

Natural Post-Disaster Management Archive Model

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Abstract

As a country within the "ring of fire" geographical area, Indonesia is vulnerable to natural disasters. The impact of natural disasters is not only physical and human, but also relates to the records that are owned. This study strives to support efforts to save archives after natural disasters and develop a model for saving and restoring archives after natural disasters happens. The results of the research showed that there is no a standardized procedures to save and restore archive in times of disasters, therefore there shall be regulation to make the regional disaster agency, the regency offices, and library and archives agency coordinate and cooperate in a single task-force, based on our developed model.

Keywords: disaster; archives; archive recovery

INTRODUCTION

Geographically, Indonesia is located between two continents (Asian Continent and Australian Continent) and two oceans (Indian Ocean and Pacific Ocean). Geologically, Indonesia is located between three large plates of the world, namely the Indo-Australian plate, the Eurasian plate and the Pacific Plate. Indonesia is also in three mountainous systems, namely Alpine Sunda, Pacific Circum and Circum Australia. There are approximately 500 volcanoes in Indonesia, of which 128 are active. The geographical and geological conditions make Indonesia vulnerable to various natural disasters.

Natural disasters that occur bring a lot of impacts in the form of losses, namely material, life, social and cultural losses. People in general will think of saving their property when natural disasters occur. However, they forget to save their archives when disaster strikes.

If important archives are not immediately saved in the event of a disaster, the potential for archive damage will be greater. Archives can become wet, damaged, even destroyed by burning hot ash or volcanic lava. Archives can also be destroyed if submerged for too long, during natural disasters, floods and tsunamis. As for earthquake natural disasters, archives are not too potentially damaged, but can be lost or torn by debris from building debris and furniture in the offices / houses of residents.

Records that need to be saved in the event of a disaster include all types of records, both dynamic and static records. However, with a precarious situation, generally government agencies prioritize archival handling. Some agencies prioritize the handling of vital records, some other institutions prioritize important dynamic records (Basuki, 2003: 249).

However, often government agencies neglect to prioritize or save their archives when a disaster occurs. They assume that saving the archive is only done after a disaster recovery period. Another assumption is that saving the archives both during a disaster

and afterwards becomes the absolute responsibility of the Regional Archives Service and the central government institution, namely the *National Archives of the Republic of Indonesia* (ANRI). This assumption causes low responsiveness among stakeholders with an interest in the existence of archives and is also one of the reasons for archives being saved late because their conditions have been severely damaged (eg submerged for too long in water or mud).

Several scholars have studied disaster management from an archival point of view. Sulistiyati (2017), for example, divide the stages of handling and storing archives against disasters starting from pre-disaster, emergency response, and post-disaster are not in accordance with the implementation instructions contained in the legislation regarding the management, maintenance, protection, and storage of records.

Mardiyanto (2017) also examines the Strategy for the Activities of Preservation of Disaster Archives. The results of the study of researchers on this research is that the preservation of archives to protect archives from natural disasters is done through preventive and curative measures, such as 1) Storage of archives in disaster-resistant places; 2) Transfer of archive media to digital archives; 3) Duplicate archives as backups for important archives; 4) Conduct a survey to determine the location of archives that are remote and minimal disaster; and 5) installation of preventive methods with symbols, evacuation route signs, and hazard detection devices.

Nurjannah (2014) stated that Preservation and Conservation of Post Tsunami Library and Archives in the Aceh Archives and Library Agency, the protection and rescue of archives due to national disasters was carried out by ANRI and the creators of archives in coordination with the National Disaster Management Agency (BNPB). (Article 24 paragraph 5 of Law No. 43 of 2009 concerning Archiving). In addition, in the context of preservation of library materials and post-tsunami archives, the Aceh Archives and Library Board has carried out conservation, restoration of archives and buildings, fumigation and reproduction. Nurjannah also said that the Team from ANRI carried out an immersion archive in ethanol liquid and then put it into the Vacuum Freeze Dry Chamber located in Jakarta.

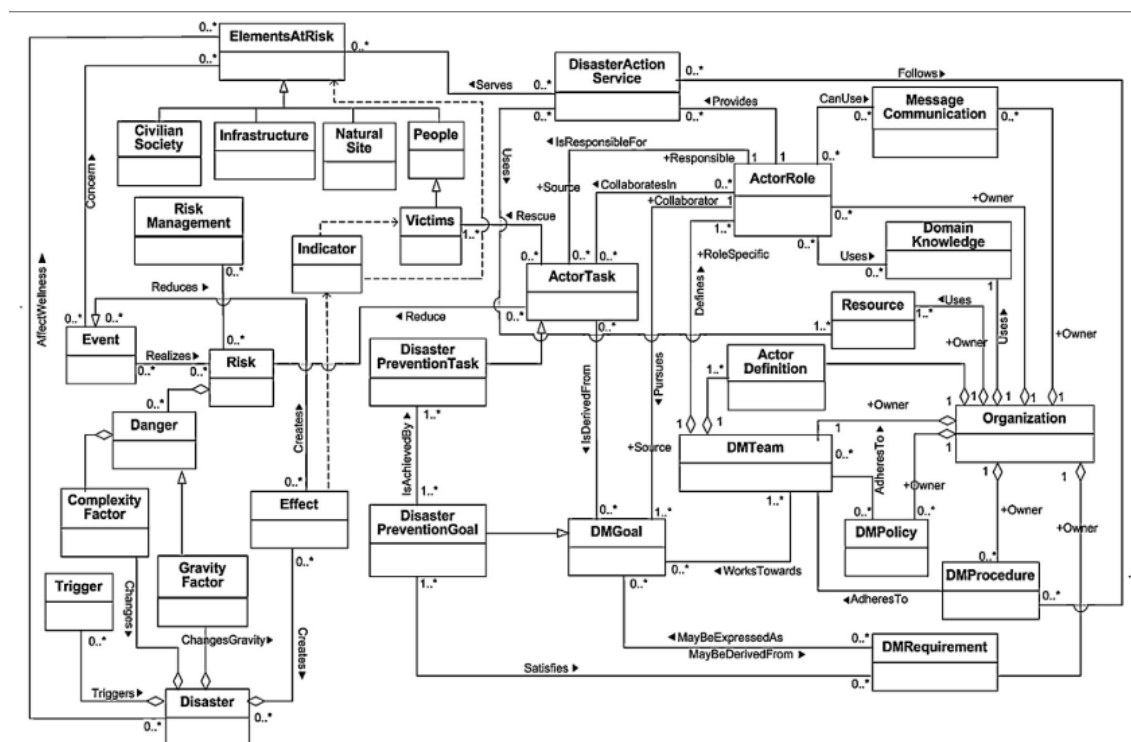
These study conclude that research about archival rescue in disaster management mainly discussed technical aspect in restoring and preserving archive form disaster. As far as we find through the literature, there is still no study about how the government institutions coordinate and collaborate to rescue vital public archives. Therefore, we conduct a study to identify the appropriate coordination among government agencies related to the handling of archives, after a disaster occurred. In addition, a model also be designed to depict this coordination.

Several focus were developed to answer the main research questions, i.e: (a) what is the current government policy to protect archives in times of the natural disasters (b) what is the role of each government institutions in saving and recovering archives when disaster occurs; and (c) existing system and procedures in times of natural disaster; (d) systems and procedure to evacuate and restore archive in post-disaster, and (e) what is the model to propose a better coordination and collaboration in handling archive saving and restoration in times of natural disaster in the future.

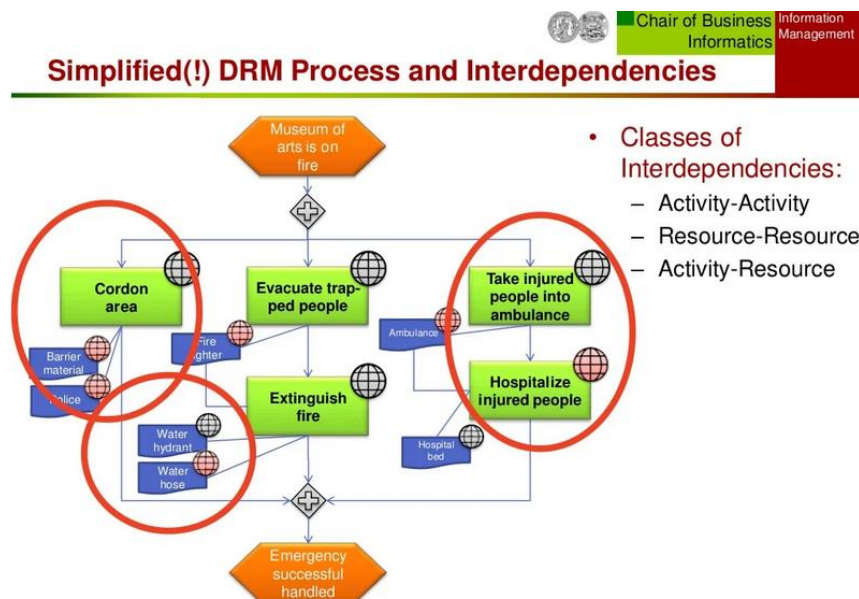
LITERATURE REVIEW

Disaster Management is the management of the risks and consequences of a disaster. It includes various aspects of planning and responses in all phases of a disaster event: mitigation, preparedness, response and recovery. Modelling in disaster management help the parties that involved in mitigating disaster to work and connect together.

Othman and Beydoun (2013) arranged a metamodel of disaster management that describes disaster management concepts and the way they are arranged, related, and constrained. A metamodel is the artifact output of metamodeling that makes statements about what can be expressed in the valid models of the knowledge domain. It is often defined as a model about models. In our context, a model refers to the DM solution model that can show the coordination of DM activity and its elements (e.g., humans, resources, plans) and how these should be arranged for a specific disaster. Othman and Beydoun's metamodel can be described as below.



Another model is developed, based on a special focus lies on the integration of place-related information as well as interdependencies resulting from stationary and mobile activities and resources. (M. Hofmann, S. Sackmann and H. Betke, 2013). This has been a basis for disaster management in particular venue or environment.



It is clearly seen from the models above, that the models exist emphasizes heavily on technical matters to improve records affected by disasters, for example the stage of saving archives and preservation of archives using ethanol liquid and the use of vacuum freeze dry chambers, or treatments that shall be done during disaster, such as fire incident.

Some of these studies also indicate that there are no articles explaining the coordination made by the archives, the BPBD, the Regional Archives Service, and other relevant parties in saving the archives after a disaster has occurred. For this reason, this research is focused on the coordination of archival and disaster agencies in saving archives, after natural disasters.

RESEARCH METHOD

Based on the main problem, the approach used in this study is a qualitative method. A qualitative method is a research method that intends to understand phenomena about what is experienced by research subjects holistically, by means of descriptions and by utilizing various natural methods (Moleong, 2006 7). Further more, the research team use case-study approach to gather the data, by using the case study in two regions, namely Sidoarjo, East Java and Sleman, Special Province of Yogyakarta.

The consideration of choosing Sidoarjo and Sleman as the research locus is because those to regioes were affected by natural disasters, severe enough to cause potential damage to the archives. The disaster in Sidoarjo was the hot mud in Lapindo Company, whereas the disaster in Sleman was the eruption of Mount Merapi.

The types of data that the researches seek are the secondary data and primary data. The primary data was collected through interviews with public personnel from the Archives and Sidoarjo Libraries, the District Government of Porong, the District Government of Cangkringan, d) the BPBD of the Sleman Regency, and the Government of the Argomulyo Village Cangkringan District, Sleman Regency. The secondary data was

collected from the second-hand distribution, such as news, speech text, documentation of public institution in Archives and Sidoarjo Libraries, the District Government of Porong, the District Government of Cangkringan, d) the BPBD of the Sleman Regency, and the Government of the Argomulyo Village Cangkringan District, Sleman Regency. After data collecting, researchers filtered the data based on the pre-determined research questions. The data then was described and analyzed by using theory and previous research, in order to direct it to the conclusion. The analysis of the interview result transcript was also confirmed with the observation and observation.

RESULTS AND DISCUSSIONS

a. National Archival Management Policy in times of Disasters

Protection or saving of archives from natural disasters has generally been contained in the Act. Number. Article 24 of 2007 concerning Disaster Management Article 6. The article states the words, "maintaining authentic and credible archives / documents from the threat and impact of disasters". This article provides a clear picture that every government organization, whether Ministry, Institution, Regional Government, or Regional Government Organization (OPD) is required to maintain authentic and credible archives or documents from a disaster threat.

Broadly speaking, regulations and policies regarding the rescue and protection of archives from disasters have been stated in several policies including Law 24 of 2007 on Disaster Management where Article 6 states that "The Government is obliged to maintain and save authentic State archives and documents". Then there is the ANRI Head Regulation (Perka) No. 43 of 2009 concerning Archives in which Article 34 states that "the State carries out archival protection from disasters". Rescuing archives not only during disasters but also during pre-disaster and disaster response periods. ”

In addition, ANRI as the Indonesian national archive management agency also issued a policy in the form of ANRI Regulation Number 23 of 2015 concerning Protection and Rescuing Archives from Disasters. This Perka then becomes a reference for the creators of archives, archival institutions and related technical institutions in taking action to protect and save archives from disasters. Then ANRI also issued a policy in ANRI Perka Number 06 Year 2005 regarding Guidelines for the Protection, Security and Rescue of State Vital Records / Archives.

Disasters that can disrupt the implementation of archival activities and damage important archives are not only natural disasters, but can be natural disasters, non-natural disasters, or social disasters. Government agencies do not have guarantees to be released from these three types of disasters, natural, non-natural and social.

Government agencies, are inseparable from the possibility of natural disasters because government offices are located in the environment of the Unitary State of the Republic of Indonesia which is vulnerable to natural disasters such as floods, earthquakes, tornadoes, and other natural disasters. Government institutions are

also inevitable from non-natural calamities that can happen at any time due to non-natural events that can occur at any time such as internet system failures, technology failures, modernization failures, epidemics, until epidemics. Likewise, social disasters that are inevitable, due to an event or act of individuals and groups of people related to social conflicts, conflicts between communities, to terrorist events.

Therefore, all forms of archive preservation efforts for all forms of disasters must always be done carefully by government agencies, even improved, both in prevention and rescue. Law Number 24 Year 2007 provides guidelines for each government agency to pay attention to the security and safety of their respective archives, from all forms of hazards and disasters that may arise in the future. Previously, the Circular of the Minister of Administrative Reform of the Republic of Indonesia Number: SE / 06 / M.PAN / 3/2005 had provided guidance on the Program for the Protection, Security and Rescience of Documents / Vital Archives of the State against Disasters / Disaster Regulations.

In addition, the Head of the National Archives of the Republic of Indonesia Number 06 Year 2005 concerning Guidelines for the Protection, Security and Rescue of the National Vital Documents/Archives Against Disasters / Disasters. More technically, the National Archives of the Republic of Indonesia actually issued a Protap Number. 24 of 2010 concerning Handling of Archives affected by natural disasters using a vacuum machine.

The existence of archives as notes and records of various events and regulations can be damaged at any time or even lost due to unexpected events, such as disasters. Therefore, the number of regulations that contain preservation of archives regarding disaster events above shows the commitment and concern of the government of the Republic of Indonesia for efforts to protect and save archives from various disaster activities that may occur at any time.

b. National Archival Management Policy in times of Disasters

In connection with regional policies related to records management in Sidoarjo Regency with reference to the 2018 Kaleidoscope, it is known that the Archives Section has conducted guidance in 50 regional apparatus organizations at the office / office and agency level and at the sub-district level and BUMD of the Sidoarjo Regency Government, as an important step in understanding management and storage archival documents as good and safe state documents. Regarding the Archives Depot, Sidoarjo Regency Government has moved all important archives of the Sidoarjo Regency Government Organization, which was originally kept on the second floor of the Sidoarjo Regency Library and Archives Office, to the warehousing room in Save n Lock Jl. Lingkar Timur Sidoarjo.

The Archives Section has also transferred media in the form of 120 archival documents, especially village government records such as Letter C documents on CD. Sidoarjo Regency never thought that there would be mud in the area. The most common disaster is a whirlwind. For that reason, the Lapindo mud embankment rupture incident was something that had never been previously thought to have happened by Sidoarjo residents.

The Lapindo mud disaster began with an outflow of mud and gas from the drilling site owned by PT Lapindo Brantas, Inc. which began drilling in the area on March 1, 2006. PT Lapindo Brantas conducted oil and earth drilling in the rice fields of the Renokenongo village, which is named the Banjar Panji Well. The policy adopted by the Sidoarjo regency government to handle archives affected by mud is to order the sub-district to immediately contact the villages to immediately secure their respective archives.

Furthermore, 12 years later, Field. Archives at the Library and Archives Service have also carried out a training program on restoration of damaged archives, on September 18, 2018, by inviting village and village government officials who have damaged archives, to receive guidance and training in order to save archives from even more severe damage.

In Sleman Regency, for the policy of saving and protecting the archives, there is Regulation No. 7 of 2016 concerning the Implementation of Archives, especially in Article 28 concerning Archive Preservation and Article 29 concerning Archival Rescue.

According to Article 28 of the Regional Regulation, static archive preservation is carried out in a preventive and curative manner. Preservation of static records by preventive means maintaining archives by preventing archives from being damaged due to disasters, pests, and so on. The following is a method of preservation of static records by preventive measures based on Article 28 of the Regional Regulation of Sleman Regency, DIY, Number 7 of 2016 concerning the Implementation of Archives:

- a) storage;
preservation of archives by means of storage is carried out by means of providing infrastructure and facilities in accordance with specified standards.
- b) integrated pest control;
Static archives are easy for termites, borers, and other pests. For this reason, in order to protect files from pests, archivists and creators of archives must always carry out prevention, eradication of microorganisms and damaging organisms.
- c) reproduction;
Static files can be reproduced easily by transferring them. Transfer of media is implemented by changing the form of an archive into digital and then stored in electronic storage media.
- d) disaster management planning.
Disaster planning is carried out by protecting and saving the archive of disasters. However, a more complete Standard Operating Procedure (SOP) on how to save archives from a disaster has not been available to date in Sleman Regency.

The preservation of static archives by means of curative was carried out through the maintenance of records by taking into account the integrity of information contained in the static archive.

c. *Stakeholders Role and Coordination to Archive Restoration during Disasters*

In general, the Regional Library and Archives Service does not provide direct instructions to the public in connection with the disaster. This was conveyed by Archivists in the Field of Archives, Department of Library and Archives of Sidoarjo Regency, as follows.

"To immediately save to the village, there is no coordination with the district. But to immediately save us directly to his village. There is coordination with the sub-districts so that affected villages immediately save their archives. Some villages entered the sub-district because they were confused about the place after the incident, so they have an office in the sub-district. "(Interview with Mr. Jati, located at the Sidoarjo District Library and Archives Service on 1 August 2019, at 10:30).

As is known from the results of the interview, the Regional Library and Archive Service at that time took the role of reminding the sub-district to immediately coordinate villages to save their respective archives and put them in the archive depot in the sub-district.

In terms of the archive security system at the time of the disaster, Sleman Regency was very alert. This can be seen from the existing archive security system. In the regulations and guidelines they have, there are 3 stages of disaster management, namely before, during and after a disaster. When pre-disaster, disaster socialization began with the eruption of Mount Merapi, the rescue when the disaster was first human, then then efforts to save archives / documents both government and private. At the time of the disaster, after the circumstances allow then save the archive (Kabag public) by transporting the archive to a private home to be saved. After the situation returned to normal and allowed all the records that exist in both government offices and schools were taken to the Job Training Agency for rescue and cleaning.

To save the post-disaster archives, the Library and Archive Service together with the village apparatus contacted ANRI to carry out the restoration of vital village records including the letter C archive, then a survey was made of the affected villages to gradually carry out the restoration by asking ANRI for help. During the restoration of the affected area, the Library and Archives Service and also learned how to restore the archives and documents from ANRI, so that in the future if archival restoration is needed again, the local government and / or community do not need to request the arrival of the central ANRI but rather just come and do coordination with the Library and Archives Service.

At certain times the archives department also conducts socialization as well as assistance to the community both in the former disaster-affected area and outside the disaster-affected area in order to restore personal records / documents. To anticipate others, the department also conducted the Family Archives Love Movement (GENTASIAGA), which began in 2016 by introducing records to the family, how to organize and organize family archives when disaster strikes, the community is ready and understands how to save archives. Together with BPBD

also conducts disaster response schools, the community has been given education to store documents and archives in a special bag / document keeper. Throughout 2016 the socialization of archive management has reached 60% because it still prioritizes disaster vulnerable areas.

The efforts of the Library and Archives Service in restoring public documents initially experienced obstacles because the general public was reluctant to show their personal files to carry out either restoration or facilitation of archive security. But gradually the community began to accept and understand the importance of restoring damaged files and organizing and managing personal records.

In terms of securing archives at the Library and Archives Service, a safe depot is available for storing archives, but the depot's structure is not perfect according to ANRI standards. One of the shortcomings of the existing depot is that there is no emergency exit at the back of the depot's room if at any time a disaster occurs. In the future, it has been programmed to make an emergency exit. For the media transfer / digitalization program, it has only reached the stage of socialization in each sub-district and village government because the tools for transferring archive media are not yet available. At this time the documents and archives transferred are only the letter C documents / documents for each village.

The Porong sub-district and other sub-districts that have a village or kelurahan affected by the disaster were contacted by the Sidoarjo Regency Library and Archive Service at the time of the disaster to immediately safeguard the archives relating to the village map, namely the kretek archive or letter C.

Porong Subdistrict also played a role as a main post for community services and a collection of archives from the village, when the Lapindo mud disaster occurred. This is consistent with the results of the interview with Mr. Murtadho, S. Sos., M.M:

"(At the time of the disaster), all villages and villages, as well as other districts, are here serving. Then we put the archive Renokenongo in the District. We put Siring in Mindi. We put Jatirejo in Tulang Pohong. First of all here as a post. The sub-district service is here."

(interview with Mr. Murtadho, S. Sos., M.M. on August 2, 2019 at 11:15 at the Porong District Office of Sidoarjo Regency)

In addition, Porong District also does not coordinate with BPBD, but it saves archives independently. Porong District also plays a role in legalizing and verifying community records, based on village map archives placed in Porong District.

In the aspect of stakeholder roles, from the Cangkringan District Government, there is not much obtained about the role of the sub-district administration in this case the sub-district head and the entire organizational structure within it. In general, the sub-district government handed over the affairs of saving the archives to the Library and Archives Service to take immediate action. As for the socialization and rescue of archives/documents the sub-district government has followed the existing standards, namely storage in a fire-resistant filing cabinet that is provided specifically for important records both governance and

population. But after the eruption of Mount Merapi, the sub-district office was then moved to a safer location.

At the time of the Mount Merapi eruption, the files in the sub-district office were not significantly damaged and document rescue was still carried out by bringing all important government records and documents to the nearest rescue center along with the refugee camps affected by the disaster. At this time the Cangkringan Subdistrict government also has an archive rescue program namely Sister Village which is saving and transferring (carrying) archives to the nearest neighboring village which is the safest position from the affected area and Sister School is the same concept as the sister village but in terms of saving school archives such as report cards, diplomas etc.

Sidoarjo Mud Handling Agency (BPLS) is a place for the transfer of rights and settlement of compensation from residents' lands affected by the Lapindo mudflow disaster. Thus, BPLS is a place to collect the citizens' records related to land and then settle all kinds of citizens' rights relating to compensation for people's land.

d. Regional System and Procedures in Handling Archival Restoration During Disaster

In terms of systems and procedures, there is no special system or procedure issued by the Office of Archives and the Sidoarjo Regency Library to anticipate a disaster event, in terms of saving the archive. This fact was obtained as stated by Ms. Ari Cahyarini, A.Md. as Head of Section for Services, Development, Institution in the Field of Archives Development, Regional Library and Archives Service Sidoarjo Regency:

"From ANRI there is no SOP yet, because if each region follows the same ANRI, each of these regions has different possibilities for effects or impacts. So we make SOPs by adjusting to our conditions. In Sidoarjo there is often a fire disaster, because the air in Sidoarjo is hot and cold. For this reason, the solution is a fireproof cabinet, making it strong in case of fire. At the OPD level, there are a lot of archives, so if we are entrusted, we are trained and we educate the archives to be processed in their respective OPD, so that the villages have stored in the appropriate place. "(Interview with Ms. Ari Cahyarini, the Library and Sidoarjo Regency Archives on 1 August 2019 at 10:15).

Sleman Regency was much more well-prepared in terms of official disaster management procedures. Although it is not written in an official standard operating procedure, there are preparations in the form of a disaster prepared bag that every citizen must have, as well as a document keeper to store important citizens' archives. When a disaster occurs, a disaster prepared bag and document keeper must be carried by residents when saving themselves. Important village government records must be saved to the nearest sub-district government office. If the office is affected by a disaster, rescued to a neighboring sub-district. In the case of an important school archive, then it is saved to other schools that are not

affected by the disaster. After conditions are safe, important village files will be returned to the village or restored if damaged by disaster.

The Sleman District Library and Service also appealed to the warraga who wanted to carry out archival restoration and needed archival management assistance to come directly to the Sleman Regency Library and Archives Service to get the access they needed where they had consulted with the relevant village officials beforehand.

e. Developing the Model for Future Coordination and Collaboration in Handling Archival Saving and Restoration in Times of Disaster

The coordination model in the context of saving archives when a disaster occurs starts from the instructions from the Regional Disaster Management Agency (BPBD) that a disaster occurs. After that, there was an announcement from the central government that determined the type of disaster, whether national or regional disaster. Immediately after the disaster occurred, the district or city Library and Archives Service immediately contacted the sub-district to immediately ask the village to save the file to the sub-district. After that, the village was also asked to urge its citizens to save their personal files when they were evacuated and could also be entrusted to the Regional Library and Archives Service officers who were guarding the shelter or disaster post.

The following is the flow of the intended coordination model. If the District Government is unable to collect the records because of a disaster, then the archive is taken to the District/City Library and Archives Service to be stored and restored.

In terms of coordination systems and procedures, in general terms are not clearly regulated or special regulations are made in saving archives/documents. However, in this case, villages in Sleman that have been affected by the disaster have made some initial initiatives to save archives and important documents in the form of public documents or private documents by directly contacting the library and archives department to conduct socialization about the arrangement of archives and BPBD for disaster preparedness activities using village funds.

As an anticipatory measure from villages affected by the Mount Merapi disaster, local village officials have periodically transferred document media to digital forms so that public documents stored in village offices are safely stored in the digital system

Whereas the sub-district government does not yet have a standard coordination system with village officials so that village officials when they wish to carry out activities related to saving archives do not coordinate with the sub-district authorities but instead come directly to the Library and Kearsiapan Office.

If a common thread is taken from the implementation of post-disaster archive management starting from the national level (conducted by ANRI) to the regional level (carried out by agencies in the region and local governments both district/city and village/kelurahan), then the coordination model can be portrayed as following.

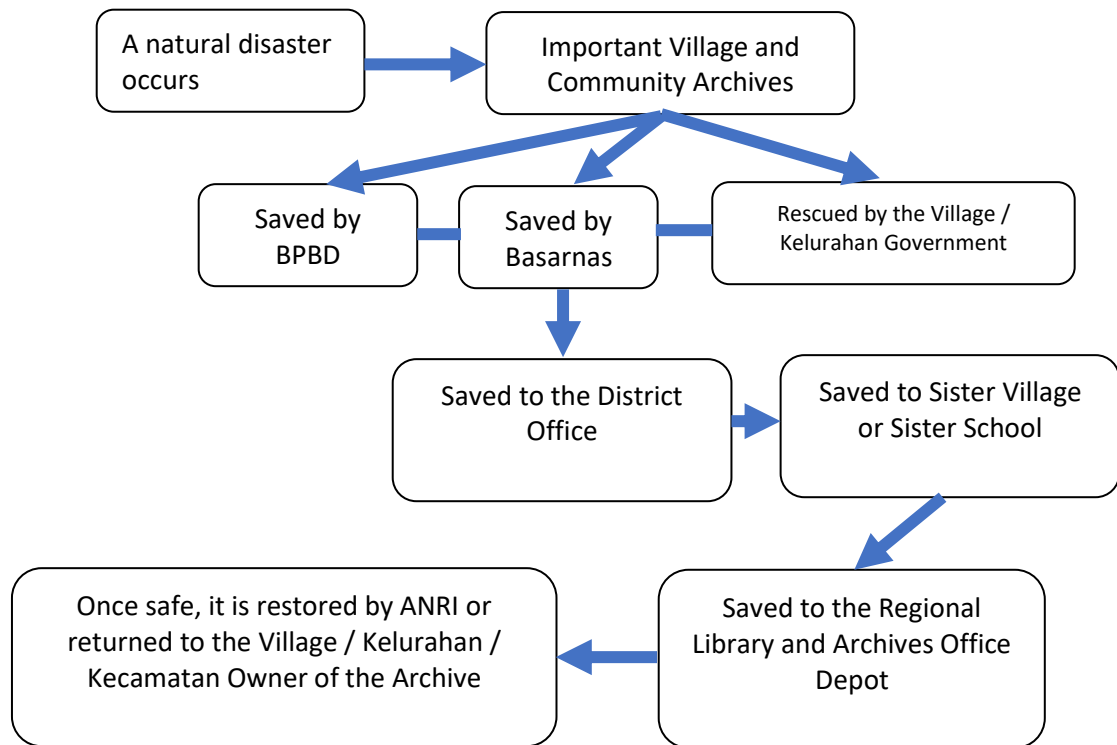


Figure 1. Coordination Model For Post-Disaster Disaster Archives Management
Source: Result of the Research 2019

In our developed model, the archive saving and restoration in times of disaster shall not be handled by a single institution, for example the regional disaster regency (BPBD). It must be taken care by collaboration of stakeholding institution, such as regional disaster regency, library and archive agency, the village office, and the district office. They have to come together hand-in-hand with standardized coordination to save and recover the archives of public and community archives. The first safe-house archive depo is on the district office, and the second safe-house level is the surrounding village or surrounding public school. After the evacuation finished and the disaster circumstance reduced, then the archive can be moved to the regional library and archives office depot. Finally, the damaged archive can be saved and restored by National Archive Agency, and the safe archive can be given to the archives owners.

CONCLUSION

The effort of the regional government in saving the regional archives after natural disasters is by placing vital village archives related to the community land map (letter C) to the district archive depot, the nearest sub-district office that was not affected by the disaster, the Vocational Training Center, or by leaving it to sister village and sister school. In addition, the way the local government in saving regional archives is to contact the National Archives of the Republic of Indonesia to restore the archives affected by the disaster. Several

Obstacles encountered in efforts to save archives are: a) the absence of a standard procedure for saving post-disaster records that can be applied equally across all regions

in Indonesia; b) the assumption that humans are the first thing to be saved so that they forget that the archive is one of the most valuable assets of the family / institution at the time of a disaster; and c) incomplete availability of archival restoration tools in post-disaster areas, so that officials must be brought from the National Archives of the Republic of Indonesia (ANRI).

To optimize post-disaster archive management and strengthen the post-disaster archive management model, the following recommendations are given.

1. The National Archives of the Republic of Indonesia need to issue more operational and coordinating rules related to standard operating procedures for handling post-disaster records by involving other agencies such as the Regional Disaster Management Agency, the Regional Library and Archives Service, the District Government, the Village Government, and the National SAR Agency.
2. District/City Library and Archives Office, to intensify dissemination to both government agencies and the public regarding "transfer" of vital archives, to prevent damage or loss of records due to a natural disaster.
3. The village government should compile an activity plan in the allocation of village funds in the form of additional equipment and other equipment not yet available to support the activities of saving archives in the village government office such as fire-resistant filing cabinets.

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