ESARBICA JOURNAL

JOURNAL OF THE EASTERN AND SOUTHERN AFRICA REGIONAL BRANCH OF THE INTERNATIONAL COUNCIL ON ARCHIVES

Volume 42

2023

Disaster preparedness for records management at the Workers' Compensation Fund, Dar es Salaam, Tanzania

Praygod Ng'unda
Rural Energy Agency
png'unda@rea.go.tz

Esther Ndenje-Sichalwe
University of Dar es Salaam
esther.sichalwe@udsm.ac.tz

Abstract

The study examined disaster preparedness for managing records in the Workers' Compensation Fund (WCF) in Tanzania. Specifically, the study identified potential disasters that can affect records and the facilities available for disaster preparedness in managing records, established the level of skills in disaster preparedness among WCF staff and identified challenges WCF staff faced in disaster preparedness for managing records. The study employed a mixed methods research design to assess the disaster preparedness programme for managing records at the WCF. The study findings indicated that the WCF is ill-prepared for potential disasters that may affect their records and inadequate staff training on disaster preparedness for managing records. Limited storage capacity for records and a lack of a written disaster preparedness plan were among the major challenges faced by the institution. The study recommends that the WCF should develop a disaster management plan as a proactive approach towards the management of their records and develop a comprehensive training programme to orient staff on disaster preparedness.

Keywords: disaster, disaster preparedness, disaster plan, disaster management, records management, Tanzania

Introduction

Disaster is interpreted in different ways and, according to Franks (2018), a records disaster is a sudden and unexpected event that results in the loss of records and information essential to an organisation's continued operation. Coppola (2011) asserts that whether natural or manmade, disasters cause severe social, economic and environmental disruption. Oketsang (2016) adds that a disaster as an unexpected event could have serious damaging consequences for the facilities, records and buildings. There can be sudden removal of records and documents, making them

inaccessible for use. Several cases reported worldwide indicated that disasters harm information centres such as records offices, libraries and archives, which results in infrastructural damage and loss of records. On the aspect of loss of records, Moustafa (2015) recommends that early efforts and collaborative measures be taken to protect records and make them free from natural and man-made disasters because they are of significant value to individuals and organisations. Duranti and Franks (2015) emphasise that establishing a disaster plan is a means of getting control of the situation and combating the chaos a disaster can cause. Asamoah, Akussah and Musah (2018) emphasise that disaster management involves planning, being prepared for the unexpected and dealing effectively with disasters. Thus, disaster preparedness and recovery policies are important to guide staff in the event of a large or small disaster and protect records that are vital to the core values laid out by the mission statement (Duranti & Franks, 2015).

Most African organisations seem to be unprepared and not protected against disasters. Studies by Mnjama (2008), Ndenje-Sichalwe (2010) and Ilo, Ngwuchukwu, Chijioke, Onuoha and Adeniran (2019) evidenced inadequate prevention and preparedness measures against disaster. These studies that were conducted in Kenya, Nigeria and Tanzania showed that public records and other government assets, including employees, are at risk of being affected by disaster due to non-compliance with disaster management frameworks, inadequate resources and infrastructure to detect and fight against disasters, a lack of employee awareness on issues relating to disasters and inadequate capacity of government institutions dedicated to deal with disasters. In Tanzania, disaster management activities resort under the disaster management department in the Prime Minister's office, and they are guided by the Disaster Relief Coordination Act and the National Guideline and Policy for disasters (United Republic of Tanzania 2022). The Workers' Compensation Fund (WCF), which is a public institution in Tanzania, established in terms of section 5 of the Workers' Compensation Act of 2008 [Cap 263 Revised Edition of 2015] as a social security scheme responsible for providing equitable and adequate compensation for employees, was used as a case to examine the extent to which the institution is prepared for disasters that can affect its records.

Statement of the problem

Despite the crucial role played by records in supporting organisation activities, records are vulnerable to disasters such as fire, water and vandalism (CAG Report 2019). Scholars such as Mnjama (2008), Ndenje-Sichalwe (2010), Biswas and Choudhuri (2012), Koka et al. (2018), Ilo et al. (2019), and Chizwina and Ngulube (2021) urge that no organisation is free from disaster but there are possibilities of minimising the impact with good preparations. However, countries like Nigeria, Kenya and Tanzania still lack policies, guidelines and procedures that are essential in managing disasters and they have inadequate resources and infrastructures to protect records against disasters (Koka et al. 2018; Ndemanyisho 2014; Kamatula & Kemoni 2018; Kashaija 2019). These studies showed that public institutions in Africa were not well prepared for disasters. The situation is hazardous, as it puts public records at risk of being damaged and lost forever. This forms a motive behind examining WCF disaster preparedness and the extent to which WCF records are protected from disasters.

Research purpose and objectives

The purpose of this study was to examine disaster preparedness for managing records at the WCF in Tanzania. Specifically, the study identified potential disasters that can affect records and assessed the disaster preparedness in managing records and staff awareness on disaster preparedness at the WCF. The study also explored the challenges the WCF staff face in disaster preparedness for managing records.

Literature review

Every organisation, large or small needs a plan to protect essential information from destruction (Franks 2018). Continuous operations of an organisation depend on the extent to which the organisation's management and employees are aware of potential disasters and their ability to minimise disruptions of critical functions as well as recover the operations timeously by having a well-developed plan. Major potential disasters that can affect records include natural, man-made and hybrid disasters (Franks 2018; Kamatula 2013; Oketsang 2016). The United Nations (2008) report describes two major categories of disasters: natural disasters, which are caused by factors beyond human control such as earthquakes, volcanic eruptions, floods and landslides; and man-made disasters, which result from human negligence and intentions such as nuclear or chemical spills, electric faults and criminal behaviour such as theft and arson. Disaster preparedness is referred to as the core element of effective disaster management, as it involves measures taken by organisations to get themselves ready to fight the disaster when it happens (Odeyemi, Issa & Saka 2011). According to Oketsang (2016), a disaster preparedness plan must have adequate coverage for the storage of public records. Chaterera (2016) insists that a disaster preparedness plan is crucial for ensuring adequate protection of documentary heritage so that it survives into the future. The plan includes organisational use of administrative measures and operational skills to implement policies, strategies and improved coping capacities to minimise or avoid the impacts of disasters. Measures that need to be put in place to prepare for disasters are facilities and equipment, which depend on the type of disasters prevalent in a particular institution (Nwokedi & Panle 2017). Alegbeleye and Chilaka (2019) add that, worldwide, the strategies for disaster preparedness as far as records management is concerned include safety measures such as locking cabinets, employing security personnel, cameras, Closed Circuit Television (CCTVs), alarm systems, fire warnings and protection systems. These are mostly installed to ensure that the physical security of records whereas for electronic records security measures such as firewalls, passwords, encryption, security copies and access rights for each user category are some of the tools for protecting the electronic records' integrity, accuracy and trustworthiness against disaster. Emphasising a comprehensive framework for a disaster preparedness plan that serves as the foundation for protecting records during disasters, Khan, Vasilescu and Khan (2016) highlight the following four phases:

- Mitigation – minimising the effects of disaster, comprising building codes and zoning; vulnerability analyses and public education.

- Preparedness – planning how to respond, including preparedness plans; emergency exercises/training and warning systems.
- Response – efforts to minimise the hazards created by a disaster, such as search and rescue and emergency relief.
- Recovery – returning the community to normal, including temporary housing, grants and medical care

The lack of a disaster management plan in most of public records management units implies that government records are prone to destruction and absolute loss (Chaterera 2016). A disaster preparedness plan should also provide training aimed at building and developing resistance capabilities in the case of emergencies, essentially to facilitate disaster responses, recovery and continuity (Robertson 2015). Employees should get an education in and a clear idea of what they can expect to find in various disasters and scenarios, such as fires and floods, and should be made fully aware of their roles and responsibilities (Hlabaangani & Mnjama 2008). Institutional planning for disasters, training and education are crucial in alerting the commonalities about their responsibilities and how to respond during the disaster. In order to deal with disasters and responding to it, there is a need for a communication plan that can be used for informing all the staff (Rossmann 2019). This resulted in the organisation and employees being on the lookout for any potential dangers and reporting to the appropriate office before it can become a disaster for records. Akumu (2013) contends that disaster awareness derives heavily from education planning that involves identifying activities to be undertaken within the context of disaster risk management, which can lead to reduced risk of losing property, reduced chances of death, reduced personal injuries and increased institutional resilience to adverse conditions in addition to ensuring business continuity.

Inadequate financing for disaster, absence of disaster preparedness policies and plans, inadequate support from top management and absence of regular training on disaster preparedness in many African organisations are some of the most pertinent challenges to disaster preparedness (Taabu 2014; Njoroge 2014; Ilo et al. 2019). For instance, Asamoah et al. (2018) surveyed the 19 ministries in Ghana, revealing high levels of unpreparedness to manage disasters concerning public records. The study also revealed the exposure of the ministries to various kinds of risks in their operations and the lack of coordination between the heads of public sector institutions, NADMO and PRAAD. According to the International Strategy for Disaster Reduction (ISDR) (2004), inadequate financing for disasters in many African organisations resulted in poor preparedness for disaster management aimed at safeguarding records. Furthermore, due to the absence of support from management, organisations do not generally recognise the importance of having a disaster management programme aimed at minimising or avoiding the damage of a disaster that can affect records. In South Africa, Ngulube, Modisane and Mnkeni-Saurombe (2011) assessed the disaster management activities in public archives and revealed a lack of written disaster management plans and strategies. The study insisted that without disaster plans, public archival institutions are unable to preserve the South African heritage and guard against collective cultural amnesia.

Ayoung, Boatbil and Baada (2016) conducted a study to evaluate disaster preparedness in Ghanaian polytechnic libraries. The study indicated the general absence of security and insurance

policies and disaster plans. The libraries were found to be ill-prepared for disasters. Moreover, the staff were not aware of disaster management and disaster preparedness. The study recommended the development of disaster management policies and training for staff to increase their awareness about disasters. Similarly, studies by Alegbeleye and Chilaka (2019), Mtui (2017) and Mnjama (2014) mentioned the absence of vital records plans, a lack of or inadequate backup of vital records, and the absence of facilities for ICT for records back-up as other challenges that affect records centres, archives and libraries in Africa. In fact, many of the records were maintained using manual systems, which constituted a serious problem because when disasters such as floods and fire outbreaks strike, records could be lost without possibility of recovery.

Research methodology

This study adopted a mixed methods research design to investigate disaster preparedness for records management at the WCF. The study employed both qualitative and quantitative approaches in data collection, analysis and presentation. However, the study was predominantly quantitative in nature with some qualitative elements featuring less dominantly. Using a mixed methods design help researchers to use data from both the quantitative and qualitative methods in a complementary fashion. Plano Clark and Creswell (2014) argue that mixed methods provide a better understanding of the research problem than either type alone. This research design suited this study because it had a proven track records in the studies conducted by Ndenje-Sichalwe (2010) and Kashaija (2019). In this regard, this mixed methods research design produced useful results that enriched the study and contributed to the literature review and body of knowledge. A total of 85 respondents participated in the study. Ten key informants comprising one director, six managers and three heads of units were interviewed and a structured questionnaire with both closed and open-ended questions was administered to 75 employees at the WCF. Respondents were purposely and randomly selected to participate in the study. The WCF was selected because many public organisations of a similar nature appear to be ill-prepared to manage disasters threatening records (CAG Report 2019).

Presentation and discussion of findings

Data were presented and analysed according to the objectives of the study. Data for this study were collected using interviews, questionnaires and observation. The 10 key informants (directors, managers and heads of units) were interviewed. Out of 75 questionnaires that were sent to respondents, 65 were completed and returned, yielding a response rate of 86%.

Potential disasters that could affect records at the WCF

The study sought to find out the potential disasters and risks that could affect WCF records. Under this objective, the major focus was to identify risks at the WCF that threaten records' life span as well as potential disasters that could affect WCF records. The following were the findings of this objective:

Praygod Ng'unda and Esther Ndenje-Sichalwe

Risk identification

Risk identification is the systematic process of assessing and documenting any risk identified that can harm the organisation's business (Asamoah et al. 2018). The majority (77%) of the respondents revealed that the WCF conducted a risk assessment every year to find out which risks the organisation was exposed to. Moreover, respondents mentioned "Actuarial Services, Statistics and Risk Management Unit" as a special unit dealing with risk assessment issues. The core function of the unit was to identify and familiarise the institution with possible risks that can affect the organisation's business. The study found that fire and water were the most identified risks, which was why in place there were firefighting facilities such as fire extinguishers, firehoses and smoke detectors as well as drainage systems and regular check-ups to prevent water leakage. Chachage and Ngulube (2006) affirm that risk assessment should be part of disaster preparedness because for an institution to prepare properly, it must know the possible risk-threatening business operations.

During interviews with the records manager, it was noted that the WCF had developed a risk management system that allowed the registering of risk, indicating the causes of the risk and controlling the possible risk. The same observation was made by the head of the Risk Management Unit that: *Risk identification is part of enterprises risk management system that allowed identification of risk, registered risk, and causes of the risk and control the possible risk.*

In addition, the findings proved that the WCF conducted risk assessments and identification of the institution's records. This ensured that public records under their control were protected well, since the institution can forecast future disasters and set strategies to prevent or minimise the impact of those disasters.

Potential disasters that could affect records in the future at the WCF

The findings also revealed possible disasters that can affect the WCF records. Table 1 below summarises these.

Table 1: Potential disasters likely to affect records in the future at WCF (N=65)

Potential disaster	Frequency	Percentage
Fire	41	63.0
Floods	8	12.0
Technological	47	72.0
Theft and vandalism	39	60.0
Earthquakes	10	15.0
Moulds	23	35.0

The findings revealed that technological disasters, fire, theft and vandalism are major possible disasters that could affect the records at the WCF. The results further showed that technological

disasters might result in loss of records due to technological obsolesces; fire might occur due to electricity short-circuit and errant human behaviours; and theft and vandalism could arise due to misbehaviour of the WCF members. Findings from interviews with the director, manager and heads of units revealed water, which was mainly caused by leaking pipes, poor drainage systems and open taps as a potential disaster to records, since the records management section was located on the ground floor. Similarly, Asamoah et al. (2018) found that public records in Ghana were at risk of being destroyed by leakages from air conditioners and taps in the washrooms. Kihila (2017) made a similar observation in higher learning institutions in Tanzania where records were found to be at risk of fire outbreaks and water damage.

Strategies for disaster preparedness in managing records at the WCF

The findings also revealed the strategies available at the WCF as mechanisms towards disaster preparation. These included assessment of disaster detection and fighting facilities, which are described in table 2 below.

Table 2: Disaster preparedness strategies (N=65)

Equipment Available	Yes		No	
	Frequency	Percentage	Frequency	Percentage
Fire alarms	56	86.2	9	13.8
Fire extinguisher	61	93.8	4	6.2
CCTV Camera	60	92.3	5	7.7
Water sensing alarm	6	9.2	59	90.8
Smoke detector	43	66.2	22	33.8
Outdoor and Fire exit	56	86.2	9	13.8

The findings revealed that the WCF is, to a great extent, prepared for disasters, which is why the institution has installed the above facilities. However, through observation, it was found that only two fire extinguishers on the sixth floor were serviced and updated, whereas the remaining two fire extinguishers on the ground floor were not serviced. Implicitly, despite the presence of such facilities, they would not deliver the anticipated function, hence, could be ineffective in fighting disaster. These findings were in line with those of Kihila (2017), who reported that despite the presence of facilities and equipment for fighting against disaster, the majority were non-functioning and not serviced.

WCF staff awareness on disaster preparedness

The study further assessed the WCF staff awareness of disaster preparedness. A total of 70.8% of the respondents indicated that they were aware of disaster preparedness. The findings showed that staff knew how to use the facilities and equipment to fight against disaster, especially fire extinguishers and outdoor emergency exits. The findings further revealed that the majority of the

respondents (55 out of 65: 85%) were aware of potential disasters such as fire and flood that could affect records at the WCF despite not having adequate training in disaster preparedness for records management. Despite the awareness of disaster preparedness, the study discovered that the majority of the respondents (54: 83%) had not experienced any kind of disaster that had affected records at the WCF. The study showed that since its establishment, the WCF had not experienced any disaster, but this has not stopped the institution from taking precautions. Moustafa (2015) opines that organisations need to take precautions to stop or minimise the impacts when a disaster happens.

Further, the study revealed that the lack of specialised training in disaster preparedness among the majority of respondents and a lack of specialised training for staff might affect response once disaster strikes in the institution. Alegbeleye (1993) notes that staff awareness and training in disaster management equip staff with skills to respond to a disaster in a mature and confident way. Ngulube and Magazi (2006) add that institutions need knowledgeable staff and written plans for dealing with emergency situations so that fewer disasters occur and damage are minimised. Putting more emphasis on staff training, Oksetsang (2016) urges all government organisations to organise staff training in disaster management, where experts from the field of disaster management engage to train staff in disaster awareness and reaction during and after disasters to avoid panic and unnecessary injuries.

Challenges associated with disaster preparedness in managing records at the WCF

The study findings indicated that limited storage capacity for records, inadequate facilities and equipment for disaster, a lack of a written disaster preparedness plan, inadequate training in disaster management and rapid change of the information management systems and technology were challenges facing the WCF when it came to effective disaster preparedness, as presented in table 3 below:

Praygod Ng'unda and Esther Ndenje-Sichalwe

Table 3: Challenges facing WCF on disaster preparedness (N=65)

Challenges	Yes		No	
	Frequency	**Percentage**	**Frequency**	**Percentage**
Limited storage capacity for records	38	58.5	27	41.5
Inadequate facilities and equipment for disaster	34	52.3	31	47.7
Lack of written disaster preparedness plan	40	61.5	25	38.5
Inadequate training in disaster	44	67.7	21	32.3
Rapid change in system and technology	41	63.1	24	36.9
Absence of budget for disaster	16	24.6	49	75.4

During interview, one of the heads of units said: *One of the challenges to disaster preparedness is limited storage capacity due to the ever-increasing of documents received and being produced.*

On the other hand, it emerged during interviews with the director, managers and heads of units that the limited storage capacity indicated by respondents was a challenge with paper-based records. Because there were electronic records due to the existence of many servers at the WCF headquarters in Dar es Salaam and their zonal offices in Dodoma, Mwanza and Arusha as well as the government server owned by the EGA, storage capacity is not a problem. Specifically, the director affirmed: *WCF has larger storage capacity that accommodated a maximum of 10 bundles of the records kept by WCF today.*

ISO 15489-1 (2016) stipulates that storage conditions and handling processes should be designed to protect records from unauthorised access, loss or destruction, and from theft and disaster.

Furthermore, the findings indicated the few respondents who cited absence of budget as a challenge facing the WCF. Taabu (2014), Njoroge (2014) and Ilo et al. (2019), in their studies conducted in Nigeria and Kenya, revealed that there was inadequate financing for disaster, an absence of disaster preparedness policies and plans, inadequate support from top management and an absence of regular training on disaster preparedness. Relating to this, Alegbeleye and Chilaka (2019), Mtui (2017) and Mnjama (2014) indicated that inadequate financing for disaster management in many African organisations resulted in poor preparedness for disaster management aimed at safeguarding records. The absence of vital records plans or inadequate backups for vital records, and the absence of facilities for ICT for records back-up are other challenges in disaster preparedness that tend to affect records centres, libraries and archives in Africa. From the findings,

much must be done to minimise the challenges facing disaster preparedness so the public records can remain intact to support government activities.

Conclusion

The study showed that the WCF has successfully conducted risk assessments; however much emphasis should be placed at achieving complete and comprehensive disaster preparedness for managing records. The institution should have all the necessary facilities and equipment for fighting against disasters for managing records. Having facilities and equipment for disasters, together with the necessary knowledge and skills to use such facilities, is important to enable them to respond to disasters. The study findings revealed a lack of training of the WCF staff, thus inadequate skills and knowledge to fight records disaster. Training and rehearsal activities are needed to equip staff with adequate knowledge and skills for fighting against disaster, since it will raise staff awareness of the existence of disaster. Limited storage capacity for records, a lack of adequate facilities and equipment for disaster management, a lack of a written disaster preparedness plan, inadequate training in disaster management and the rapid change of systems and technology impede the organisation's success in instituting effective disaster preparedness plans.

Recommendations

The following recommendations were made based on the findings of the study:

- The WCF should develop a disaster preparedness plan that addresses all the issues about disaster management, including the establishment of disaster management teams, and covers both pre-disaster and post-disaster phases.
- Provision of training in disaster preparedness to the WCF staff with a well-outlined disaster preparedness plan that sets out staff responsibilities and duties once disaster strikes.
- The WCF should establish a confidential registry that ensures that vital and confidential records are protected from the events associated with disasters. In Tanzanian public institutions, a confidential registry is mandatory as it is responsible for keeping classified records.

References

Akumu, O.M. 2013. Disaster awareness and preparedness of secondary schools in Homa Bay County, Kenya. Unpublished dissertation, University of Nairobi, Nairobi.

Alegbeleye, G.O. & Chilaka, U.C. 2019. *Evaluation of records management practices at the Ministry of Health, Abia State, Nigeria*. [Online] Available at: https://digitalcommons.unl.edu/libphilprac/2306 (Accessed 29 September 2022).

Asamoah, C., Akussah, H. & Musah, A. 2018. Recordkeeping and disaster management in public sector institutions in Ghana. *Records Management Journal* 28(3): 218-233.

Ayoung, A.D., Boatbil, C.S. & Baada, F.N. 2016. Disaster preparedness of libraries: Insights from polytechnic librarians in Ghana. *Information Development* 32(5): 1296-1305.

Biswas, B.C. & Choudhuri, S.K. 2012. Digital information resources for disaster management of libraries and information centres. *Bangladesh Journal of Library and Information Science* 2(1): 12-21.

Chachage, B. & Ngulube, P. 2006. Management of business records in Tanzania: An exploratory case study of selected companies. *South African Journal of Information Management* 8(3): 118.

Chaterera, F. 2016. Managing public records in Zimbabwe: the road to good governance, accountability, transparency and effective service delivery. *Journal of the South African Society of Archivists* 49: 116-136.

Chizwina, P. & Ngulube, P. 2021. Using a multi-methods approach to investigate disaster preparedness of community libraries in the North West Province of South Africa. *Restaurator: International Journal for the Preservation of Library and Archival Material*, 42(4): 207-233.

Coppola, D.P. 2011. *Introduction to international disaster management*. Burlington, USA: Elsevier-Butterwort Heinemann.

Duranti, L. & Franks, P.C. 2015. *Encyclopedia of archival science*. London: Rowman/Littlefield.

Franks, P.C. 2018. *Records and information management*. 2nd ed. Chicago: Neal-Schuman.

Hlabaangani, K. & Mnjama, N. 2008. Disaster preparedness in information centres in Gaborone. *African Journal of Library, Archives and Information Science* 18(1): 63-74.

Ilo, P.I., Ngwuchukwu, M., Chijioke, H., Onuoha, M. & Adeniran, C.S. 2019. Challenges of disaster training: Implication for Federal and State University Libraries in Nigeria. *Disaster Prevention and Management: An International Journal* 28(3): 332-342.

International Organisation for Standardization (ISO) 15489-1. 2016. Information and documentation – records management – Part 1: General. Geneva: International Organisation for Standardization.

International Strategy for Disaster Reduction (ISDR) .2004. African Regional strategy for disaster risk reduction. https://www.preventionweb.net/files/7603_AFRICAREGIONALDRRSTRATEGYfull PDF.pdf (Accessed 19 February 2024).

Kamatula, G.A. & Kemoni, H. 2018. A framework for e-records in support of e-government implementation in the Tanzanian public service. *ESARBICA Journal* 37: 71-88.

Kashaija, L.S. 2019. Assessing the Implementation of legal frameworks on current records management in public offices: A case of business registration and licensing agency (BRELA). *Information and Knowledge Management* 9(11): 9-17.

Khan, H., Vasilescu, L.G. & Khan, A. 2008. *Disaster management cycle – a theoretical approach*. [Online]. Available at: https://www.mnmk.ro/documents/2008/2008-6.pdf (Accessed 19 February 2024).

Kihila, J.M. 2017. Fire disaster preparedness and situational analysis in higher learning institutions of Tanzania. *Jàmbá: Journal of Disaster Risk Studies* 9(1): 1-9.

Kilasi, M.P. 2011. An assessment of disaster preparedness for public sector records management in Tanzania: A case of the President's Office Public Service Management and Prime Minister's office. Unpublished dissertation, University of Botswana, Gaborone.

Koka, P.M., Sawe, H.R., Mbaya, K.R., Kilindimo, S.S., Mfinanga, J.A., Mwafongo, V.G., Wallis, L.A. & Reynold, T.A. 2018. Disaster preparedness and response capacity of regional hospitals in Tanzania: A descriptive cross-sectional study. *BMC Health Services Research* 18: 835.

Mnjama, N. 2008. Access to records and archives in Kenya. *African Research and Documentation* 106: 59-76.

Mnjama, N. 2014. Archival legislation and archival services in Africa. In Sebina, P. Moahi, K. and Bwalya, K.J. (Eds.). *Digital Access and E-Government: Perspectives from Developing and Emerging Countries*. IGI Global, pp. 27-47.

Moustafa, L.H. 2015. Endangers culture heritage: A survey of disaster management – Planning in Middle East libraries and archives. *Library Management* 36(6/7): 476 494.

Mtui, A.D. 2017. Assessing records management at the Tanzania National Roads Agency Registry. Unpublished dissertation, Makerere University.

Ndemanyisho A.J. 2014. Reflecting on revenue collection in Tanzania: What went wrong with records management? *International Journal of Education and Research* 2(8): 483-502.

Ndenje-Sichalwe, E. 2010. The significance of records to fostering accountability in the Public Service Reform Programme of Tanzania. Unpublished PhD thesis, University of KwaZulu-Natal, Pietermaritzburg, South Africa.

Ngulube, P. & Magazi, L. 2006. Protecting documents against disasters and theft: The challenge before the public libraries in KwaZulu-Natal, South Africa. *South African Journal of Library and Information Science* 72(3): 185-97.

Ngulube, P., Modisane, C.K. & Mnkeni-Saurombe, N. 2011. Disaster preparedness and the strategic management of public records in South Africa: Guarding against collective cultural amnesia. *Information Development* 27(4): 239-250.

Njoroge, R.W. 2014. An investigation on disaster preparedness and mitigation for computer-based information systems in selected university libraries in Kenya. Unpublished dissertation, Kenyatta University, Kenya.

Nwokedi, G.I. & Panle, P.P. 2017. Disaster management and preparedness: A case study of University of Jos. *Library Philosophy and Practice (e-journal)*. [Online]. Available at: http://digitalcommons.unl.edu/libphilprac/1590 (Accessed 26 May 2022).

Odeyemi, T.S., Issa, O.A. & Saka, H.T. 2011. Management of records in the judiciary of south-western states of Nigeria. *The Information Manager* 11(1&2): 5-55.

Oketsang, N. 2016. Disaster preparedness, management and recovery for records at the Ministry of Youth, Sports and Culture in Botswana. Unpublished master's dissertation, University of Botswana, Botswana.

Plano Clark, V.L. & Creswell, J.W. 2014. *Understanding research: A consumer's guide*. 2nd ed. USA: Pearson.

Robertson, G. 2015. *Orientation and training programmes in disaster planning for libraries.* Sawston: Chandos Publishing.

Rossmann, D. 2019. Creating an organisationally embedded strategic communication plan for libraries. *Library Leadership and Management* 33(2): 1-17.

Taabu, L. 2014. Assessment of disaster management practices at the Ministry of Energy and Petroleum. Unpublished Dissertation, University of Nairobi, Nairobi.

Tanzania Controller and Auditor General Report. 2019. *The annual general report of the controller and auditor general on the audit of financial statements of the central government for the financial year ended 30 June 2019*. [Online] Available at: https://www.nao.go.tz/uploads/.pdf (Accessed 12 June 2021).

The United Nations. 2008. United Nations Platform for Space-based Information for Disaster Management and Emergency Response (SPIDER): presentation of the Proposed Platform Programme 2007-2009 and the Proposed Plan-of-Work 2007. https://digitallibrary.un.org/record/595956 (Accessed 19 February 2024).

United Republic of Tanzania. 2022. Acts and regulations. [Online] Available at: https://www.pmo.go.tz/documents/acts-and-regulations (Accessed 19 February 2024).

Zulkipli, F.N. 2021. Disaster preparedness for records management: A conceptual review. Universiti Teknologi MARA (UiTM) Selangor. *Malaysia Journal of Information and Knowledge Management* 11(1): 1-14.