Recordkeeping and disaster management in public sector institutions in Ghana

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Abstract

Purpose – The purpose of this study is to examine the disaster management procedures and measures adopted by public institutions in managing their information resources with a view to identifying possible problems and making recommendations for their resolution.

Design/methodology/approach – Questionnaires, interviews and observation were used to collect data from 65 respondents from 19 ministries and five respondents from the Public Records and Archives Administration Department (PRAAD) and the National Disaster Management Organization (NADMO). Descriptive statistics and content analysis were used to analyze the data collected for the study.

Findings – In the 19 ministries surveyed, the findings revealed 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. Also, inadequate budgetary allocation for the records department of the ministries and PRAAD was identified.

Research limitations/implications – The study concentrated on the headquarters (HQ) of the ministries because they are the administrative headquarters of public sector institutions and they make policies that are complied with by all the Regional and District branches as well as the Departments and Agencies in executing their tasks. The major limitation of the study was the inability of the researcher to cover all the ministries.

Practical implications – The recommendations made included cooperation among heads of the ministries, PRAAD and NADMO to develop a national information disaster management plan for the effective management of public records and information and a comprehensive program in public institutions to orientate staff on information disaster management.

Social implications – The study set the tone for public sector institutions and other institutions in the same area of operation to review the processes and procedures with regard to recordkeeping. Also, the study is anticipated to draw the attention of policy-makers (management of the ministries) and regulatory bodies in the field of records and disaster management (PRAAD and NADMO) to review their plans and policies to make provision for information disaster management.

Originality/value – The study is a research paper and critically looks at the disaster preparedness of public sector institutions in managing their records/information. It also examines whether there are any collaboration and coordination among public sector institutions in Ghana in having disaster preparedness and management plan to safeguard public records/information.

Keywords Disaster management, Recordkeeping, Disaster preparedness plan, National disaster management organization (NADMO), Public records and archives administration (PRAAD), Public sector institutions

Paper type Research paper
Introduction
Organizations have one thing in common, that is, they all produce records. These records contain information, which is one of the essential resources in every organization worldwide. What people achieve in organizations depends mainly on the information they acquire and how well they manage and use their information resources, including records. According to Robek et al. (2002), information has no value unless it is used, and for it to be used effectively, it must be readily accessible to those who need it.

One of the key threats to the safety and preservation of official records and information is the risk of disaster. There are many kinds of disasters, and one is information disaster. Information disaster is any event that destroys information resources. Most institutions, especially records and archives management institutions refer to disasters to information resources (records) as “records disasters” (State Records of South Australia, 2007).

Limited access to resources such as funds for the maintenance of facilities, training and educating staff on disaster preparedness and recordkeeping makes most organizations vulnerable to disasters (Mnjama, 2004). It is essential for organizations to conduct risk assessments to know where they are vulnerable in terms of disasters and find appropriate ways to alleviate them. According to Matthews and Feather (2003), risk assessment involves systematic and effective way of collecting, organizing and analyzing information about risk, while developing strategies to manage and alleviate risk is referred to as risk management. Disasters are likely to have a negative impact on staff, customers, the public, the organization itself and the government in terms of the extent of damage, especially to lives, property and valuable records (Documents and Records Management Professionals, 2011). These valuable records which are mostly classified as vital record (legal documents, financial records, operational records, commercial records, intellectual capital and disaster recovery plan) are essential for the management of businesses and its continuity (backup) in case of disasters (JISC Infonet, 2014). Disaster management can help prevent such negative impacts and, should they occur, help minimize their effects.

Disaster management involves planning, being prepared for the unexpected and dealing with disasters effectively should they occur. According to New York State Archives (2012), disaster management is not a function of one organization working on its own but involves the co-operation and co-ordination of experts, professionals and agencies, such as social services, administration, logistics and health. Therefore, it needs to be carefully considered and properly planned, and all staff need to be made aware of the various risks to the items in their care and what is expected of them in a disaster situation (Matthews and Feather, 2003). The very survival of an organization may depend on whether vital business records have been protected and are available for use immediately following a disaster (Robek et al., 2002). Morgan and Smith (1997) wrote that:

[... ] disaster management involves the development of a disaster plan which can be described as a set of rehearsed action which will reduce the likelihood of a disaster occurring and further also reduce the extent of damage should a disaster occur.

Every public institution in Ghana has a duty to perform to merit its continued existence for national development. Thus, the study focuses on disaster management as a fundamental part of records management in public sector institutions in Ghana and, hence, the need for preparedness.

Public sector institutions in Ghana
The term public sector here refers to the 23 ministries and their subordinate departments and agencies under the control of the government of Ghana (Government of Ghana, 2015).
During their operations, these institutions create electronic or paper-based records daily. The recorded information is used as evidence of their functions, policies, decisions, procedures, internal and external transactions of the institutions. Public institutions are responsible for the management of the records they create.

The general responsibility of the heads of public institutions in respect to records management is to establish good recordkeeping practices within their records offices for the management of public records in accordance with standards directed by the Public Records and Archives Administration (PRAAD), which has been authorized with the management of public records in Ghana under the PRAAD Act 535 of 1997. These standards include having appropriate filing systems for the management of current records and implementing retention schedules and transfer of semi-current records into the custody of PRAAD, except in situations where the records of the creating institution are confidential in respect to national security, safeguarding revenue, protection of personal privacy and maintenance of public order.

The National Disaster Management Organization (NADMO) is the constitutionally mandated government agency that coordinates the management of disasters and other related emergencies. It was established by Act 517 of 1996 with the responsibility to manage disasters and similar emergencies in the country (NADMO Act, 1996). The activities of NADMO span the three phases of disaster management, namely, before, during and after emergencies. Its mandate includes the drawing up of plans to prevent disasters or mitigate their effect on residents in Ghana, to coordinate activities before and during emergencies as well as ensuring post-disaster rehabilitation, reconstruction and resettlement (NADMO Act, 1996).

**Problem statement**

Hlabaangani and Mnjama (2008) emphasized that records are exclusively unique and irreplaceable. It is, therefore, necessary to protect them from disasters. However, recordkeeping in public institutions, in Ghana, has not been prioritized as a core management function. Whether public sector institutions in Ghana see the need to protect their records from disasters by identifying their vital records and having disaster management programs in place is one of the problems to be investigated.

Records and information centers, by virtue of the materials they hold, such as paper documents, magnetic tapes and optical disks, provide ideal environments for the initiation of disasters like fire, as elements that encourage fires to start, such as heating elements and electrically heated wires, which are the primary sources of ignition, are always present in them.

**Objectives of the study**

The general objective of the study is to examine the disaster preparedness of public sector institutions in Ghana. The following are the specific objectives of the study:

- to determine the potential or real hazards and risks within the information environment of public sector institutions;
- to determine the resources and facilities available to public sector institutions in relation to information disaster management;
- to determine whether public sector institutions have disaster management plans for their records;
- to determine the level of awareness and expertise of staff in public sector institutions in relation to disaster and risk management; and
- to examine the role of PRAAD and NADMO in information disaster management in public sector institutions.
Methodology
A survey method was adopted as the research strategy for the study, with the use of mixed methods combining both qualitative and quantitative approaches.

Two sets of population were used for the study. These were the population drawn from the ministries who were given questionnaires and the population drawn from PRAAD and NADMO who were interviewed. The first group was drawn from staff of 23 government ministries and included all Chief Directors and all heads of IT departments and general and confidential records departments. The second group comprised the Directors of NADMO and PRAAD and the heads of the National Records Centre, Preservation Service Branch and National Archives. The total population for the study was 97, made up of 92 subjects from the ministries and five subjects from PRAAD and NADMO. This is illustrated in Table AI.

Data were obtained using questionnaires, interviews and observation. The questionnaires were designed and distributed with permission from the Chief Directors of the ministries. The use of interviews was appropriate for the researcher because as heads of their respective institution and departments, the interviewees were in better positions to give detailed and accurate information on issues (confidential and policy matters) that were not adequately covered by the questionnaires.

The quantitative data collected was constructively analyzed, and statistical analysis was used to summarize the results in figures, tables and frequencies. Percentages were also used to describe the frequencies, rounded up to one decimal place. Content analysis was used to analyze the qualitative data. Data collected from interviews were used to complement and validate data collected from questionnaires. Observations were also made, and the data collected from this method were critically analyzed and presented in the analysis and findings.

Data analysis and findings
Data were presented and analyzed according to the objectives of the study. Responses were received from 19 ministries for the quantitative data. In all, 65 questionnaires were returned out of the 92 sent, giving a response rate of 70.7 per cent. Out of the 65 respondents, 30 (46.2 per cent) were records staff; 19 (29.2 per cent) were IT personnel and 16 (24.6 per cent) were Chief Directors. All five respondents were interviewed for the qualitative data. All tables and figures have been presented in the Appendix.

Potential hazards and risks within public sector institutions
The study sought to find out the hazards and risks that public sector institutions (information centers, records offices and ICT units) were exposed to in terms of the environment. Data were presented under the following sub-headings: location related risks of the ministries; signs of leakages and cracks; faulty/improperly fitted electrical wiring; electrical gadgets or equipment used at the ministries and servicing of electrical gadgets.

Location of the ministry
The majority (98.5 per cent) of the respondents did not see their geographical location as a potential threat to their records. However, one respondent indicated the risk of flooding because their ministry was located near the sea. The findings at PRAAD through interviews were not different from that of the ministries. Nevertheless, respondents emphasized that the location of an Electricity Company of Ghana (ECG) substation on the premises exposes records to the risk of fire.
Signs of leakages and cracks
Out of the 65 (100 per cent) respondents, 34 (52.3 per cent) indicated that they had not noticed any signs of leakages or cracks, while 12 (18.5 per cent) indicated they had noticed signs of leakages and cracks at their respective ministries. The remaining 19 (29.2 per cent) respondents gave a no response. However, observations made by the researchers revealed many disturbing situations. One potential hazard that was very common at the ministries was leakages from air conditioners and taps in the washrooms. Few of the ministries had cracks on their buildings.

Electrical gadgets or equipment used in the ministries
Fire outbreaks, injuries or even death can occur where there are poor electrical installations and faulty electrical appliances. The types of electrical gadget or equipment used at the ministries varied from one department to the other. It was very common to find photocopying machines in the records offices because of the reproduction of records, while computers were the common things that were seen in the IT departments. Figure A1 gives a picture of the responses that were given. Respondents were also asked about the servicing and maintenance of electrical gadgets or equipment which was critical because faulty gadgets or equipment could easily cause electrical faults that could lead to electrical sparks and fire disasters. In all, 49 (75.3 per cent) indicated that their electrical gadgets or equipment were serviced, while 15 (23.1 per cent) indicated that their electrical gadgets or equipment were not regularly serviced.

Awareness of disasters
Respondents were asked to indicate among possible choices as many as were applicable to them, disasters likely to affect their records. The responses had been presented separately in Figures A2 and A3 because there were some differences as to the likely disasters that could affect the records at the records offices and those that could affect electronic records at the IT departments.

Disasters encountered at the ministries
Disasters are inevitable as their timing is unknown no matter the level of preparedness. Respondents were asked to indicate disasters they had encountered at the ministries. This was to help determine whether they had experienced any kind of disaster before. The findings are represented in Figure A4. From Figure A4, it can be gleaned that 36 (55.4 per cent) indicated that they had encountered equipment/system failure, 10 (15.4 per cent) indicated fire, 12 (16.9 per cent) indicated loss of vital information, 11 (16.9 per cent) indicated theft and one indicated flood.

Disaster management planning for records
Planning in preparedness for disasters is very crucial as it has many benefits for organizations when disasters strike. Disaster management planning for records entails protecting records from risks throughout their lifecycle and ensuring business continuity during and after disasters. This can be done through identification of vital records, having backup systems in place and providing appropriate security controls for the safety of records. The researchers sought to find out whether public sector institutions had disaster preparedness and management plans for their records. The responses are presented in the following sub-sections.
**Identification of vital records**

Vital records are records that are very important for the operations of an organization without which it cannot continue in business. The study revealed that in terms of vital records, out of the 30 (100 per cent) records staff, 23 (76.7 per cent) indicated they had identified their vital records. Some of the records offices also had inner rooms that were restricted from unauthorized staff. Observations by the researcher confirmed that the ministries had identified their vital records.

The head of the National Records Centre said they did not have any vital records protection program for the records in their care. They had identified vital records significant to the Nation and those records had been kept in the strong room at the repository.

**Backup system**

Backup systems help organizations insure their records to continue their operations when disasters strike. The information technology (IT) experts refer to backups as data protection. Respondents were asked whether they had backups for their records in the ministries. In all, 37 (56.7 per cent) indicated that they had backup systems for their records. However, the methods used to backup records were different in the records departments and the IT departments. This was because both departments managed different forms of records. Out of the 30 (100 per cent) respondents from the records offices, 29 (96.7 per cent) indicated the use of dispersal/duplication, while 7 (23.3 per cent) indicated the use of digitization in addition to dispersal/duplication as the backup methods for their records. Six (31.6 per cent) respondents from the IT departments indicated the use of real-time backup, three (15.8 per cent) indicated the use of off time backup, while five (26.3 per cent) indicated the use of both real-times and off time backup systems. Respondents indicated that they made copies of records as a method of dispersal/duplication. Perhaps, the ministries that indicated the use of digitization as a method of backup for their records may be among the few who had automated their records management systems.

**Method used to protect records from disaster**

Onsite and Offsite/Remote storage are the methods used to protect records from disasters. Onsite storage is where records are stored within the organization. With offsite/remote storage, records are stored away/remotely from where the organization operates. In this direction, the researcher asked the records and IT personnel about the method used to protect records from disasters. In all, 25 (51.0 per cent) respondents indicated that they used onsite storage to protect their records from disasters; 3 (6.1 per cent) respondents indicated offsite/remote storage, while 9 (20.0 per cent) respondents indicated they used both onsite and offsite storage to protect their records from disasters.

**Disaster and risk assessment in the ministry**

Chachage and Ngulube (2006) assert that risks assessment and analysis should be the foundation of an organization’s disaster plan, as it helps organizations identify, analyze and evaluate risks that are likely to affect them and the adequacy of the available controls to deal with probable disasters. Risk assessment is the first basic element to be considered at the prevention stage of a disaster management plan. In all, 29 (44.6 per cent) respondents indicated that risks assessment was conducted at the ministries, while 36 (55.4 per cent) indicated that risks assessment was not conducted.
Disaster detection/suppression systems

The study revealed the availability of disaster detection/suppression systems at the ministries, and this was confirmed through observations. It was evident that all the ministries had fire extinguishers of which majority had them placed at vantage points on all the floors of their buildings. Few indicated they had smoke and heat detectors in addition to fire extinguishers. However, the researcher noticed through observations that about 50 per cent of these fire extinguishers were not functional because their validity dates had expired. It was rather more worrying to observe that except for four ministries; the records offices did not have their own disaster detection/suppression systems. The four which had them had recently moved into new premises that had been purposely built and so had fire alarm systems, smoke and heat detectors and fire extinguishers everywhere. The records center at PRAAD had no functional disaster detection/suppression systems and the ones available were all outmoded.

Security controls

Security and safety controls are the mechanisms in place to guard the sudden disappearance of valuable records and electronic equipment in information centers from their original positions to an unknown place. The loss of valuable records because of unauthorized intrusions, theft or sabotage can be very disastrous for an organization. In all, 48 (73.8 per cent) indicated that they had well-secured access points at the ministries, while 12 (18.5 per cent) respondents indicated that there were no well-secured access points. Five (7.7 per cent) respondents did not respond to the question. The responses revealed that the ministries had well-secured entries. To confirm these findings, an observation made by the researchers showed that there were security guards at all the entrances and exit points at the various ministries. There were strong burglary proofs fitted at every window, and a few had them at their doors. A few ministries also had closed circuit televisions (CCTV) cameras fitted at vantage points. It was also observed that the confidential records offices and IT server rooms were restricted from unauthorized staff.

Availability of disaster plan

Having a written disaster control plan shows the level of preparedness by organizations towards disaster management. However, the study revealed that 48 (73.8 per cent) indicated that they had no disaster management plan at the ministries. The few – 16 (16.9 per cent) respondents who indicated they had disaster management plan – could not indicate who developed the plans and as well did not have copies of the plan in their offices. However, one Chief Director indicated that because of a fire outbreak at their ministry which destroyed most of their vital records, they had put together a committee who was working together with the Ghana National Fire Service (GNFS) to draw a disaster management plan for the ministry, and to confirm this, the respondent showed the researchers a copy of the draft which was still under review. Aside this ministry, none of the ministries had even considered having a disaster management plan.

Role of PRAAD in information disaster management

The study also sought to find out the role of PRAAD in information disaster management. Specifically, the study sought to find out the extent to which PRAAD assisted records staff/offices of the ministries to manage records effectively during their lifecycle and, thus, ensuring that disaster management procedures were in place to ensure the safety and continuity of records. The researchers expected that as part of every effective records management practice, the legislative framework should include disaster preparedness plan
to help manage disasters when they happen but the findings at PRAAD on records management procedures and policies revealed that although there was existing legislative framework that guides the management of public records as was evident in the PRAAD Act 535 (1997) there was no indication of a disaster preparedness plan. In all, 60 per cent of the records staff indicated that they had procedural manuals for managing records, but none of them could point to any aspect of the manual that dealt with disaster management of records. In support of these findings, the Director emphatically stated that no disaster management plan had been factored into the records management policy. All respondents from PRAAD indicated that they had no written disaster management plan for the records they manage.

**Role of NADMO in information disaster management**

As an institution constitutionally mandated to manage all forms of disasters in Ghana, one would expect NADMO in addition to a general National Disaster Plan to have a specific disaster management plan for records. When asked whether the institution has an information disaster management plan, the response was “No”. It was found out that the disaster management strategies of NADMO had been to save lives and provide relief services during disasters.

**Staff awareness and training on disaster and risk management**

Majority 48 (73.8 per cent) of the respondents indicated that they were neither aware of any disaster control/recovery plan nor have they had access to any such plan. However, the 14 (21.5 per cent) respondents who indicated they had disaster control/recovery plans were among the Chief Directors. The researcher observed that only one ministry had a notice posted inside their offices which had indicated measures that should be taken by staff to prevent fire disasters. About orientation on information disaster management, 36 (55.4 per cent) respondents indicated that they had not had any orientation on information disaster management by PRAAD or NADMO. The 25 (38.5 per cent) respondents who indicated that they had training on disaster management indicated it was organized by the Ghana National Fire Service (GNFS). However, although 16 (63.3 per cent) respondents in the records offices indicated they had had training on recordkeeping, none of them indicated any aspect of the training that dealt with disaster management. The study revealed that the impact of the Ghana National Fire Service (GNFS) was more felt in disaster management than NADMO.

**Discussion**

Akussah (2003) noted that geographical location, the type of building and its construction, the political environment amongst others as has been shown by other researches, influence hazards that affect organizations. However, in contrast to this, the ministries did not see their geographical location as a potential threat to their records. Information gathered from the Town and Country Planning Department indicates that part of Accra where the ministries are located lie within an earthquake zone. Respondents, however, did not see this as a threat. Aside this is the risk of fire to the records at PRAAD. The consequences of such risks can translate into great loss to the nation’s collective memory. A recent incident was the Achimota substation fire on May 20th, 2013. According to a report by Wiafe-Agyei (2013), the incident grinded the University of Ghana examinations to an abrupt halt and caused most parts of Accra to experience power outages. Although respondents indicated that their electronic gadgets were regularly serviced, observations made by the researchers showed a differing opinion. Most of the equipment was broken down and some
looked very old in different offices especially the records offices that needed maintenance or replacement. Reports on the fire outbreaks at VAT Office, Kumasi (2008), Ministry of Foreign Affairs headquarters, Accra (2009), Lands Commission headquarters, Accra (2012) among others were as a result of faulty air conditioners and electrical installations which were the sources of most of these fires that caused great loss to the organizations involved and the nation because most vital records for their operations were totally destroyed. This could be the fate of the ministries if attitude towards maintenance of equipment and buildings are not well addressed. Fire was the most likely disaster to records. This finding concurs with the findings of Hlabaangani and Mnjama (2008) that many information centers perceived fire as the most likely disaster that could destroy their information materials. They added that although wars, internal conflicts and earthquakes were not considered as threats to information centers, it should not be interpreted as a guarantee for organizations to sit back and not develop a disaster plan to protect their records. However, this seems to be the situation in Ghana. The attitude of “it will never happen to us” has been the order of the day and so most organizations do not anticipate the likelihood of disasters emanating from wars, internal conflicts, earthquakes amongst others to occur let alone plan in preparedness for them. In addition to fire, leakages and unauthorized intrusions were also high. Flooding had been on the rise in some parts of Ghana especially Accra, Western, Ashanti and Eastern regions. Organizations could lose their vital information and equipment when such incidence happens. Confirming the findings of Onwuchekwa’s (2010), equipment/system failure and loss of vital records were the commonest disasters to the IT departments which were very common in most electronic environments. Performing responsibilities thoroughly by staff in organizations does not mean disasters will not occur. It is therefore important for organizations to prepare for disasters so that they can protect their information resources and systems from the consequences of risks. Preparing for disasters involves identifying vital records, putting protection measures in place, planning for disaster and staff training. Most of the ministries had identified their vital records as in contrast with the findings of Hlabaangani and Mnjama (2008), that none of the information centers studied including records management units in various government ministries had identified and listed their vital information materials. However, it confirms the findings of Kalusopa and Ngulube (2012) that most labor organizations were aware of the need for managing vital records. Although the ministries had identified their vital records, they were all kept onsite which implied that in the event of any disaster, they stand the chance of losing most of their vital information needed for business recovery and continuity. On the other hand, the head of the National Records Centre said they did not have any vital records protection program for the records in custody. Concerning backups, it was deduced from the findings that the ministries had different methods for backup depending on departments and the type of records they use. This confirms the findings of Onwuchekwa (2010) that staff used different methods of backup depending on what they were instructed to do or feel was best for their job specifications. Although the majority of the ministries indicated the use of onsite storage to protect their records from disasters, it would be ideal for them to have offsite storage so that in the event of disasters they could fall on such backups. Anyigire (2000) suggested that organizations that store their entire backup onsite were likely to lose everything including vital records and assets when disasters strike. In agreement with their views, Chachage and Ngulube (2006) emphasized that those organizations that kept the backup of their vital records offsite kept them more safely than those that kept them onsite. However, looking at the situation at the ministries they stand the chance to lose their vital records in the event of a disaster because of keeping their entire backup on site. Findings from the study confirmed observations made by the researchers that risks assessment was not conducted at the
ministries as evident by the fact that most ministries needed renovation of their buildings and records offices. By implication, the level of preparedness towards disasters was low at the ministries. These findings concur with Hlabaangani and Mnjama (2008) that majority of information centers in Botswana had not conducted risk assessments. In agreement with Adinku (2005), risk assessment and analysis are highly technical and requires the services of experts. However, the ministries should not view this as a constraint to deter them from having a disaster management plan, as they could reap its benefits in the long run.

It was also apparent that the ministries were prepared towards fire disasters as evident by fire extinguishers placed at vantage points on each floor of the buildings. Nevertheless, the researchers observed that many of the records offices did not have their own disaster detection/suppression systems except for 4 (21.1 per cent) ministries that had them because they had occupied new premises that had been purposely built and so had alarm systems, smoke and heat detectors and fire extinguishers everywhere. This confirms the findings of Kemoni (2007) that majority of the ministries surveyed in Kenya did not have disaster detection/suppression systems in the records storage area. It was evident that in terms of security, especially physical security, the ministries had adequate measures in place. Findings of various studies (Kemoni (2007); Hlabaangani and Mnjama (2008); Ngulube et al. (2011); and Ndenje-Sichalwe et al. (2011); Akussah (2003); Tetteh (2004); Gyamoh (2006) and Onwuchekwa (2010) showed that most public institutions had no disaster management plans. Chachage and Ngulube (2006) noted that even though disaster preparedness plan allowed organizations to plan and make decisions about emergency response and recovery, most companies had not made it a part of their records management strategy. This finding holds true in the Ghanaian situation. PRAAD had not incorporated disaster management into its records management policy and had no written disaster management plan for the records they manage. This confirms the findings of Ngulube et al. (2011) that disaster management did not feature prominently on the agenda of national archival institutions in Africa. The Director of NADMO indicated that any organization that needs their services in terms of training and development of disaster management plan could consult them and they will be willing to provide the necessary assistance. This is an indication that NADMO had not been proactive in exercising its mandate through disaster management awareness, and therefore, as emphasized by Akussah (2003), it makes it more imperative for PRAAD to put together its own disaster management plan for the records they manage. Notwithstanding this, it would be beneficial for PRAAD to come together with NADMO and stakeholders of public sector institutions to come up with a national disaster management plan for information resources. This would help guarantee the safety of public records and help maintain the authenticity, reliability, integrity and usability of records in the event of disasters and, thus, ensure that accountability and legislative requirement are met in the daily operations of public sector institutions. Alegbeleye (1993) posits that staff awareness and training in disaster management equip staff on how to respond to a disaster maturely and confidently. For any disaster management plan to succeed, staff should be trained and made aware of their responsibilities and roles during disasters. Respondents who indicated they had disaster control/recovery plans were among the Chief Directors. By inference, there could be information gap between management and staff on policies that exist in the ministries and this could mean that although policies on disaster management may exist, staff were not aware, and thus, enforcement of it may not be successful. Staff training is an important aspect of the preparedness phase of a disaster management plan as it enables staff to respond to variety of disasters. In agreement with Hlabaangani and Mnjama (2008), there is no need for having disaster suppression systems in place when staff cannot use them. The impact of PRAAD and NADMO was not felt in the training programs of the
ministries on information disaster management. The ministries that indicated they had had training on disaster management indicated it was organized by the Ghana National Fire Service (GNFS). However, although respondents from the records offices indicated they had had training on recordkeeping, none of them indicated any aspect of the training that dealt with disaster management. One critical issue with disaster management according to Nakagawa and Shaw (2004) is the problem of incorporating people and communities in the process of pre-disaster mitigation and post-disaster recovery initiatives. Thus, the aspect of social capital which creates an interaction between government and communities for sustainable development is absent in disaster management especially in the Ghanaian situation.

Conclusion and recommendations
Information disasters can be aggravating to organizations, and this affects their productivity and efficiency. It is therefore important to be prepared before, during and after disasters. Many organizations take disasters for granted and presume it will never happen to them but disasters cannot be based on presumptions since their timing is unknown and they occur when least expected. It is therefore important to plan in anticipation for them so that vital records of organizations can be protected against tragedies that come with disasters and thus minimize their consequences. The following recommendations were made based on the findings of the study on issues concerning recordkeeping and disaster management at the ministries. It is anticipated that these recommendations would help refocus the direction of the ministries, PRAAD and NADMO in the area of disaster management for records.

Potential hazards and risks within public sector institutions
Periodic hazard surveys within organizations would help mitigate effect of hazards and risks before they become catastrophic. The negative attitude of the public institutions towards renovating and maintaining facilities should be discouraged. Officials’ from the Estate Departments of the ministries should be assigned the responsibility of regular inspections of buildings, equipment and other facilities in public sector institutions to help identify possible problems early so that they can be mitigated in the long term.

Vital records protection programs
Heads of the public-sector institutions in consultation with PRAAD should develop internal policies to effectively manage and improve their vital recordkeeping systems. Additional controls are always required for the management of vital records (JISC Infonet, 2014). Backup of vital records should be stored offsite to ensure maximum protection. In addition, some records staff should be assigned the responsibility of ensuring the effective management and protection of vital records in the ministries.

Disaster preparedness plan
The heads of public institutions should make disaster control and preparedness plans part of their strategic management programs. Hence, the heads of public institutions should develop policies for managing disasters in consultation with PRAAD and NADMO that could work together with security procedures for the protection of records in the long term.
The role of PRAAD in recordkeeping and disaster management

The Director of PRAAD must be proactive in ensuring that heads of public sector institutions adhere to strict records management practices to ensure the safety of records. The heads of PRAAD should integrate disaster management plans in its records management systems which by extension could be adopted by the ministries. The heads of PRAAD in consultation with the head of civil service should strengthen PRAAD’s legislative framework and review policies guiding the management of public records to include the management of disasters to records. Records management manuals at the ministries should be reviewed and developed to suit modern records management practices. The Director of PRAAD should strengthen its staff capacity by recruiting and training staff adequately to perform its supervisory roles at the ministries effectively.

The role of NADMO in disaster management

NADMO should be proactive in extending its disaster management training programs to staff of public sector institutions. They should embark effectively on pre-disaster management awareness creation in public sector institutions and come up with policies to ensure that every public institution develops a disaster control and management plan to suit their operations. There should be cooperation among heads of the ministries, PRAAD and NADMO to develop a national information disaster management plan for the effective management of public records and information. It would be beneficial for PRAAD to come together with NADMO and stakeholders of public sector institutions to come up with a national disaster management plan for information resources. This would help guarantee the safety of public records and help maintain the authenticity, reliability, integrity and usability of records in the event of disasters and, thus, ensure that accountability and legal requirements are met in the operations of public sector institutions.

Staff awareness and training programs

Heads of public institutions should organize training programs through workshops and seminars in-house to educate staff on the practical steps of disaster planning and management. Staff should be trained by NADMO and the GNFS on the use of disaster management tools and be made aware of their responsibilities during and after disaster and also to be informed of disaster management procedures. There should be a comprehensive program in public institutions to orientate staff on information disaster management.

References


Further reading


Appendix

Table A1.
Population for the study

<table>
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<tr>
<th>Categories of staff</th>
<th>No. of staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Directors (ministries)</td>
<td>23</td>
</tr>
<tr>
<td>Heads of IT Departments (ministries)</td>
<td>23</td>
</tr>
<tr>
<td>Heads of general and confidential records office (ministries)</td>
<td>46</td>
</tr>
<tr>
<td>Director of PRAAD</td>
<td>1</td>
</tr>
<tr>
<td>Director of NADMO</td>
<td>1</td>
</tr>
<tr>
<td>Head of National Records Centre (PRAAD)</td>
<td>1</td>
</tr>
<tr>
<td>Head of Preservation Service Branch (PRAAD)</td>
<td>1</td>
</tr>
<tr>
<td>Head of National Archives (PRAAD)</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>97</td>
</tr>
</tbody>
</table>

Source: Field Data (2017)

Figure A1.
Electrical gadgets or equipment used in the ministries

Source: Field Data (2017)

Figure A2.
Awareness of disasters in the records departments

Source: Field Data (2017)
Recordkeeping and disaster management

Figure A3.
Awareness of disasters in the IT departments

Source: Field Data (2017)

Figure A4.
Disasters encountered at the ministries

Source: Field Data (2017)

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