EFFICACY OF FIRE DISASTER MANAGEMENT POLICIES IN MANAGING FIRE OUTBREAKS IN TANZANIA'S SECONDARY SCHOOLS

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Abstract:
Despite the issuance of policy directives, fire disaster events have continued recurring in Tanzania's secondary schools unabated over the years. This paper, therefore, is based on a study that was conducted to answer the research question: Why do fire disasters continue to occur in Tanzania's secondary schools despite the existence of policy directives issued by the Ministry of Education, Science and Technology (MoEST) for mitigating the problem? The study was guided by the critical policy analysis theory to investigate the efficiency of policy directives to manage fire outbreaks in secondary schools in three regions of Tanzania namely, Iringa, Mbeya and Kilimanjaro, as well as the MoEST Headquarters. The researcher adopted purposive sampling techniques to draw a sample of 116 participants from Zonal School Quality Assurers (ZSQAs), Regional Education Officers (REOs), District Secondary Education Officers (DSEOs), School Board Members (SBMs), Heads of Schools (HoSs), teachers and students, and the Commissioner of Education (CoE). The information from the participants was gathered using face-to-face interviews and Focused Group Discussions (FGDs). The study found that hardly had the policies issued by MoEST managed to mitigate the occurrence of fire outbreaks in the country's secondary schools. The recurrence of the problem was aggravated by little initiatives on the part of the ministry to ensure that the policies issued are clearly understood by the implementers (Heads of School, teachers and students) at the secondary school level. Moreover, the system in place largely fails to solve on time inhibiting factors such as lack of accountability, making close follow-up and creating an enabling environment on the part of school authorities to facilitate the smooth implementation of policy directives. Thus, the study calls for a coherent formulation and implementation of policies coupled with capacity-building among key implementers at the secondary school level to curb regular occurrences of fire disaster events.

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1. Introduction

Disaster events create shock waves all over the world due to the adverse effects they create including destruction of infrastructure, loss of property, disruption of human activities, injuries and death. Usually, disaster incidents are non-selective as they may occur and affect human settlements and communities, learning institutions in general, and schools in particular. The shocks from disaster events are experienced in all nations, worldwide. Disasters occurring in schools are caused by natural, man-made factors or both. The emerging disasters include floods, landslides, earthquakes, epidemics, wars, school shootings, windstorms, accidents, heavy rainfall and, in this case, fire (Tanaka, 2012; PMO, 2011; United Nations [UN], 2008). Fire disasters events in schools are a global phenomenon, despite policy directives being issued for managing them. Such fire incidents disrupt the normal functioning of schools, specifically the proper implementation of the curricula. The destructive nature of disasters, specifically fire outbreaks in secondary schools, have awakened the international community as well as the individual nations to issue and refine their managerial policies aimed to manage and curb further disaster incidents.

Globally, children in schools are the most vulnerable when fire disasters hit their institutions (UNESCO, 2014; UN, 2008). Subsequently, the United Nations initiated the Hyogo Framework for Action (HFA), which insists on nations to incorporate disaster management practices into their national plans and programmes (UN, 2008). In 2005 more than 168 nations declared to have integrated the issue of disasters into their respective national agendas. The agreed upon priority areas include: making disaster risk reduction a priority, improving risk information and early warning, building a culture of safety and resilience, reducing the risks in key sectors and strengthening preparedness for response (UN, 2008, p.1). Towards this end, individual countries are responsible for translating the key priority areas of the HFA into their local policies and plans for managing disaster events in communities and institutions.

Overall, fire disaster events affect the children in schools psychologically, emotionally, physically and educationally (Peek, 2008). Thus, the HFA reminds nations to empower their people, including the children in schools, to mitigate and fight against the occurrence and fire disaster events-linked adverse effects. Ultimately, the empowered children may practice disaster preparedness activities in their residences, in schools and in their respective communities. Fire disaster preparedness practices include regular drills, training and the integration of disaster issues in the school curriculum (Petal & Izadkhah, 2008). Petal and Izadkhah contend that fire disaster incidents are critical problems for both developed and developing countries, whether lower, middle and higher income nations.

1.1 Argument

The MoEST's issuance of policy directives were intended to manage the recurrence of fire disaster incidents in secondary schools. These policy directives were designed to ensure the provision of education in a safe and friendly environment (WEMU, 2011; MoEVT, 2002). Yet, fire disaster events in secondary schools have increased over the years in Tanzania particularly from the 1990s to the recent past. These fire outbreaks have continued unabated in secondary schools despite the long span of policy directives issued by the ministry to stave off and manage fire outbreaks. The persistence of such deadly fire disaster incidents in Tanzania's secondary schools reveals a gap between the policy intentions and the actual practices on the ground. The regular occurrence of the problem also raises questions on whether the policy directives the MoEST issued actually reached secondary schools and to what extent they were being implemented. Apparently, it not self-evident how far the policy directives have succeeded to prevent the regular occurrence of fire outbreaks in the country's secondary schools. This paper, therefore, reports the findings of a study that examined the efficacy of fire disaster management policies issued by the MoEST in managing the recurrence of fire disaster incidents in the country's secondary schools.

Studies on fire disasters have been widely conducted outside Tanzania, with the exception of a few local studies that have focused on fire preparedness and causes of fire disaster events in schools (Kahwa, 2009; Nestory, 2017; Nyagawa, 2017). Comparatively, children in schools are the most vulnerable when disaster events such as fire outbreaks occur (Efthymis, Michael, Alexia, Panagiotis, Vassiliki, Kate, & Spyros, 2014). The following sub-sections reviews literature on fire disasters from developed, developing countries generally, African countries in particular before zeroing in on Tanzania.The presentation of the existence and side effects of disaster events in various countries is followed by the research gap that the study set out to cover.

2. Fire Disaster Events in Developed Countries

The fire disaster incidents in the United States are higher among the poor people than among the rich. The most affected people are the children, the aged and the people with disabilities (FEMA, 2016). The vulnerability to fire is also experienced in schools, leading to the destruction of buildings and facilities. For instance, fire departments reported that almost 4,000 school buildings catch fires annually, causing an estimated loss of property worth $66.1 million and 75 injuries. However, large-scale fatalities caused by school fires in the United States are very few because of active early warning systems, including fire detectors and alarms (Tropical Fire Report Series, 2014).In many cases, schools in the United States are more affected by disasters arising from transportation, homicides, suicide and school shootings, than incidents originating from fires (Satterly, 2014). The main causes of fires in school buildings were cooking (42%), intentional action (24%) and heating (10%) (Tropical Fire Report Series, 2014).

The major fire disaster fatalities in Japan, New Zealand, Indonesia and Australia, on the other hand, largely originate from natural forces such as earthquakes and

tsunamis (Bird, Chagué-Goff & Gero, 2011; Mutch, 2014; O'Connor & Takahashi, 2014; Tanaka, 2012). In Japan, for example, most of the fire disaster incidents in schools are related to seismic activities, such as the eruption of earthquakes. The occurrence of earthquakes is often accompanied by overturning, falling and eruption of fire from the heating appliances such as space heaters, cooking stoves and candles. The fire incidents also were caused by destruction and breakage of gas piping or electric wiring systems (Sekizawa & Sasaki, 2014). The country, therefore, has strived to build seismic resilience by revising its policies for managing the negative effects of disaster events in schools and the larger communities (World Bank Disaster Risk Management Hub, 2017). Calamities brought by the eruption of disaster events in schools have prompted Japan to revisit and refine its policies in education in a bid to manage the disaster incidents in schools better and more efficiently (Kitagawa, 2014; Tanaka, 2012).

The United Kingdom (UK) also experienced school fires resulting from arson and some unknown sources (Merseyside Fire & Rescue Service, n.d.). On average, schools in the UK reportedly experience three fires daily, with 75 percent attributable to arson. The country has about 1,400 to 1,800 fire disaster events which caused a loss of £49 million in 1995, rising to £67 million in 2005 (Wade, Teeman, Golden, Wilson & Woodley, 2007). The worst fire disaster incident in UK schools in record is the Grenfell Tower fire incident (NEU, 2017). As a result, the UK decided to include issues related to fire disaster incidents in the school curriculum (Shape & Kelman, 2011). Now it is mandatory for schools to consider fire safety issues more broadly and seriously by revisiting fire risk assessments. Despite the incidents of school fire in developed countries, the problem seem rare in rich and developed countries compared to middle and lower income, developing countries, the policies in place notwithstanding.

2.1 Fire Disaster Events in Developing Countries
The incidents of fire disasters are also alarming in middle and lower income countries such as India, Iran, Nepal and Haiti (Taghizadeh, Mowafi & Ardalan, 2013; Tropical Fire Report Series, 2014). India has experienced school fire outbreaks over the years causing injuries, destruction of property and loss of human life. For instance, on 2nd August 2004 some 100 students perished and scores others were seriously injured at Sri Krishna Saraswathi School in Kumbakonam following a deadly fire incident (Beware, 2004). In 1995, 441 school children died in a stampede aggravated by panic when a marquee used for the end of school term celebrations caught fire. Iran also experienced more than six large school fires between 2005 and 2012, costing the lives of five students and causing 67 serious injuries (Taghizadeh, Mowafi & Ardalan, 2013).

2.2 Fire Disaster events in Africa
South Africa has witnessed several fire disaster events in secondary schools in recent years. The recurrence of fire outbreaks in South Africa prompted the government to establish the Disaster Management Framework for guiding communities in the fight against the problem (Pasipamire, 2011). The framework insists on the creation of community awareness and promoting the culture of safety among community

members, including students in schools. Similarly, in Kenya, fire outbreaks have interrupted community life after occasioning damages and loss of life, despite the government issuing of emergency preparedness guidelines for managing disaster events, including fire outbreaks (Nasimiyu, Wakhungu, & Omuterema, 2017). Furthermore, the Ministry of Education (MoE) has been insisting on cultivating a culture of safety for rescuing secondary schools from fire disaster events (Shibutse, Omuterema, & China, 2014). Efforts to mitigate fire outbreaks in Kenya's secondary schools notwithstanding, the problem have persisted. In fact, the problem of fire disaster events generally remains critical in Kenya's secondary schools (Gichuru, 2013; Kanyi, 2014; Kimathi, 2011; Kisurulia, Katiambo, & Lutomia, 2015; Mamogale, 2011; Shibutse, Omuterema & China, 2014).

2.3 Fire Disaster Events in Tanzania

The Tanzania government issued the National Disaster Management Policy (PMO, 2011) and enacted the National Disaster Management Act, 2015 (URT, 2015) as part of efforts aimed to effectively and efficiently manage the regular occurrence of disaster events in communities. In the education sector, the Education and Training Policy (ETP) of 1995 and that of 2014 insist on education being conducted in safe and friendly environments, free from disasters, and fire outbreaks (MoEC, 1995; WEMU, 2014). In 2011, the then Ministry of Education and Vocational Training (MoEVT) before it was renamed the Ministry of Education, Science and Technology (MoEST) issued a policy directive (Education Circular Number 4 of 2011) aimed to mitigate the fire incidents in schools and Teacher Training Colleges (WEMU, 2011). The policy directives were issued following the regular occurrence of fire outbreaks in secondary schools.

The literatures reviewed underscore the relevance of the critical policy analysis theory in policy formulation and implementation processes in education sector to manage fire outbreaks in secondary schools. This theory is important in effecting change in society and accounting for how top authorities formulate policies issued in secondary schools for implementation, without necessarily consulting the latter. This study, therefore, focused on the usefulness of policy directives issued by the MoEST in managing fire disaster events in secondary schools. Policy efficiency denotes the capability of policy directives in solving the problem of fire disaster incidents in secondary schools.

Previous studies on fire disasters in schools relied mostly on the causes of fire incidents and fire preparedness in secondary schools (Kahwa, 2009; Nestory, 2017; Nyagawa, 2017). The implications of policy directives issued by government to manage fire incidents in secondary schools were rarely covered. The literatures and empirical studies reviewed further signal that studies have rarely been carried particularly in Tanzania on the efficacy of policies aimed to manage fire outbreaks in secondary schools. In addition, fire outbreaks continued to occur in secondary schools over the years, despite the policy directives issued to manage the problem being in place. This paper thus covers the mismatch between the policy intentions and what actually takes place in secondary schools.

3. Theoretical Underpinning

Theoretically, the critical policy analysis (O'Connor & Netting, 2011) works on the assumption that demands for change should come from the people affected by the problem instead of being pushed top-down by the authorities. Principally, the top-down policies lack familiarity and sense of ownership among the implementers (Birkland, 2001; Kreitner, 2009). Subsequently, the policy becomes irrelevant and less coherent in solving the problem facing the community, such as fire disaster incidents in secondary schools. In this regard, Mosha (2006) contends that policies in institutions which are not universally justifiable are difficult to effectuate. Similarly, Alphonce (2000) contends that the critical theory is fundamental in building a conscious society in which the leaders and the led share ideas rather than one side being dominated by another. This sharing of ideas assists on the society acknowledging the existence of each side and creating a sense of responsiveness. According to O'Connor and Netting (2011), the critical policy analysis theory relies on the assumption that counter-arguments between the two sides in a linear of thesis (proposition), antithesis (counter-argument) and synthesis (compromise) yields a resolution to a problem—the rational policy option for resolving fire outbreaks in secondary schools. The theory was deemed relevant in this study because it takes on board the demands and inputs from the people affected by the problem while ignoring the dominancy of the top authorities during the policy making process. In contrast, the public policy options may be spoiled by individual or group interests than public demands (Mosha, 2006). However, the strengths outweigh the weaknesses, hence making this theory relevant in policy formulation and implementation processes.

3.1 Conceptual Framework
The following conceptual framework has been developed from related literatures and empirical studies reviewed:
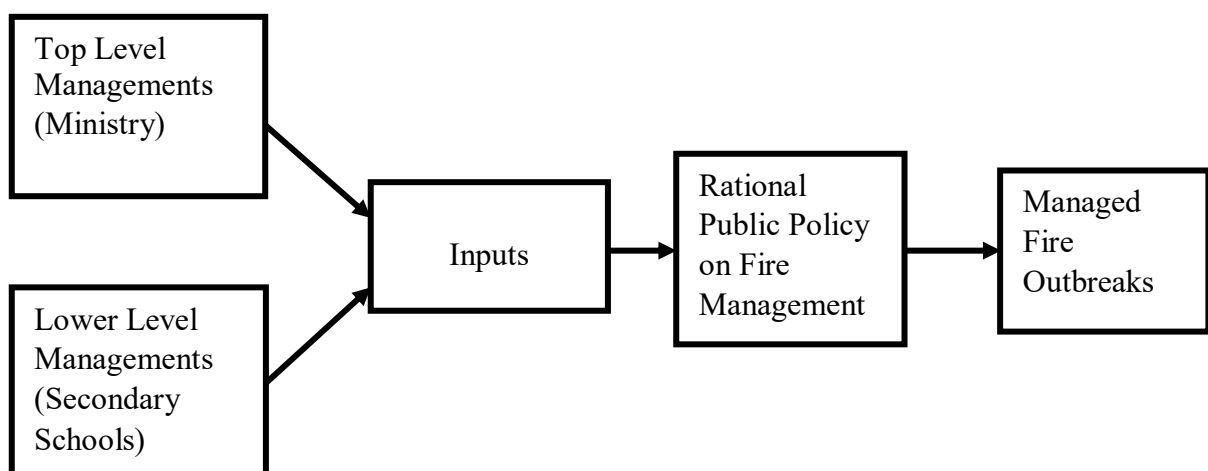

Figure 1: Conceptual Framework of the Study

The conceptual framework elaborates on procedures for formulating a coherent public policy for managing fire disaster events in secondary schools. The top level is occupied by the Ministry of Education, Science and Technology (MoEST), which is responsible for issuing policy directives in secondary schools. Currently, schools receive policy directives from the MoEST without necessarily involving them in the policy formulation process. Yet, the framework suggests that relevant public policy for managing fire outbreaks in secondary schools should draw inputs from both sides, the top managements (Ministerial level) and the lower level managements (secondary schools). The rational public policy formulated is relevant for managing fire outbreaks in secondary schools, and the reverse is continued recurrence of fire disaster events.

4. Methodology

The study adopted the qualitative research approach for guiding the choice of research design, data gathering techniques and analysis of information obtained from the study sites. This method was appropriate for capturing information from the policy-makers, school monitoring teams, supervisors and people who are affected by fire disasters in secondary schools (Cohen *et al.*, 2007). Qualitative research enabled the researcher to obtain detailed information from the participants based on their practicing of fire disaster management policies in secondary schools. Specifically, the study gathered sufficient verbal information from the study sites affected by fire disaster events more than once (Wellington, 2000; Schratz & Walker, 1995).

The researcher investigated the case of reoccurrence of fire outbreaks in secondary schools. The study, therefore, adopted a multiple embedded case study design (Yin, 2011), which allowed the researcher to visit secondary schools, district councils, regions, zonal school quality assurance offices and MoEST headquarters connected with the study and research problem for gathering information related to fire disaster incidents in secondary schools. The case study design guided the researcher to study the problem of fire outbreaks in various educational offices and the secondary schools (Sharpe & Kelman, 2011; Ball, 1981; Lacey, 1970). The information from different institutions studied was embedded as multiple cases (Komba & Mpeta, 2014; Kahangwa, 2014; Peter, 2014; Wright, 1992) and compiled as research report. The multiple case study design enabled the researcher to obtain detailed information on the practices of fire disaster management policies in secondary schools. The study sites were purposively selected, and involved four secondary schools, four district councils, three regions, three zonal school quality assurance offices and the MoEST headquarters. The secondary schools were places which critically experienced the problem of fire outbreaks. The researcher selected secondary schools, which experienced multiple fire disaster incidents. These have sufficient experience of fire outbreaks after facing the problem several times. The secondary schools therefore, provided enough information on how fire management policies are put into practice and their usefulness in mitigating the problem. The zonal school quality assurance offices, district councils and regions, on the other hand, were specifically selected because they monitored the

implementation of policy directives issued by MoEST to secondary schools. The researcher selected only those education zones, regions and district councils where secondary schools affected by fire outbreaks were located. The study zones were the Southern Highlands, Highlands and North-Eastern whereas the regions were Iringa, Mbeya and Kilimanjaro. The districts were Iringa Rural, Mbeya City, Hai and Rombo. The MoEST headquarters was specifically selected because of its strategic placement as the key policy-maker and issuer of the directives to the lower levels of management, including the secondary schools for actual implementation.

The study sample was purposively selected from the students, teachers, Heads of School (HoSs), District Secondary Education Officers (DSEOs), Regional Education Officers (REOs), Zonal School Quality Assurers (ZSQAs) and the Commissioner of Education (CoE). The sum of study participants was 116 comprising 1 CoE, 7 ZSQAs, 3 REOs, 4 DSEOs, 2 SBMs, 3 HoSs, 35 teachers and 61 students. The groups of participants formed the units of analysis from which information was generated for the study. Gathering information from the participants in the study sites was through the use of face-to-face interviews and Focused Group Discussions (FGDs). The use of more than one technique facilitated the obtaining of a variety of information which could, otherwise, not be acquired through the application of a single method. The use of multiple methods also enabled triangulation of data collection methods for generating complementary information. Such triangulation of data collection methods assisted the researcher to obtain rich information from the natural setting of the studied population (Wellington, 2000).The researcher used NVivo 11 to analyse the voluminous data from the study sites. The major themes and the emerging themes from the face-to-face interviews and FGDs were subjected to content analysis. Furthermore, the researcher adopted the Huberman and Miles (1994) technique of qualitative data analysis techniques, which entails data reduction, data display, conclusion drawing and verification of data.

5. Discussion of Findings

The study was conducted to answer the major research question: Why fire disasters continued to occur in secondary schools despite the issuing of policies to manage the problem? The study findings indicate that the issuing of fire disaster management policies alone cannot suffice to control and manage the regular occurrence of fire outbreaks in the country's secondary schools. The study shows that there were other factors beyond the existence of policy directives, which abetted the occurrence of regular fire disaster events in secondary schools. These factors are summarised in Table 1.

Table 1: Factors behind the Occurrence of Regular Fire Outbreaks in Secondary Schools

Main reason	Subsequent reasons	Number of Participants
Lack of accountability	• Untrusted school management, teachers and students	59
	• Failure to conduct thorough check-ups	21
	• Shortage of feedback after fire incident	18
	• Improper use of electricity	8
Sabotage	• Planned school burning	28
	• Dissatisfied communities	16
	• Unprepared to learn students	10
	• Revenge from the communities within the school and outside	7
	• Destruction (tampering with) of the sources of power	5
Irresponsible school management	• Rise of grievances	43
	• Negligence	39
	• Strict school rules	23
	• Inappropriate management	17
Unreliable sources of power	• Complete absence of electricity	11
	• Unstable power supply	8

Source: Field Data (2017)

Table 1 shows factors which hindered the usefulness of the policy directives issued by the MoEST to manage reoccurrence of regular fire outbreaks in secondary schools. The information indicates that fire outbreaks continued to occur in secondary schools due to the existence of critical issues which were not resolved on time despite the government-issued policy directives. This means, the fire disaster management policies issued by the MoEST's for mitigating the problem in secondary schools did not properly work primarily because of lack of accountability, sabotage, irresponsible school managements and unreliable sources of electrical power.

5.2 Lack of accountability

The study found that some government authorities, school managements, teachers and students did not play their roles of ensuring that fire outbreaks in secondary schools are mitigated. During the FGDs for students and teachers, it emerged that the heads of school and the government officials from the ministries, regions and the districts did not undertake their responsibilities of educating people and supplying fire fighting gear for mitigating fire outbreaks or combating them whenever they occurred. Instead, they waited until disaster struck before taking stop-gap measures. Thereafter, no further actions were taken to ensure the problem did not recur. The study further established that there were no sustainable actions for dealing with the problem after the occurrence of fire in the secondary schools under review. Subsequently, fire disasters continued to occur and even recur in the same secondary schools to create uncertainties and insecurity among students, teachers and the whole community (Ndetu & Kaluya, 2016). This means, policy directives may effectively work if individuals and institutional

managements are committed to overcoming the problem. Failure to have committed or accountable personnel renders the policy directives toothless no matter how potentially good they are. Similarly, after the ministerial issuance of policy directives for managing fire outbreaks, regional and district authorities should make secondary schools accountable by performing their designated roles and help build their capacity to manage fire disaster events. Failure to do so results in continued fire outbreaks in secondary schools. One student explained this sorry situation thusly: "*What causes repeated fire incidents in many secondary schools in Tanzania is lack of accountability among teachers, government leaders and all the students ... Teachers themselves are irresponsible. After school hours, they do not do anything extra. Students likewise, after receiving education the first time, they take responsibilities then they forget.*"(Student 3).

Information gathered from the REOs through face-to-face interviews revealed that the school administration and the government did not often make thorough follow-ups and check-ups in secondary schools to identify the potential sources of fire and take immediate appropriate remedial action. Similarly, information volunteered by the teachers during the FGDs shows that the MoEST did not make follow-ups in secondary schools to ensure that the policy directives reach secondary schools at the right time and full enforcement. The findings from the study indicate that there was lack of adequate monitoring in secondary schools from the district, regional and ministerial authorities to ensure that policy directives do exist and work as they should. The policy documents issued by the MoEST were also unavailable in secondary schools. Failure to have policy directives in place meant that schools could not enforce desirable fire management practices. As result, there was continued occurrence of fire disasters in secondary schools. In this regard, a teacher in one school said during the FGDs: "*The directives might be good, but they are not well-received; they reach improper persons … For instance, scouts are used to train students, but teachers who are their immediate supervisors, are surprisingly not involved in the training exercise. So what do you expect [in such a situation]?*"(Teacher 10).

5.3 Sabotage

The respondents also reported that students and members of the community surrounding the schools were behind the damage witnessed in the institutions aimed to disrupt the smooth running of the school. Indeed, the findings from face-to-face interviews with the ZSQAs, DSEOs and HoSs and the FGDs to teachers and students show that some fire incidents in secondary schools originated mainly from students and community members round the school. These deliberate fires were intended to sabotage school management and infrastructures due to long-standing claims and dissatisfactions among students and communities. As such, they used fire as a weapon for informing the school management and government at large about their discontent and demands. These actions include setting fire to school buildings and other facilities. As such, the study found that the issuing of policy directives by the authorities for managing fire disasters should be coupled with efforts aimed to solve problems facing the school and the community surrounding the school. After all, a disgruntled

community cannot support the government's intention of managing fire outbreaks. In other words, there should be other initiatives of ensuring that problems facing students are solved and long-standing claims from the community members are settled to ensure that the ministerial directives on combating fire outbreaks actually work. Largely, fire disaster management policies work properly among the people who are free from discontents and disenchantments. Suggestively, some problems facing students and other people can be solved through convening of common meetings and holding of discussions. Thus, secondary schools and the government at large should resolve the conflicts which hinder students, teachers, parents and the larger community to work together in minimising fire disasters. Conversely, in the absence of a common understanding among the school and community members fire disaster incidents could persist. Further evidence was provided by one DSEO during a face-to-face interview who charged: *"Some fire incidents were caused by dissatisfaction among the parents, who contributed construction materials in form of a loan. Those people were promised to be refunded but never done in time … the particular situation obvious, parents will ensure that the school is not stable"* (DSEO 1).

In a bizarre twist, a ZSQA reported that one of the sources of fire outbreaks in secondary schools was the District Commissioner who ordered parents to bring back to school all the long-term truants. The ZSQA explained this situation thusly: *"I remember at one time we visited a school and discovered that the District Commissioner had instructed all the truants to return to school. Those were the critical truants … some were already married, had wives or husbands … were brought back to school by force and treated like other students. Unwillingly, they went back to school but after a while the school was gutted down ... when interrogated during the special inspection, both parents and children admitted that they wanted their right of being together with their wives and husbands at home, to be respected."* (ZSQA 5).

5.4 Irresponsible school management

Information obtained from the FGDs with students indicate that the events of fire outbreaks continued to occur in secondary schools because school managements were negligent and unable to manage the students' affairs amicably, with the school rules rather very strict and stringent. The students further explained that the HoSs and teachers concentrated much on barring students from using mobile phones and other electrical gadgets as the only means of mitigating fire disaster events. Despite such restrictions, they reported, fire outbreaks in secondary schools continued escalating. Implicitly, prior to implementing the MoEST's policy directives, the secondary school managements should review school rules and regulations in light of the prevailing potential hazards and realities on the ground. This review should involve all the key stakeholders including both students and teachers. These study findings are consistent with those of Kisurulia, Katiambo and Lutomia (2015), Kanyi (2014) and Gichuru (2013) who found that emergency preparedness in schools hardly existed. Thus, to mitigate fire outbreaks in secondary schools, the school managements should analyse critically the existing situation and timely take appropriate measures. Otherwise, the problem will persist regardless of the policy directives issued by the top authorities. Impliedly,

school managements should investigate other factors which contribute to regular fire occurrences in secondary schools rather get stuck on a few factors that do not help to end fire outbreaks. One student contended during the FGDs: "*A person was caught with a phone at school and expelled back home, yet, fire incidents continued to occur. Now you find that the problem was not the phone, but there are other things which teachers do not take into account. They only consider one thing, a phone ... while there are many causes of fire outbreaks.*"(Student 10).

Another student explained during one of the FGDs thusly: "*I advise the government to ensure that our demands are met, then schools will be safe … when you violate the rights of students, the rights shall be claimed by any means ... even by burning the school*" (Student 36).

Another student complained: "*Our school management is really bad. Students' regulations are too tight. So, a person may decide to burn a school, then the school will be closed and students will be sent back home to rest at least for a short while ... then, things are likely to change after the event.*"(Student 17).

5.5 Unreliable sources of power

Power designated as source of light students use for studying at night hours. Information gathered from the students and teachers through the FGDs revealed that due to unreliable electricity supply and frequent power cuts, students were forced to use candles, kerosene lanterns and solar-powered gadgets which accelerated fire outbreaks in secondary schools. Moreover, sudden power cuts and alternating power supply caused shot circuits that sometimes resulted in fire eruptions. Furthermore, the study findings show that the absence of reliable power supply made students use unreliable and unsafe sources of light such as candles and kerosene lamps, which could torch the beddings or books, hence causing fire outbreaks. This means, some secondary schools were gutted down by fire from candles and kerosene lamps. Implicitly, issuing of policy directives to manage fire outbreaks should be allied with the provision of reliable sources of power and lighting. Otherwise, policy directives issued by MoEST to manage fire disaster events in secondary schools would continue failing to manage and contain fire outbreaks as envisaged.Explaining this dilemma, a student charged during the FGDs: "*In a nearby school, the dormitory was razed by fire because of erratic power and fluctuation of electricity … As a result, there were unexpected power cuts ... light went on and off intermittently, finally a bright light was observed at an electric pole connected to the dormitory ... later the building became an inferno and the dormitory was gutted down completely.*"(Student 8).

6. Conclusion

The study investigated the efficacy of fire disaster management policies in managing regular fire incidents in secondary schools. Generally, the policy directives issued by MoEST for managing such fire outbreaks in Tanzania's secondary schools were not sufficient enough to mitigate the problem of fire. Moreover, they were not coupled with

actions and measures that could improve things on the ground and make the policy directives implementable. Furthermore, the study found the existence of various sources of fire which are both planned (arson) and unplanned (accidental). On the other hand, the policy directives issued for managing fire outbreaks could not suffice to prevent the problem as a lot more needed to be done by the authorities to ensure the situation on the ground were amenable to fire outbreak curbs. In consequence, fire incidents continued to occur in many secondary schools, the policy directives in place notwithstanding. The reasons behind the recurrence of these fire outbreaks were found to include lack of accountability among the heads of school, teachers and students; sabotages from students, parents and members from surrounding communities; irresponsible school managements; and unreliable and erratic power supply. On the whole, the policy directives cannot properly function and produce the desired results when other intervening variables are left unattended to or simply ignored by the school, district and regional authorities. Indeed, without addressing these hurdles, the implementation of the policy directives in Tanzania's secondary schools aimed to contain and manage fire outbreaks would fail to deliver the required output. Thus, a rational policy formulation and implementation should consider resolving contextual factors the policy agents in secondary schools face.

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