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INVESTIGATION INTO THE STATE OF DISASTER PREPAREDNESS IN SCHOOLS IN KENYA

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ABSTRACT

Disasters of various kinds have been witnessed in learning institutions in Kenya for many years. Indeed, disasters disrupt the education process and undermine quality of education. This study investigated preparedness of learning institutions in fighting instances of fire outbreaks. It was based on a survey conducted in 12 Counties in Kenya and targeted all learners in primary and secondary schools, teachers, school administrators, Boards of Management/School Management Committees, Chiefs, Sponsors and education officials. Descriptive survey research design was used. The research instruments used in collecting data were questionnaires and interview guides. Piloting of the instruments was done and validated for reliability in three Counties selected randomly. The pilot Counties were not part of the main study. Quantitative data were analyzed using SPSS while qualitative data were analyzed thematically. Education is hampered in learning institutions because the personnel were not sufficiently prepared to handle disasters or emergency situations, as 61% of the respondents had not attended drill demonstrations on disaster management. Only 39% of the respondents had been exposed to demonstrations on disaster management. The study makes recommendations at both the policy and programmatic levels. It is expected that these findings will provide insightful reference that policy makers, education officials, school administrators, teachers and stakeholders can rely on in regard to disaster preparedness and management in learning institutions. Strategies to contain disasters are crucial in helping ensure quality education in schools.

1.1. Background to the study

Disasters in society can influence the pattern of academic performance in learning institutions. When disasters take a violent dimension, it disrupts the fabric of society in political, economic and social areas (Rugumamu and Gabla, 2003). Achoka (2007), defines disaster as a state of incompatibility. Achoka further compares disaster to the traffic light that shines green to alert you to move on yet at the same time it shows red warning you to stop. According to Wario (2006), violent conflicts have been the cause of distress across many schools, communities and countries in the world. They lead to human anguish through loss of lives and property. In relations to schooling, such trends cause adverse effects on curriculum delivery and supervision in learning institutions leading to poor performance in examinations because, learning and supervision can only be well achieved in a harmonious environment (Wekesa, 1993; Rue, 1982). Therefore, a disaster can be generally understood as a natural or human-caused event, occurring with or without warning. It causes death, injury or disease, damage to property, infrastructure or the environment, which exceeds the ability of the affected society to cope using only its own resources. Disaster preparedness encompasses the body of policy and administrative decisions and operational activities which pertain to the various stages of a disaster at all levels.

Safety awareness and preparedness in schools are becoming major concern in the wave of violence and arson. In the recent past, there have been perpetual reports on violence and fire outbreaks across the schools in the country. These reports are evidence that schools are not immune to destructive violence. Apparently, there exists constant fear among the leaders and a growing need to address the issue of safety in depth. According to Indiana Education Policy Centre (2000:2); school violence prevention demands that we be prepared for the eventuality of violence. Schools that are safe and responsive have plans and procedures in place to deal with violent and disruptive behaviour.

According to Begun (2001), most violent situations can be avoided if training of social skills becomes part of proactive safety procedures. The School administrators have a responsibility to ensure that the school environment is conducive for learning (Day and Golench, 1995). They can accomplish this by working through an establishment of clear rules and procedures; thus school policy takes an important role in safety procedures.

The question here is whether schools are adequately prepared to deal with issues of disasters that include the evolving threats to school security, comprehensive school safety planning and leadership, school security assessments, school security strategies and issues including board meeting and administration office security. Other areas include athletic and large event security, bomb and grenade threats and suspicious devices, cell phones and text messaging, gangs, hotlines and anonymous reporting, private and independent schools, school police, school security staffing, student involvement in school safety planning, transportation security, uniforms and dress codes, zero tolerance, managing bullying; preparing schools for terrorism; managing school safety on tight budgets; parents and school safety; early warning signs of violence; assessing and managing threats; lessons learned from school crisis Incidents; emergency preparedness planning and preparation; emergency response and crisis management; managing media and parent Communications on school safety and crisis issues.

The statement of Problem

The issue of disasters and safety standards in schools or educational settings will continue being a major factor in the management of education world over. This is evident from the numerous scholarly works that attempt to address this issue. In Kenya, the issue of students' safety and security has attained greater significance especially following the unprecedented levels of school fire breakouts and unrest witnessed in the country frequently. In 2008, student unrest was reported in learning institutions resulting into the death of three students. In 2012, there were 28 cases of fire breakout in schools resulting in 14 deaths. This was happening at a time when the country had just witnessed serious political violence in the name of post-election violence. Many schools have continued to suffer property destruction and loss of lives. In 2012, the following schools had incidences of fire disasters destroying school property and in some incidences causing death: Malindi High School –Malindi District, fire caught deputy principal's house at night claiming his life, wife, 6 children; Emmanuel High School in Uasin Gishu County, the school boy's dormitory caught fire at night.

In addition, Kathigiriri mixed boarding school girl's dormitory in Meru County caught fire destroyed the whole dormitory and pupil's property. The most critical one was in Homa Bay County where in August 2012 fire broke out in a dormitory at Asumbi primary boarding school burning to death eight pupils that were in the dormitory. Only one pupil survived. The fire was suspected to have been caused by electric upsurge. In all these fire incidences the probable cause of fire is attributed to electrical fault and other unknown reasons. It is in the interest of this study to establish the level of disaster preparedness in learning institutions in Kenya.

The general objective of the study was to establish whether schools were well prepared to deal with disasters. The study will enrich the theoretical foundations on which disaster preparedness and conflict management is to be carried out. The findings of this study will contribute to the existing fund of knowledge pertaining to disaster preparedness in schools, practice and theory. Literature was reviewed based on the following themes:

- i) Disaster preparedness and safety management practice,
- ii) Manpower training and development,
- iii) Effect of disaster on schools.

Findings on Disaster Preparedness

The purpose of this study was to establish whether schools were well prepared to deal with disasters. The specific objectives were to determine the nature and types of disasters encountered in schools; to establish whether training on disaster preparedness is carried out in schools in Kenya; to establish measures employed by headteachers and

principals in ensuring disaster preparedness in schools; to evaluate the effects of disasters on schools in Kenya and to find out the challenges facing schools in disaster management.

Major Responses on Safety Standards in Schools

The general trend of safety standards in schools was of concern. The selected categories of safety standards surveyed included: availability of the Kenya Power and Lighting Certificate (KPLC), availability of functional fire extinguishers, perception of risks, and impact of disasters and levels of training as a mark of preparedness.

Responses on availability KPLC certificate

It was observed that **92%** of the surveyed schools did not possess the certificates. This, in effect, is a pointer to possible risky power connections which are a major cause of frequent fire outbreaks in schools. On fire out breaks, **53.9%** of the respondents in the sampled schools rated it as **'most severe'**. **Availability of KPLC Certificate was:** Not Available = 92%. Available = 8%.

Responses on serviceability of fire extinguishers

It was noted that only 43% of the schools surveyed had actually serviced the fire extinguishers. The rest (57%) had never renewed or serviced the gadgets since installation. Again, this is a pointer towards the risky disposition the learning institutions in Kenya are exposed to. There is need to cushion them from the risk of fire outbreaks.

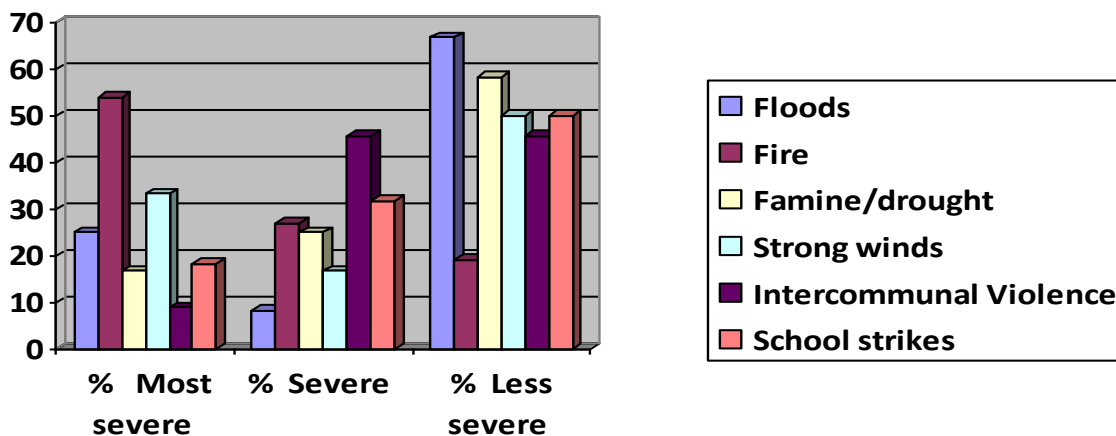
Perceived Major Disaster Risks

The research identified six perceived major disaster risks namely; floods, fire, famine/drought, strong wind, inter-communal violence, and school strikes. The opinion of the respondents on occurrence of these disasters in the last five years was gauged on the 1-3 Likert Scale: most severe (1), severe (2) and less severe (3).

The findings were as follows:

Table 1: Perceived Level of Severity of Disasters

Type of disaster	% Most severe	% Severe	% Less severe
Floods	25.0	8.3	66.7
Fire	53.9	26.9	19.2
Famine/drought	16.7	25	58.3
Strong winds	33.3	16.7	50
Intercommunal Violence	9.0	45.5	45.5
School strikes	18.2	31.8	50



This means that the most severe disaster in schools was **fire** as majority (**53.9%**) of the respondents pointed out that fire caused the most unwarranted disasters in schools. This therefore implies that issues to do with fire need to be addressed urgently in learning institutions. The problem of fire breakout was said to be followed closely by the menace of strong wind (**33.3%**) and floods at (**25%**). These percentages are high hence schools that encounter these disasters were likely not to perform well in academics.

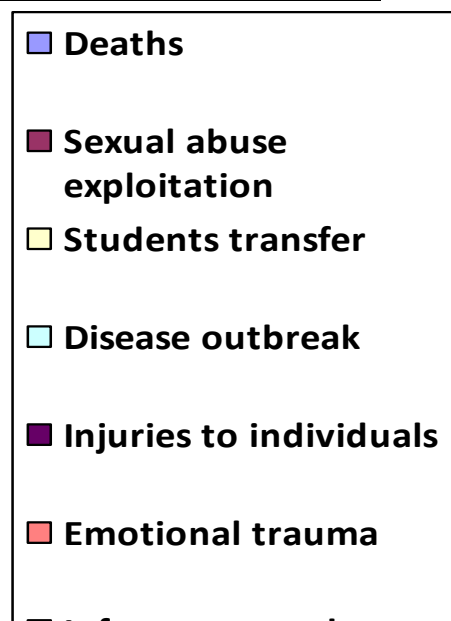
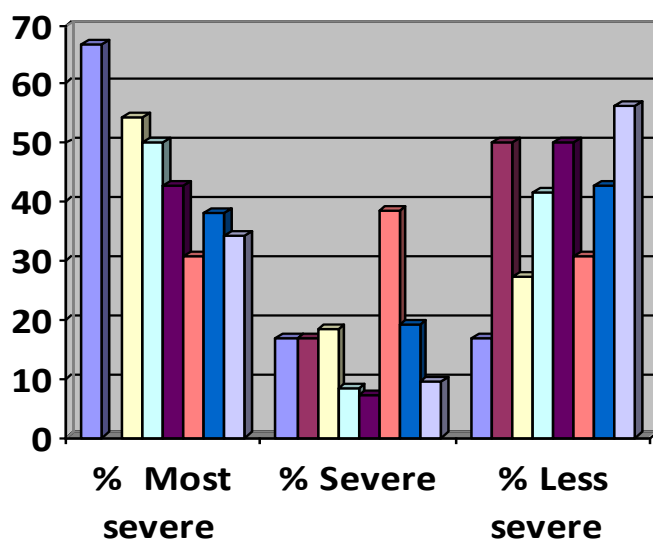
Impact of Disasters on Schools

On impact of disasters on schools, the respondents were exposed to seven variables which included: deaths, students' transfer, disease outbreak, injuries to individuals, and closure of schools, emotional trauma, sexual abuse/exploitation, infrastructural damage, and lessons disruption.

The responses were as follows:

Table 2: Perceived Impacts of Disaster on Schools

Impact of disaster	% Most severe	% Severe	% Less severe
Deaths	66.6	16.7	16.7
Sexual abuse exploitation	33.3	16.7	50
Students transfer	54.5	18.2	27.3
Disease outbreak	50	8.3	41.7
Injuries to individuals	42.9	7.1	50
Emotional trauma	30.8	38.4	30.8
Infrastructure damage	38.1	19.0	42.9
Lessons disruption	34.4	9.4	56.2



Looking at the bar graph carefully, majority (66.6%) of the respondents indicated that the disasters encountered had severe impact that resulted into death of students or injuries of the individuals.

Disaster Awareness

On disaster awareness it was observed that pupils/students, teachers and local community were sensitive to the occurrence of disasters in their environment.

The responses were as follows:

Table 3: Disaster Awareness

Type of respondents	% - Aware of disasters and know what to do	% - Not aware of disasters and do not know what to do
Teachers	50	50
Pupils/students	41	59
Local community	43	57

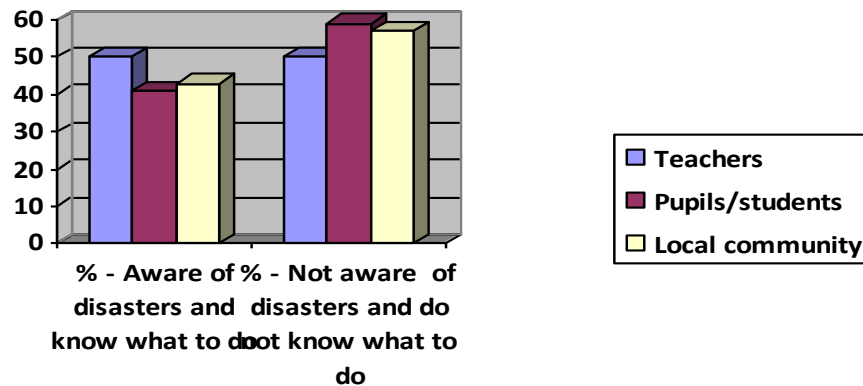


Figure 3: Bar Graph Showing Disaster Awareness

The bar graph reveals that majority of the respondents were not aware of what to do in case of a disaster. This was worrying because in an event of a disaster, many people were not prepared in anyway on how to deal with it.

Levels of training as a mark of preparedness.

On levels of training as a mark of preparedness, it was observed that 52% of the respondents indicated that they had received basic training in disaster prevention. Out of the respondents who indicated that they had received any training in disaster management, 72% had only attended demonstration sessions in disaster management; 16% had gone to certificate level, 7% had attained diploma level, and only 2% had attained Bachelors and Masters Degrees in Disaster Management.

CONCLUSION

From the findings above, it is concluded that learning institutions were not sufficiently prepared to handle disasters or emergency situations as they may occur from time to time. This premise is informed by the fact that schools do not have contingency plans to mitigate disasters like floods, fire outbreak, and wind, among others. It is, therefore, incumbent upon the national government and County governments throughout the forty seven (47) regions to urgently address disasters of various kinds in learning institutions throughout the country.

RECOMMENDATIONS

It is therefore, recommended that a seven pronged response plan which includes the following action points should be put in place by the Ministry:

- i) Policy:** Develop a coherent disaster/emergency preparedness policy and implement it at national, county and sub-county levels. The policy should generate and encourage proactive leadership and prudent use of local resources in handling disaster related issues at grassroots levels.
- ii) Sensitization:** Urgently organize a sensitization programme for all directorates in the Ministry and key education stakeholders on issues pertaining to Disaster and Emergency preparedness. This initiative will promote ownership of emergency programmes in both central and county governments.
- iii) Capacity building:** Build the capacity of all levels of education sponsors, managers and administrators in all the 47 Counties. This initiative should be continuous and it should be able to empower all actors and facilitate rapid response to emergencies in rural areas.
- iv) Rapid Response Teams:** Establish county-level rapid response teams/ committees in all 47 Counties to handle regional emergency situations.
- v) Funding:** Establish a County emergency fund to cater for disasters through rapid response teams mentioned in No. 4 above.
- vi) Networking:** The Ministry and County officers alike should coordinate synergized responses to emergency situations through coherent networking with international and national humanitarian organizations like UNOCHA, UNICEF, Save the Children, Red Cross, Fire Brigade Department, among others.
- vii) KPLC:** The Kenya Power and Lighting Company should urgently survey the state of electrical wiring in schools and make appropriate recommendations.

WAY FORWARD

a) Directorate of Policy, Partnerships and East African Community

- i) Develop an education policy on disaster/emergency preparedness in learning institutions to be implemented at national, county and sub-county levels.
- ii) A clear coordination framework on disaster/emergency management response should be formulated.
- iii) Networking: Should network with other stakeholders including international and national humanitarian agencies like UNICEF, UNOCHA, Save the Children, Red Cross and Fire Brigade for assistance.

b) Directorate of Quality Assurance and Standards

- i) Officers at all levels should be trained on how to detect functional and malfunctioning fire extinguishing equipment and materials e.g sand, water, hand held cylinders, etc.
- ii) The Directorate should review and upgrade the safety standards manual to address issues related to adequacy of equipment and responsiveness.

c) Directorate of Basic Education/Secondary and Field Services

- (i) Should operationalize the rapid response teams through coordination at all levels
- (ii) Capacity building for BOMs/SMCs, Principals, Head teachers and even students on disaster preparedness and management should be held
- (iii) Funding: a pool of emergency funds should be established to cater for disasters by the rapid response teams
- (iv) A way should be found to encourage the culture of openness, transparency, dialogue (communication), democratization in schools and the community to reduce tensions that trigger vandalism and arson.

d) Education Secretary's Office

- i) Sensitization - the office should urgently organize a sensitization programme on disaster preparedness findings for all the Directorates and the counties, sub-counties and key education stakeholders.
- ii) The office should liaise with KPLC to undertake a survey on the status of electrification, safety and durability in basic education.

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