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## CREATING SUSTAINABLE SOLUTIONS: INTEGRATING SOCIAL WORK EDUCATION IN DISASTER RESILIENCE STRATEGIES IN BOTSWANA

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**Abstract:** Social work, as a dynamic profession, addresses a wide range of issues affecting human society. These issues encompass diverse problems that differ in type, scale, and intensity. Among these challenges are natural disasters, which have global implications, leading to infrastructure destruction, loss of lives, economic setbacks, and environmental harm. Botswana, like many other nations, faces its share of natural disasters, primarily including drought, floods, wildfires, animal diseases, earthquakes, pest infestations, epidemics, and the ongoing challenges posed by HIV and AIDS.

Drought is a pervasive issue affecting the entire country, while floods typically occur during the rainy season from October to March. Veld fires are a common occurrence during the dry months from April to November, with a peak in July. In 1999/2000, Botswana witnessed one of the most devastating flood events, which affected 23 administrative districts, cities, towns, and villages. This catastrophe resulted in significant loss of life, extensive damage to over 17,000 structures (comprising both public and private assets), environmental degradation, crop destruction, and the displacement of thousands of people.

This paper explores the role of social workers in addressing the multifaceted challenges posed by natural disasters in Botswana. It delves into the unique aspects of various disasters, their impacts on communities, and the critical interventions social workers undertake to provide support, relief, and rehabilitation. By examining these disaster scenarios, this study sheds light on the vital role of social work in enhancing disaster resilience, safeguarding lives, and promoting community well-being in the face of these diverse natural challenges.

**Keywords:** Social work, Natural disasters, Botswana, Disaster resilience, Humanitarian response

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### **Introduction**

Social work is a dynamic profession that deals with diverse situations and problems that affect humanity. The problems and situations that social workers deal with vary in terms of type, magnitude, and intensity. These problems include disasters of varying form and complexity. Disasters worldwide cause mass destruction to infrastructure, loss of human lives, economic downturn, and environmental degradation (Kadi, 2006). Botswana, like other countries, also experiences natural disasters. They comprise mainly drought, floods, wildfires, animal diseases, earthquakes and tremors, pest infestations, epidemics, and HIV and AIDS. Drought is experienced country-wide; floods occur during the rainy season, that is, from October to March; and veld fires are regular occurrences during the dry months of April to November with a peak in July (United Nations Development Programme, (UNDP) 2009). In 1999/2000, the country experienced the worst floods in 23 administrative districts, cities, towns, and villages. The floods caused loss of life and extensive damage to 17000 structures (both public and private assets), the environment, and crops, and displaced thousands of people.

Animal diseases like the contagious Bovine Pleuropneumonia (CBPP) caused the eradication of 30000 cattle at the cost of 270 million Pula (Botswana Government, 2004). Humanitarian relief efforts cost the government and donor agencies thousands of PULAs, but such services do not reduce the vulnerability of the affected groups (Victoria, 2008; UNDP, 2009). The United Nations Development Programme (UNDP, 2008) asserts that the recorded economic costs of disasters have been increasing over decades. According to the Cayman Institute (2008), global disaster economic losses in 2008 were US\$178 billion, double the annual average for 2000-2007 which was US \$85 billion. In terms of global human loss, as an indicator of impact, 235,816 people were killed by natural disasters in 2008, three times more than the annual average of 66,812 for 2000-2007. The two fatal disasters: were cyclone Nargis, which killed 138,366 in Myanmar, and the Sichuan earthquake in China that killed 87,476 people in the same year (UNDP, 2008). This paper seeks to establish whether social work students at the degree level are adequately trained to work with communities prone to disasters and related risks.

### **Statement of the problem**

Social work education should equip practitioners to undertake an analysis of hazards and determine the likely consequence for individuals, groups, and communities. Disaster risk management makes predictions about disaster occurrences based on the historical experiences of communities. Therefore, disaster risk management is topical to social work education and practice. It is necessary to develop knowledge, strategies, approaches, and methodologies which are fundamental to building community resilience to disasters. According to the Botswana national policy on disaster management admittedly disaster risk management cuts across professions but at community level, social workers are expected to guide communities to gradually move towards safety and resilience in relation to disasters ( (Botswana, 1996).

The Department of Social Work, at the University of Botswana, established more than 30 years ago, has not mainstreamed disaster risk reduction in its curriculum in line with the United Nations five priority areas. It might be assumed that social work students are technically competent to address disaster risk management based solely on their social work knowledge. The perception might ignore the complex disaster risk management, techniques, concepts and terminology, and systems that must be undoubtedly understood. Although social workers are capable of assessing individuals, groups or communities for disaster relief assistance, the methodologies that are engaged for disaster risk reduction differ. Therefore, social workers without appropriate training and knowledge

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are handicapped in their approach. Beauchesne (2007) defines comprehensive emergency management as an integrated programme that includes a number of elements from hazard assessment and resource management to logistics, training, and finance.

Although disaster risk management can be mainstreamed in the diploma and degree courses in Botswana as other universities concurrently with courses already offered, this option has not been explored. It can be integrated in the following courses at the diploma level: social work with communities and groups (DSW 102); social work with disabilities (DSW 107); selected issues in social work (DSW 202); and social work and social development (DSW 204). At Bachelor's degree level it can be combined with helping in the community (SWF 102); social work and mental health (BSW 203); and / or offered as a separate BSW seminar (University of Botswana Calendar, 2009/2010). The Department of Social Work has not institutionalized its role according to the UN disaster risk reduction priority areas and steered dialogue with stakeholders in the practice field (United Nations International Strategy for Disaster Reduction, 2005).

The interface between social work education and disaster risk management is inevitable and there is an urgent need for action. Social workers in academia and practice have to define the parameters of practice to operationalize their influence in this field. Morales & Sheafor (1995) identified disasters and disaster aid as an arena for social work practice. The founder of the crisis response organization, Eye of the Storm, states that while the National

Association of Social Workers (NASW) Code of Ethics mandates that social workers deliver appropriate professional services in public emergencies, too many are unprepared. Nevertheless, this does not deter helping professionals from impeding or paralyzing relief efforts, creating a situation which Mitchell describes as "helpers helping helpers rather than victims" (Robb, 2003). As change agents, social workers should have knowledge and skills to intervene in hazard identification and to implement disaster risk management measures at micro, mezzo, and macro level.

## **THEORETICAL FRAMEWORK**

Social workers are, professionally, expected to work with individuals, groups, and communities to enhance or restore functioning favourable to that goal (Morales & Sheafor, 1995). Therefore, disasters are events that disrupt the normal functioning of individuals and communities calling for the proactive intervention of social workers. Crisis theory is traced back to Sigmund Freud, the progenitor of psychoanalytic and ego psychology in 1926. These schools of thought sought to understand how a person confronted with an overwhelming threat who cannot cope would behave. A crisis is a threat to homeostasis; a stressful life experience affecting the stability of an individual so that their ability to cope or even function may be seriously compromised or impaired (Gleason, 2008). It is a temporary state of upset, and disequilibrium, accompanied by confusion and disorganization. The latter may be integral to reducing problem-solving ability to the extent that traditional management strategies may not be effective (Atkinson, Atkinson, Smith, Bem, & Hoeksema, 1996).

The two conditions associated with a crisis are; the perception that the event will lead to considerable upset or disruption; and the person's inability to resolve the disruption with the available coping methods that they can use. Crises are classified into two: the situational and the developmental. The situational (rather than the developmental) will be the focus of this study as it relates more with disasters, which are external disruptive

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factors. Situational crises are physical illness and injury, unexpected or untimely death, crime, natural and man-made disasters, and situational crises of modern life (Kirst-Ashman, 2010).

The theory enabled the researcher to identify the characteristics of crisis events in the communities and the relevant interventions by social workers. These characteristics are the dangers and opportunities, the seeds of growth and change, a state of disorganization and disequilibrium, and a breakdown in coping within the individual and or the community. The perception that it will not happen to them, and their preparedness to manage the emergency. The assessment gave an indication of what could be expected after a crisis in a community and whether social workers have the prerequisite knowledge to assist the affected to emerge on a higher or lower level of functioning.

## **LITERATURE REVIEW**

### **Role of social workers in disaster management**

Social workers are key players in the socio-economic development of their communities worldwide and this should have knowledge related to disaster risk reduction. Disasters by their nature grossly affect the social functioning of individuals, families, groups, and communities worldwide and are therefore a concern for social work. Harding (2007) states that disaster is usually associated with human suffering caused by natural events such as tsunamis, hurricanes, earthquakes, and floods while human created disasters stem from war, the use of sanctions, the conduct of repressive regimes, and economic and social policies. Social work is a profession that aims at helping individuals and families, groups, and communities to enhance or restore their functioning and or creating societal conditions favourable to that goal (Morales and Sheafor, 1995). The International Federation of Social Work (2000) defines it as a “profession that promotes social change, problem solving in human relationships and the empowerment and liberation of people to enhance wellbeing, it intervenes at the point where people interact with their environment using theories of human behaviour and social systems as well as upholding principles of human rights and social justice”. Further it addresses the barriers, inequities and injustices that exist in society and responds to crises and emergencies including personal and social problems and natural disasters. In Israel social workers are amongst the most volatile professionals providing care in the aftermath of disaster. They play an active role in disaster relief activities which involve assisting survivors, accompanying families to the morgue, providing information, and supporting the community before any impending terrorist attack. They apply various relationship building skills including empathy and solace (Sweifach, LaPorte, and Linzer, 2010). Hawkins & Maurer (2010) argue that social worker should increase their understanding of the nature of social capital and how it can be used to strengthen or hinder individual and community development following a catastrophic event.

However, the current disaster risk management role of social workers serving in Botswanas’ local government structures is more reactive than proactive. It is temporary and limited to assessing those affected by natural disasters (drought, earthquakes, floods, windstorms, lightening, fire, ill health, death of a breadwinner, and any other emergency or natural disaster) and providing relief (Revised National Policy on Destitute Persons, 2002). Beyond this, the policy does not specify their role in disaster risk and hazard management. The relief provisions are short-term rather than focused on prevention, mitigation, and / or strengthening preparedness. This implies that the role of social workers is more visible at the onset of disasters and wanes immediately after the emergency period is over. The relief does assist the beneficiaries to temporarily minimise the disaster effects but leaves them

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more vulnerable to similar hazards in the future. The skill development component for low income policy groups is a positive move towards improving livelihoods but is selective and not considerate of disaster risk reduction. The home economics unit in local authorities, which works to equip families with practical skills in home management and child care in order to improve living standards and quality of life, should target the all vulnerable groups to improve family livelihoods and mitigate against disaster risks (Directorate of Public Service Management, [DPSM] 2000).

The Directorate helps “mobilize individuals, families and communities to carry out projects and programmes directed toward improving quality of life and contributing to national development” (DPSM, 2010:10). It is important to recognize the fact that disaster risk reduction at individual and community level is key to improving the livelihoods of families as beneficiaries. Therefore, social workers focusing on livelihood improvement should play a role in disaster risk reduction and building of community resilience towards disasters. The destructive nature of disasters has a tendency to increase the number of beneficiaries of safety net programmes. Each time there is a disaster, the number of people who receive assistance increases and some are able to recover.

According to UNISDR (2005), the United Nations declared the 1990s as the international decade for natural disaster reduction and in 1994 adopted the Yokohama strategy and plan of action for a safer world. The UN further resolved that all governments, Botswana included, should give more resources to preventing and reducing risk based on the five UN priorities for action. Thus, the role of governments, institutions, and professions, including social work should be to:

- Ensure that disaster risk reduction is a national and local priority with a strong institutional basis for implementation.
- Identify, assess, and monitor disaster risks and enhance community and individual early warning systems.
- Use knowledge, innovation, and education to build a culture of safety and resilience at community and individual levels.
- Reduce underlying risk factors and
- Strengthen district disaster preparedness for effective response.

Social workers serving in district councils in Botswana are by default members of the District Disaster Management Committee (DDMC) which must align its activities with the UN priorities for action (National Policy on Disaster Management, 1996). The United Nations risk reduction strategy and plan of action have not been mainstreamed into policies, programmes, and the social work curriculum at the University of Botswana nor by practising social workers in Botswana. The profession has not defined its roles and responsibilities besides conducting an assessment after a disaster at the request of the DDMC. It has not developed disaster protocols for communities’ prone to disaster to guide preparedness, and prevention and mitigation strategies and programmes in line with the UN priorities. Botswana MDGR (2004b) shows that the country lacks adequate disaster preparedness and management capacity; established mechanisms to minimise exposure to natural disasters ensuring quick and effective response and speedy recovery; and better decision making, improved planning, effective risk management, and innovation in development and environmental protection activities. The absence of these weakens the ability of districts to prevent, mitigate, prepare, and respond effectively to disasters.

The Botswana National Policy on Disaster Management (1996) defines disaster management as “an integrated series of activities and strategies involving disaster mitigation, disaster preparedness, and emergency response

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implemented within the national development context". Victoria (2008) states that a disaster risk reduction framework must aim at:

- Reducing vulnerability and increasing capacities of vulnerable groups and communities to cope with, prevent or minimise loss and damage to life, property, and the environment;
- minimizing human suffering; and
- hastening recovery.

According to Victoria (2008), a comprehensive community based disaster management programme must be characterised by the following which community social work should promote:

- People's participation: community members must be the main actors and propellers; they also directly share in the benefits of disaster risk reduction and development.
- Priority for the most vulnerable groups, families, and people in the community: in urban areas the vulnerable sectors are generally the urban poor and informal sector while, in rural areas, these are the subsistence farmers, the fisherfolk and indigenous people, the elderly, the differently abled, children, and women (because of their care giving and social function roles).
- Risk reduction measures are community specific and are identified after an analysis of the community's disaster risk (hazards, vulnerabilities and capacities, and perceptions of disaster risks).
- Existing capacities and coping mechanisms should be recognized: Community Based Disaster Management builds upon and strengthens existing capacities and coping strategies.
- The overall is to reduce vulnerabilities by strengthening capacities: the goal is building disaster resilient communities.
- Disaster risk reduction links with development and addresses vulnerable conditions and causes of vulnerabilities.
- Outsiders have supporting and facilitating roles.

### **(a) The basis of community social work and disaster risk reduction**

Community practice in social work is to guarantee sustainable development of communities through hazard and risk management compatible with the profession. Community practice in Botswana focuses on social development and encompasses mass education and literacy and general social work, including rehabilitative casework, investigating individual cases of indigence or other forms of hardship such as physical handicaps, and recreational youth activities (Hedenquist, 1992). Past community development practices had three main objectives: (1) to mobilize communities towards self-help projects thereby promoting the national principle of self-reliance; (2) to assist communities through village development committees by funding their development projects through, for example, LG 1109 and the European Union, and (3) to educate communities on social services and assist them to identify and prioritise their needs (DPSM, 2000). The current strategic framework for community development in Botswana does not mainstream disaster risk reduction but defines five operational areas which are community mobilisation and education; social justice; community governance; economic empowerment; and networking (Department of Social Services, 2010).

These noble objectives should integrate disaster risk reduction for individuals, groups, and communities to strengthen practice. Social workers also work with village development committees (VDC) as local institutions responsible for coordination and development of all village institutional activities, including disaster prevention,

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preparedness, and response. VDCs were established by a presidential directive in 1968 for the purpose of implementing government principles and developing self-reliance and unity. Their functions are to: identify and discuss local needs; formulate proposals for the development of the community; and raise funds for the general benefit of the village (Ministry of Local Government and Lands, 1968; National Policy on Disaster Management, 1996). Village development committees need to be trained in disaster risk management for them to discharge their roles effectively. As such, disaster risk management is an area of practice that the social work profession should engage in with communities. Social workers must ensure that community members play a more central role in both planning and implementation of disaster programmes. Their role in community based disaster management should include the identification of hazards, risks, and capacities within communities to prevent, reduce, and respond to disasters.

The adverse effects of disasters thwart sustainable economic progress and may hamper the realisation of a nation's aspirations. The Botswana National Vision 2016 promotes the building of a safe and secure nation (Presidential Task Force, 1997). The safety and security of communities is all-encompassing and thus includes disaster risks and hazards. This creates a positive foundation for local government and other agencies to incorporate disaster risk reduction into their programmes (UN, 2009). Improvements in communities will be realised when hazards and risks are reduced and prevention mechanisms established.

### **(b) Relevance of social work in disaster management**

Social work's positive contribution to risk reduction strategy will strengthen Botswana's commitment to the millennium development goals surrounding poverty reduction by 2015. The millennium development goals are in harmony with the Botswana national vision (2016) that envisions a healthy and secure nation by the year 2016 (Presidential Task Group, 1997; UN, 2009).

Social workers involved in community development and individual or group work are better placed to address disaster risk reduction at those levels. They are confronted by and respond daily to situations that contribute to human vulnerability such as poverty and increased population density. As such, it is fundamental for social workers to acquire knowledge, techniques, and skills in disaster risk reduction in addition to community mobilization (UN, 2009). These will enable social workers to interact effectively with communities in hazard identification, and mapping and determining strategies for risk reduction. The purpose of social work, through its very definition as a profession, is premised on the context of risk reduction.

### **(c) Disaster Risk Reduction in the Social Work Curricula at the University of Botswana**

Botswana is one of the countries that monitors its progress on the Hyogo Framework for Action. Botswana has been concentrating on issues of curricula inclusion for students with special needs such as disability, not considering disaster risk reduction as one of the main issues. Therefore, the society has not tailored its education policies to be inclusive of this issue. According to the Botswana Progress Report on the Implementation of the Hyogo framework for action (2011) there is no disaster risk reduction in the national educational curriculum the primary or secondary school curricula, and there is no professional disaster risk reduction education programme. The report mentioned that there was only one course on disaster management offered at university level. The University of Botswana curriculum is guided by the Tertiary Education Policy which also does not specify the inclusion of disaster risk reduction. The Botswana Tertiary Policy (2008) has the main objective to

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“...achieve sustainable social and economic development, uplift the standard and quality of life of Botswana, and to meet long term national and global challenges through the development of a tertiary education system that is relevant, dynamic, accessible, equitable and internationally competitive. The tertiary education system will be characterised in terms of increasing access, ensuring relevance and quality, providing diversity and choice and is linked to broader policies and national goals in particular those related to (1) Human Resource Development and (2) Research and Innovation.”

Due to the lack of specified guidelines for disaster risk reduction in the tertiary policy, the main objective is not met. As a result, students graduate from the university without knowledge to undertake an analysis of hazards and determine the likely consequence for individuals, groups, and communities.

The Department of Social Work, at the University of Botswana, established more than 30 years ago, has not mainstreamed disaster risk reduction in its curriculum in line with the United Nations five priority areas. It might be assumed that social work students are technically competent to address disaster risk management based solely on their social work knowledge. The perception might ignore the complex related techniques, concepts terminology, and systems that must undoubtedly be understood. Although social workers are capable of assessing individuals, groups or communities for disaster relief assistance, the methodologies that are utilised for disaster risk reduction are different. Therefore, social workers without disaster appropriate training and knowledge are handicapped in their approach. Beauchesne (2007) defines comprehensive emergency management as an integrated programme that includes a number of elements from hazard assessment and resource management to logistics, training, and finance.

### **METHODOLOGY**

The qualitative study was conducted during the 2012-2013 academic year, first semester, amongst the Diploma and Degree students of Social Work to assess the knowledge and understanding of disasters and disaster risk reduction. The students were in the 2<sup>nd</sup> year Diploma and 3<sup>rd</sup> year Bachelor's degree in Social Work, at the University of Botswana. They were briefed on the study and asked to volunteer to participate. Those who wished to participate were interviewed to ascertain their understanding of the subject. The third year students are between the early years of an under-graduate programme and completion of their studies. It is assumed that they have a sufficiently broad knowledge, theory, and skill base applicable to the profession and would offer a rich source of data in this regard.

#### **The sampling process**

The total sample of students who volunteered to participate in the study was 54 third year Bachelor of Social Work students at University of Botswana. They were involved in in-depth interviews to establish their knowledge on disaster risk reduction. Non-probability sampling was used through asking students to volunteer for the study. According to Monette et al (1990) purposive sampling is a non-probability sampling method in which elements in the sampling frame do not have an equal chance of being included in the sample. It is a technique by which the sample is selected on the basis of the researcher's understanding of the elements to adequately represent the study focus and the elements of the cases to be included in the sample (Newman, 2007). Skinner (2005) further states that purposive approach to sampling allows researchers to use their own knowledge, skills, experience and professional wisdom to select the sample. The BSW third year students comprised of 41 males and 13 females.

#### **Data analysis**

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The data was analysed following the qualitative processes and procedures based on thematic concepts designed to assess the knowledge of participants on the subject matter.

### RESULTS

Social work is a multi-dimensional profession that promotes social change, problem solving in human relationships, and the improvement and liberation of people to enhance well-being. Besides the barriers, inequities, and injustices that it addresses, it responds to crises and emergencies including disasters (International Federation of Social Work, 2000). Disasters are known for disrupting social functioning of individuals, families, and communities and to cause serious recovery challenges. Social work aims at enhancing or restoring capacity for social functioning, and as such, knowledge of disasters and risk reduction is fundamental.

#### Participants Bio-data

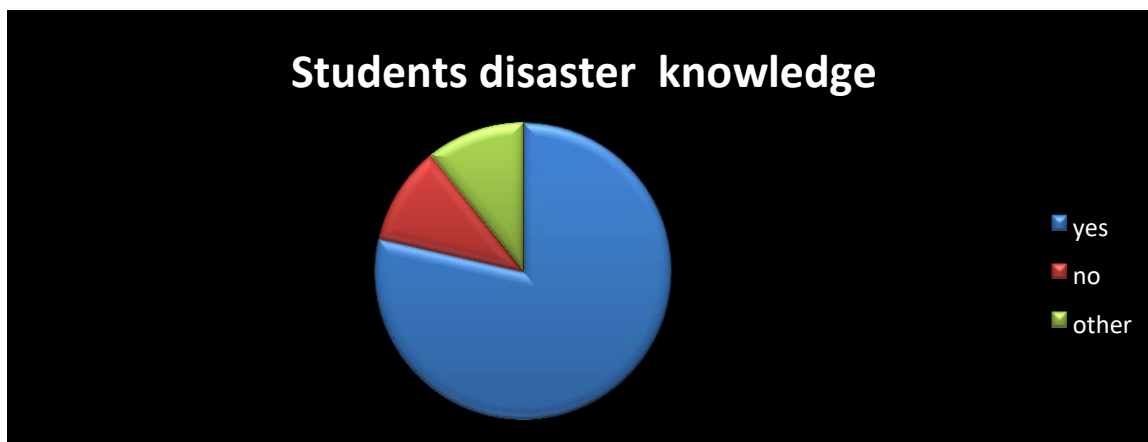
The age of participants ranged between 20 and 30 years comprised of (96%) while over 30 years were 4%, (76%) were males and (34%) females and 96% were single while 4% were married. In terms of educational attainment, 83% had the BGCSE and 17% had a BGSCE and Diploma in Social Work. Table 1: below displays the categorised bio-data.

| No. of participants | Age   |     | Gender |        | Marital status |         | Educational level |     |
|---------------------|-------|-----|--------|--------|----------------|---------|-------------------|-----|
|                     | 20-30 | 30+ | Male   | Female | Single         | Married | BGSCE             | DSW |
| 54                  | 52    | 2   | 41     | 13     | 52             | 2       | 45                | 9   |
|                     | 96%   | 4%  | 76%    | 34%    | 96%            | 4%      | 83%               | 17% |

**Table 1: Participants bio-data**

#### Disaster knowledge

Of the 54 who participated in the study, 48 showed that they had some knowledge on disasters while 6 did not. The latter were not able to identify the meaning of disaster in this context

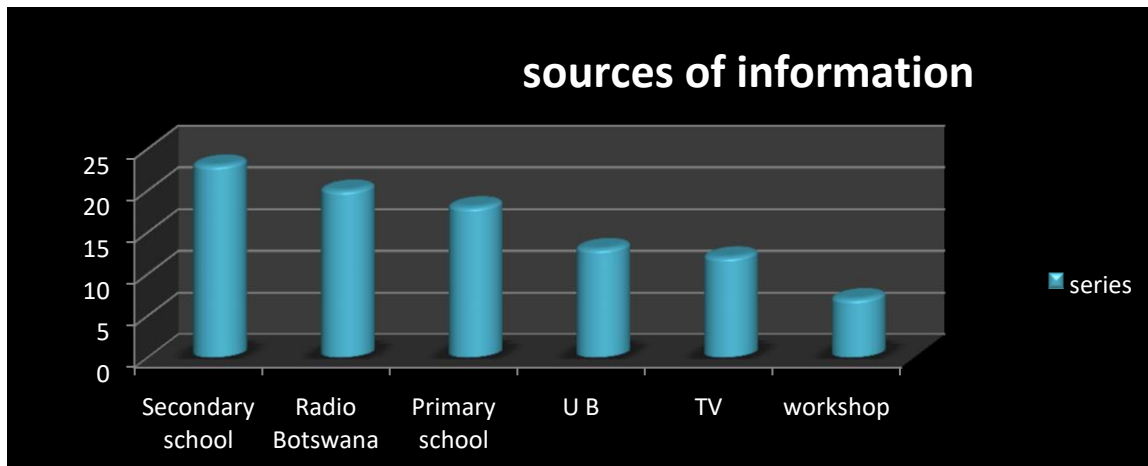


**Figure 1: students' knowledge of disaster**  
**Source of information on disasters**

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The sources of knowledge on disasters acquired by the participants was provided by Radio Botswana, television, secondary and primary schools, the University of Botswana, and disaster related workshops. The sources were in descending order secondary school (23),

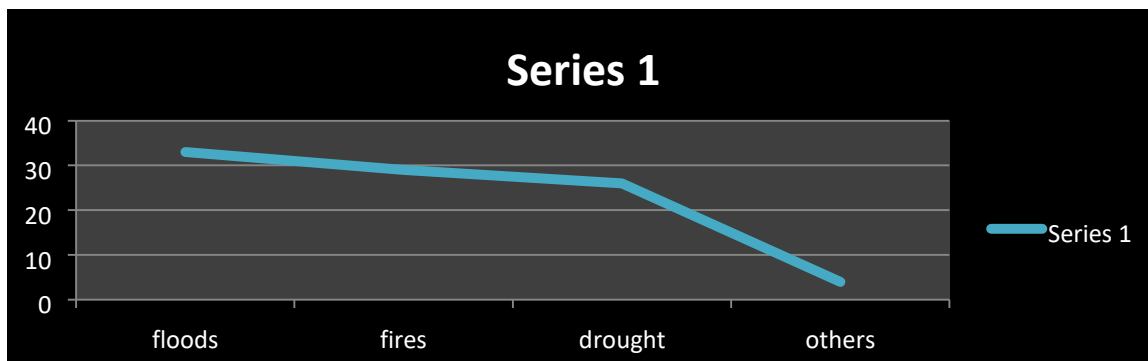
Radio Botswana (20), primary school (18), University of Botswana (13), television 12, and the disaster related workshops (7). The bar chart 1 below represents the sources of knowledge of disasters in graphic form.



**Figure 2: source of disaster information**

### Types of disaster reported

The types of disaster which were common to the participants were flood, fire and, drought and those less common were tsunamis, earthquakes, and civil war. The most prevalent of these according to number of respondents are floods (33), fires (29), and drought (26). Tsunamis, earthquakes, and civil war are not common hazards in the country. The graph below represents the disasters that are more prevalent in the country.



**Figure 3: common hazards**

### Explanation for lack of disaster information

The students who did not have knowledge on disaster were asked to account for their lack of information to determine whether it was ignorance or other factors. They could not account for their ignorance of disaster information. It may be inferred that they may not have suffered or encountered any disasters in their communities and / or social work education had not introduced them to the subject or they did not wish to disclose the reasons.

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### Knowledge on Disaster Risk Reduction

Of the 54 respondents, 27 (50) claimed to know something about disaster risk reduction and could define it while 27 (50 %) had no idea of its meaning. When they were asked to define the concept to validate their response the following:

- To halt any disaster that can negatively affect people's lives
- Careful use of fire, and avoid overgrazing and cutting down of trees
- Store dangerous objects that may cause disasters in a safe place
- Suggesting prevention methods to reduce disasters
- Methods that are employed to reduce the occurrence of disasters
- Establishment of disaster management teams
- Learning how to swim to avoid drowning
- Utilising social services offered by the government
- Educating people about possible disasters and interventions
- Avoiding leaving fires burning without supervision and educating people about the dangers of not doing so.
- Avoid making fires haphazardly and being friendly to the environment
- Designing or implementing measures that can decrease the chance of disaster
- Keeping away flammable substances, like petrol, from fire □ Not building houses next to rivers
- Helping or assisting those individuals affected by disasters
- Clearing fire breaks to prevent or combat disasters

### Sources of information on Disaster Risk Reduction

The respondents acquired information on DRR from reading (18), secondary school (11), Radio Botswana (10), primary school (9), other undefined sources (7), and workshops (5). The majority of the respondents acquired information through self-initiated reading then the schools, and unspecified sources. This might suggest that the disaster information dissemination does not target the University of Botswana community and the national Disaster Risk Reduction plans have not included them.

### Participants' knowledge of hazards

| No. of students |    | Percentage |
|-----------------|----|------------|
| Yes             | 26 | 48 %       |
| No              | 28 | 52 %       |
| Total           | 54 | 100        |

**Table 2: Number of students with knowledge on hazards**

Table 2 above shows that 48 % of the respondents could define disaster hazard while 52 % had no idea and could not even attempt a definition of the concept. The research did not probe further to verify whether those in the 'no' category were just reluctant to do so or it that they had no prior knowledge regarding the subject. The 48 % defined a hazard as follows:

- Hazards are dangers or anything that can harm or put your life at risk
- Things that can expose one to danger

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- Things that cause accidents
- Accidents that happen in the household □ Dangers that can occur during disasters
- Bad things that can occur to an individual either at home, school or work
- Things that are dangerous to our lives
- Harmful, dangerous situations

| Hazards                       | NO / %   | YES      |
|-------------------------------|----------|----------|
| □ Terrorism                   | 49 (91%) | 5 (9%)   |
| □ Earth quakes                | 49 (91%) | 5 (9%)   |
| □ Civil unrest                | 47 (87%) | 7 (3%)   |
| □ Structural building failure | 44 (82%) | 10 (18%) |
| □ Overflowing rivers          | 43 (80%) | 11 (20%) |
| □ Windstorms                  | 43 (80%) | 11 (20%) |
| □ Floods                      | 39 (72%) | 15 (28%) |
| □ Economic recession          | 39 (72%) | 15 (28%) |
| □ Drought                     | 39 (72%) | 15 (28%) |
| □ Wild fires                  | 36 (67%) | 18 (33%) |
| □ Structural fire outbreak    | 23 (43%) | 31 (57%) |

**Table 3: Number of students with capacity to act in the event of disaster**

The participants were asked to indicate their response knowledge on the hazards stated in Table 3 above. Table 3: shows the distribution of students according to their response to named hazards and it is clear that the majority are vulnerable to various hazards except for structural fire outbreaks. It is shown that 91% of students are vulnerable to terrorism, 91% to earthquakes. Furthermore, The high percentages of students who did not know what to do in civil unrest is 87%, windstorms 80 %, floods 72 %, and drought 72% which is worrisome because these are frequent occurrences in the country and make people vulnerable. 72 % to economic recession while wild land fires was only 67%.

### The source of students' knowledge to act in the event of disasters

The participants were asked to indicate their source of knowledge on how to act in the event of disasters. They reported that they acquired knowledge from the media (television/newspaper/radio), secondary schools, open lectures, independent reading, movies, University on campus activities programme (respondents could not give details), personal experience, social studies while at primary school, and lastly through disaster related workshops. It shows that these sources of knowledge were not able to reach a broader population and are limited.

### Proposed solutions on disaster information dissemination

The participants were asked to propose ways of disseminating disaster information and suggest the possible medium of exchange. They were of the view that disaster workshops should be increased, self-directed reading on disasters should be promoted, individuals and communities should be educated on hazards and risks, community outreach should be encouraged, and information on disaster prevention should be provided to the community at the kgotla.

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### Implementation of the proposed solutions by students

The participants were asked to suggest organisations and other players that would implement their solutions on disaster information dissemination. The intention is to reduce the paucity of knowledge on disasters and related risks and they identified: disaster management teams, churches, families, private organisations, government, parastatals, the security forces

(Botswana Defence Force and Police Service), Red Cross Society, schools, UB management, and chiefs. They confirmed that disaster risk reduction needs a multi-sectorial effort and sense of responsibility. All institutions and organisations in the society, the University of Botswana included, should be involved in one way or another.

### Participants' perceived role of social workers in disaster risk reduction

The participants were asked to state the role social workers should play in disaster risk reduction. Their view is that social workers should play a significant role in information sharing with communities, shelter provision, and education and mobilisation of communities before, during and after disasters. They should work with communities to plan, educate, and advocate for vulnerable groups; provide counselling; collaborate with other stakeholders; provide therapy and education on safety measures; conduct research; ensure the welfare of survivors; and help the affected to cope and receive welfare assistance.

### Social work education's role in equipping students to address disaster related challenges

The participants were asked to state how social work education has equipped them to address disaster related challenges. They showed that social work education has equipped them with skills of communication (presentation and education), counselling, crisis intervention, and the ability to work with different clients.

### Students' knowledge of disaster terminology /concepts

Conceptualization of disaster was addressed by asking respondents to define the given concepts, and they provided interesting responses. The exercise was meant to help them to introspect on whether they were prepared to work with their clients to anticipate, respond to, and prevent disasters. Eighteen (18) conceived vulnerability as being prone to some condition or situation, seventeen (17) defined hazard as danger, eleven (11) defined risk as taking a chance; ten (10) stated that capacity is ability; while seven (7) said it was an amount; one (1) defined natural and technological disasters as natural disasters; and thirty (30) had no answer at all.

### Source of information on disaster terminology / concepts

Respondents were asked to report on the sources of information to determine the status and usefulness. Thirty reported that they obtained information on disaster terminology from internet and books, educational institutions (schools), general knowledge, media while 24 could not attribute their knowledge to any of the sources. It shows that the stated sources provided limited and inadequate information on the subject and that respondents had a desire to know about the subject matter. Although 56% seemed to have little information on the concepts, the main sources of information were the internet and books, schools, and general knowledge.

### Participants' knowledge of the Hyogo Framework of Action

| Response | YES | NO        |
|----------|-----|-----------|
|          | 0   | 54 (100%) |

Table 4: Number of students with knowledge on HFA

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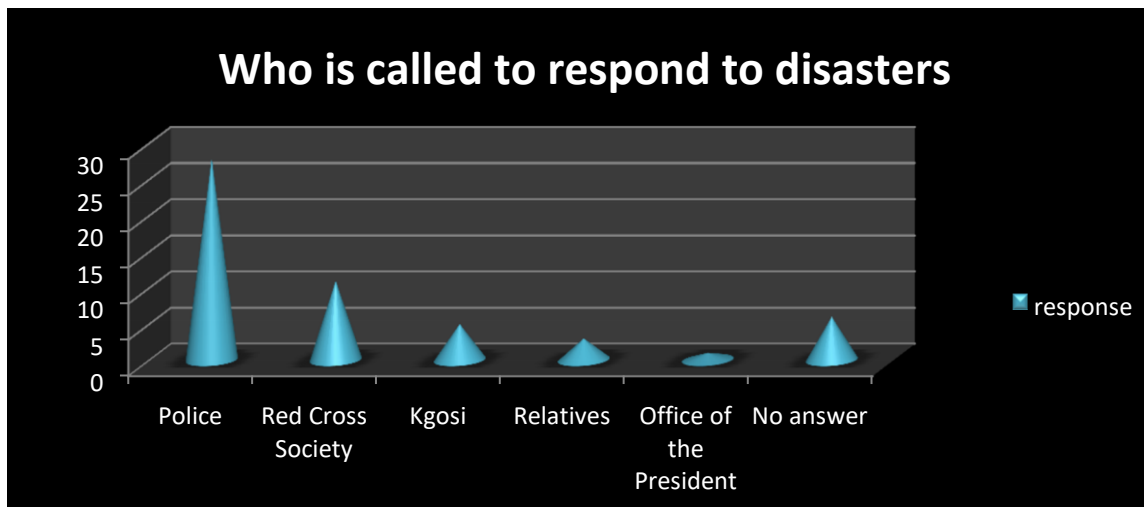
The Hyogo Framework for Action (HFA) 2005 -2015 is a United Nations initiative to build the resilience of nations and communities to disasters. It is a political commitment of 176 governments to implement HFA, allocate necessary resources and set up the appropriate institutional and legislative frameworks to facilitate implementation (United Nations, 2005). Table 3 above shows that the 54 participants did not know anything about the United Nation Hyogo Framework for Action 2005-2015 for disaster risk reduction. These are third year of Social Work degree who will graduate students and intervene in disaster related problems.

### The first to be called in the event of a disaster

|                         |    |     |
|-------------------------|----|-----|
| Police                  | 28 | 52% |
| Red Cross Society       | 11 | 20% |
| None                    | 6  | 11% |
| Kgosi                   | 5  | 9%  |
| Relatives               | 3  | 6%  |
| Office of the President | 1  | 2%  |

**Table 5: Institution or people called to respond to disasters**

Table 5 above and Figure 4 below show that police are highly represented as the first people to be called in the event of any disaster (52%) , followed by the Red Cross Society (20%), the kgosi (9%), relatives (6%), and the National Disaster Management Office (Office of the President). The remaining 11% of participants did not know who to call in response to a disaster. The bar chart below shows the graphic representation of the first responders to disasters.



**Figure 4: first responders to disasters**

### Students' disaster related experience

The participants were asked whether they had experienced disasters in any way: 11 had witnessed domestic fires, 6 wild land fires, 5 drought, 4 floods, 28 reported not to have had any personal experience with disasters related situations. Despite the personal experience of disasters students, social worker should be knowledge of factors that makes their clients to suffer hardships as individuals, groups, and communities suffer from disasters. This

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can be associated with the lack of interest by students and the failure of the curriculum to deliberately expose them to disaster risk reduction.

### **Students' response to the stated disasters**

The students reported that they responded to wild-land fires with the help of the community and other government departments and evacuated those who were affected. During wild land fire outbreaks, they called neighbours, parents, police, and fire fighters to help put out the fire, using water, and then made a fire break. Students that responded to floods reported that they relocated the survivors to areas which were not flooded, mobilised neighbours to provide food and, after evacuation, they dried out their property then moved on with life. Those who with experience of drought, reported that there was a backup of saved grains, bought cattle feeds, and relocated domestic animals. Amongst 54 participants, 28 reported that they had not ever had any disaster related experience.

## **DISCUSSION**

Discussion of results/issues should be presented in this section. Font Size 12, Times New Roman, single spaced. All the subheadings in this section should be in font size 12 Bold, Times New Roman, single spaced. The first letter of each word in subheading should be capital. The results show that social work students of the University of Botswana at third year bachelor degree level had limited knowledge of disasters and, in particular, disaster risks reduction and the Hyogo Framework for Action. Although, the media and schools have passed information to the participants, there is need for a deliberate effort to integrate disaster risk reduction in the social work curriculum at the University of Botswana. Although the University was rated lower than television, secondary schools, Radio Botswana, and primary schools, it is seen as an important medium of instruction in disaster risk management. The information focussed mostly on floods, fires, and drought which are prevalent disasters in Botswana. Those participants who lacked knowledge on disasters could not attribute their ignorance to any specific reason. Harding (2007) states that it is crucial that social must respond to disasters by helping victims deal with induced trauma through providing mental health and social services to survivors, and planning and implementing responses to natural and technological disasters (Harding, 2007). Social work students who graduate without adequate knowledge in this sphere may be academically handicapped to address the suffering of vulnerable groups (children, women, older people and the poor) in disaster related situations.

It is common in developing countries to find that social workers graduate without requisite skills and knowledge for effective intervention in disaster risk reduction yet they are among professionals who are necessary involved in disaster management. In the Caribbean, social workers assist in preparations for impending disasters and are usually in the forefront of rescue and recovery efforts; however, the field of disaster management has not been given enough attention in the education of social workers in many counties including Botswana (Rock & Corbin, 2007). In this the Department of Social Work of the University of Botswana should review its programmes to mainstream disaster risk reduction.

### **Knowledge on disaster terminology / concepts**

Disaster terminology is complex and needs to be unpacked for those who will intervene in related situations. Deliberate efforts of educators to introduce learners to the field are essential. Social workers are aware that intervention may result in harm if proper care is not taken during intervention. Egan (2010: 41) argues that "only those beliefs, values, and norms that you have made your own will make a difference your helping behaviour".

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The author further argues that helpers should master the model of helping utilised by them through developing a basic problem-management and opportunity development framework and the skills that make it work (Egan, 2010: 42). Although some participants had intimated that they had knowledge on disasters and related concepts, the study shows that they were not well versed in the subject matter. While 50% had shown that they had knowledge on disaster risk reduction, it was found that they were unable to define the concept. All the answers were more inclined to mitigation than the definition of DRR. The answers from the participants show that they have little or no understanding and appreciation of disaster terminology. In addition, 50% had already indicated that they had no knowledge of the concept. Disaster Risk Reduction (DRR) is defined by the United Nations as “reducing disaster risks (losses) through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, correct management of land and the environment, and improved preparedness for adverse events” (IFRC, 2009: 2).

### **Participants’ knowledge of the Hyogo Framework of Action**

The Hyogo Framework for Action (HFA) 2005 -2015 is a United Nations initiative to build the resilience of nations and communities to disasters. It is a political commitment of 176 governments to implement HFA, allocate necessary resources, and set up the appropriate institutional and legislative frameworks to facilitate implementation (United Nations, 2005). Table 3 shows that all the 54 participants did not have knowledge on the United Nation Hyogo Framework for Action 2005-2015 for disaster risk reduction. These are third year Bachelor of Social Work students who will graduate and join organisations that intervene in disaster related problems but without adequate disaster intervention knowledge. It is crucial to note that the Hyogo Framework for Action was a 10 year framework that will end in 2015 but has not been mainstreamed as envisioned.

### **Social work education’s role in equipping students to address disaster related challenges**

Social work education in focus social practice at three levels: clinical, group work, and community work. It also includes policy development and management and supervision of practicing social workers. As such, the interface between social work education and disaster risk management is inevitable, hence the need for action. Social workers in academia and in practice have to define the parameters of practice to operationalize their influence in disaster risk management field. Morales & Sheafar (1995) identified disasters and disaster aid as an arena for social work practice. The founder of the crisis response organization Eye of the Storm, states that while the National Association of Social Workers (NASW) Code of Ethics mandates that social workers deliver appropriate professional services in public emergencies, too many are unprepared. Nevertheless, this does not deter helping professionals from overcrowding crisis scenes only to impede or paralyse relief efforts, creating a situation which Mitchell describes as “helpers helping helpers rather than victims” cited by Robb (2003). As change agents, social workers should have knowledge and skills to intervene in hazard identification and disaster risk management implementation at micro, mezzo, and macro level. Although these might be useful skills for dealing with diverse client situations, it shows lack of adequate knowledge on disaster risk reduction is relevant.

### **THE WAY FORWARD**

The participants suggested that the University of Botswana should establish a disaster reduction centre where every student will be trained and provided with necessary knowledge and skills to help themselves and others in disaster situations. Sweifach, Laporte, and Linzer (2011) argue that social workers are amongst the allied professionals providing care in the aftermaths of disaster. Social work education must equip practitioners to

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undertake an analysis of hazards and determine the likely consequence for individuals, groups, and communities. Disaster risk management makes predictions about disaster occurrences based on the historical experiences of communities. Therefore, disaster risk management is topical in social work education and practice. The study depicts that there is need for mainstreaming disaster risk management to social work curricula so that students are able to address disaster related challenges in the field. Similarly, social work students have to be knowledgeable of the Hyogo Framework of Action and the 5 key priority areas.

Although disaster risk management can be mainstreamed at diploma and degree level concurrent with course offered, this option has not been explored. It can also be integrated in the following courses at diploma level: social work with communities and groups (DSW 102), social work with disabilities (DSW 107), selected issues in social work (DSW 202), and social work and social development (DSW 204). While at Bachelor's degree level it can be amalgamated with helping in the community (SWF 102), social work and mental health (BSW 203) and / or run as a separate BSW seminar course (University of Botswana Calendar, 2009/2010). The Department of Social Work has not institutionalized its role according to the UN disaster risk reduction priority areas and steered dialogue with stakeholders in the practice field.

## **CONCLUSIONS**

The results show that social work students at the University of Botswana, at third year bachelor degree level, have little knowledge on disasters, disaster concepts, literature, and related interventions. This is problematic because the social work professional expectation and the global approach to social problems include disaster risk reduction. It is apparent that the students do not know the Hyogo Framework of Action and have not been introduced to the framework while at the university for three academic years. Furthermore, it is unfortunate that the realisation of resilient and safe communities as envisioned by the United Nations will not be realised by 2015. Universities are supposed to lead in terms of educational development and graduating professionals with adequate skills to work with diverse populations and issues raised at various levels. In such an event, the UN disaster agenda will be compromised by inactive participation of stakeholders, in particular academic institutions.

## **REFERENCES**

- Atkinson, R. L., Atkinson, R. C., Smith, E. E., Bem, D. J., & Hoeksema, S. N., (1996). "Introduction to Psychology", New York: Harcourt Brace College Publishers.
- Beauchesne, A. M. (2007) "Natural Disasters: A Governor's Guide to Emergency Management", FEMA, Washington DC, Online article. Accessed 2 February, 2009 at: <http://www.nga.org/centre>
- Botswana Government (2004). Botswana country report submitted to the African Regional consultation on disaster reduction workshop, June 2-3, Midrand, South Africa.
- Botswana MDG Report (2007). Botswana from independence to Vision 2016, Gaborone: Government Press.
- Botswana Government (1996). National policy on disaster management. Presidential Directive No. CAB. 27/96. Gaborone: Government Press.

**Original Article**

Department of Social Services (2010). "Strategic Framework for Community Development in Botswana". Gaborone: Government Press.

Cayman Institute (2008). Economic cost of Disaster. Online article. Accessed 2 February, 2009 at: <http://www.caymaninstitute.org.ky>

Directorate of Public Service Management (2000). Management service review report on the organisational review of the social welfare function of the Ministry of Local Government, Lands, and Housing. (Approved by the Cabinet). Gaborone: Government Press.

Egan, G. (2010). The skilled helper: A problem-management and opportunity-Development approach to helping. 9<sup>th</sup> Ed. Belmont: Brooks/Cole, Cengage Learning.

Gleason, C. (2008). "Basic concepts in crisis theory: Overview of crisis intervention and characteristics of crisis events," Online article. Accessed 16 April, 2012 at: <http://www.suite101.com/article>

Harding, S. (2007). Man-made disasters and development: The case of Iraq. International social work 50:295. Online article. Accessed 27 January 2011 at: <http://www.isw.sagepub.com>

Hawkins, R. L., & Maurer. K. (2010). Bonding, Bridging, and linking: How social capital operated in New Orleans follow hurricane Katrina. British Journal of Social Work 40(1), 1777-1793.

Hedenquist, J. A. (1992). "Introduction to social and development in Botswana," Ministry of Local Government and Lands, Gaborone: Gaborone Press.

IFRC (2009) Disaster: how the Red Cross Red Crescent reduce risk, IFRC

International Federation of the Red Cross and Red Crescent Societies. 2007. "World Disaster Report "Focus on Discrimination." Bloomfield: Kumarian Press Inc.

International Federation of Social Workers (2000). "Review of the International Definition of Social Work", Online article. Accessed 27, January, 2011 at: <http://www.eassw.org/definition.asp>

United Nations International Strategy for Disaster Reduction (2005). World conference on disaster reduction: Hyogo Framework for Action 2005-2015 Building the Resilience of Nations and Communities to Disasters 18-22 January, Kobe, Hyogo, Japan.

International Resource Group. 2001. "Southern Africa Development Community (SADC) Disaster Management Committee and Technical Seminar," 6 - 9 December 2000,

## **Original Article**

Harare, Zimbabwe. Vol. 1. USAID/Regional Center for Southern Africa/Botswana.

Online article. Accessed 8, August 2013 at: <http://rmportal.net/library/content/frame/volume-ii-sadc-conference.pdf>

Kadi, M. (2006). Climate risk management in Africa: Learning from Practice, Africa Centre of metrological Applications for Development. USA: Silver Sprint.

Kirst-Ashman, K. K. (2010). "Introduction to Social Work & Social Welfare Critical Thinking Perspective", 3<sup>rd</sup> Ed. United States: Brooks / Cole.

Ministry of Local Government and Lands (1968). "Guidelines for Village Development Committees", Gaborone: Government Press.

Monette, D. R., Sullivan, T. J., and DeJong, C. R. (1998). "Applied Social Research: Tools for the Human Services", (4<sup>th</sup> ed.). New York: Harcourt Brace College Publishers.

Morales, A. T. and Sheafor, B., W. (1995). "Social Work: A Profession of Many Faces", (7<sup>th</sup> Ed), London: Allyn and Bacon.

National Policy on Disaster Management (1996). Botswana Government Presidential Directive No. CAB 27/96. Gaborone: Government Press.

Newman, L. (2007). "Basic of social research: Qualitative and Quantitative approaches." Boston: Pearson Education Inc.

Office of the President. 2010. "National progress report on the implementation of the Hyogo

Framework for Action (2009-2011)", Gaborone: National Disaster Management Office. Online Article. Accessed 25, September 2013 at: <http://www.preventionweb.net/english/hyogo/framework/progress/v.php?id=16768&pid:45>

Presidential Task Group (1997). "Long term vision for Botswana: Towards prosperity for all", Gaborone: Government Press.

Revised National Policy on Destitute Persons (2002). Gaborone: Government Press.

Robb, M. (2003). "Mastering disaster-continuing education in crisis response," Social Work Today, 4(5)34. Skinner, D. (2005). "Human Research Council": Cape Town (Unpublished). Sweifach, S., Laporte, H. H., & Linzer, N. (2010). "Social Work responses to terrorism: Balancing ethics and responsibility," International Social Work, 53:822-835.

**Original Article**

United Nations Development Programme. (2009). “Botswana National Disaster Risk Management Plan, National Disaster Management Office”, Gaborone: Office of the President.

United Nations Development Programme (2008). “Bridging disaster and Development in Srilanka” GMSL-DMIP.

UNISDR (2005). “World Conference on disaster Reduction: Hyogo Framework for Action 2005-2015 Building the Resilience of Nations and Communities to Disasters, 18-22

January”, Kobe, Hyogo, Japan.

University of Botswana school calendar, 2009/2010. Gaborone: University of Botswana. V EM-DAT: The OFDA/CRED (2009). “International Disaster Database”, University of

Catholique de Louvain, Brussels, Bel. Online Article, Accessed 31 October, 2013 at:  
<http://www.preventionweb.net/english/countries/statistics/?cid=23>

Victoria L., P. (2008). “Community Based Approaches to Disaster Mitigation”, Regional Workshop on Best Practice in Disaster Management. Centre for Disaster Preparedness. Pp. 269-314.