CHAPTER I

INTRODUCTION

A. Background of Research

Indonesia is one of the countries that are on the path of Ring of fire world and can be said to be prone to natural disasters. This happens because it is related to the geographical location, in that Indonesia is located between two large oceans and is located in the tectonic plate area that is prone to earthquakes. Many active volcanoes are potential emergence of earthquake disasters, hot clouds, cold lava, flood and volcanic eruptions.

In Indonesia, there are at least 147 mountains, 83 of which are active mountains or about 13% of the world volcano. [1]Merapi Mountain is one of the 147 most active volcanoes in Indonesia,[2] and the repeated period of eruption activity ranges from 2 – 7 years.[3] Merapi Mountain has a peak height of 2,968 m , is a mountain located in the central part of Java Island and is one of the most active volcanoes in Indonesia. The Slope on the south side is in the administration of Sleman Regency, Special region of Yogyakarta. The other side is in the province of Central Java, namely Magelang on the west side, Boyolali in the north and east, and Klaten on the southeast side. Merapi based on its shape has a strato-volcano type, composite volcano, high and conical consisting of hardened lava or volcanic ash. Merapi Magma is an andesite-basaltic magma. Merapi was formed geodynamically on archipelago arc due to subduction of Indo-Australian Plate meeting with Asian plate.

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[1] Volcanodiscovery.2017."Volcanoes of Indonesia(147 volcanoes)". Accessed from https://www.volcanodiscovery.com/indonesia.html On 26 December 2019 at 11.00 A.M

[2] Surono, Jousset, P., Pallister, J., Boichu, M., Buongiorno, M. F., Budisantoso, A., Costa, F., & Lavigne, F. (2012). "The 2010 explosive eruption of Java's Merapi volcano—a '100-year'event*". Journal of volcanology and geothermal research*, 241, pg.121-135

[3] Nugroho, Ariyadi Susilo. 2014. "Analisis Tingkat Resiko Erupsi Gunung Merapi Terhadap Permukiman Di Kecamatan Kemalang, Kabupaten Klaten*". Jurnal Teknik PWK* ,Vol. 3, No. 1.

In Indonesia, volcano eruption is a disaster that takes the 2nd most victims in Indonesia after the tsunami disaster. One of the biggest volcano eruptions in Indonesia was Merapi eruption in 2010 . The eruption of Merapi in 2010 was an event where the volcano started the activity start at the end of September 2010, and caused a volcanic eruption on Tuesday, October 26, 2010, resulting in at least 353 people were killed[4] and total refugees reaching 320,090 people, the Merapi eruption in 2010 was greater than the eruption of Mount Merapi in 1822, 1872, and 1930.[5]

The eruption of Merapi in 2010 has a tremendous impact on social conditions affecting mental, spiritual, educational, health, livelihood, natural resources and the economy in general. The eruption of Mount Merapi at least damaged 3,424 houses, with 2,636 houses being heavily damaged, 156 moderately damaged and 632 slightly damaged and 867 hectares of forest in a mountainous area located in Sleman Special region of Yogyakarta, with a total loss of about IDR 30 billion. There are about 900 SMES from 2,500 MSMES, to temporarily stop completely. Most of the livelihood are livestock, and crafts. The Department of Agriculture, Fisheries and Forestry, informed that the number of livestock that died from the eruption of Merapi reached 1,548 . Of these, the dead dairy cows reached 1,221, and goats or sheep reached 200 t. There are 23 domestic flights and 3 international flights per day at a halt or there was an estimated passenger reduction of approximately 58,300 passengers for 11 days.[6] Other casualties due to the Mount Merapi eruption include

[4] Sutaningsih dkk (2011), "Perbedaan Letusan Merapi Tahun 2006 dan 2010 Ditinjau Dari Karakteristik Kimia Gas Vulkanik", Buletin Berkala Merapi, Vol.08/01/Edisi April 2011, BPPTK, Pusat Vulkanologi dan Mitigasi Bencana Geologi, Badan Geologi, Yogjakarta.

[5] Benny N Joewono, "Erupsi Merapi 2010 Lebih Besar dari 1872", Accessed from https://megapolitan.kompas.com/read/2010/11/09/15573541/erupsi.merapi.2010.lebih.besar.dari.1872?page=2., pada . On 26 December 2019 at 12.00 A.M

[6] Hasanudin Aco, "inilah kerugian materiil dampak gunung Merapi" ,Accessed from https://www.tribunnews.com/bisnis/2010/11/16/inilah-kerugian-materiil-dampak-letusan-merapi, On 26 December 2019 at 12.10 PM

damage to property, damage to houses, and shifting land. The destruction of the house as a consequence of the hot cloud was one of the great losses to the survivor.

Special Region of Yogyakarta is one of the provinces that can be considered as a disaster - prone area, because this area has a volcano and the volcano, Merapi Mountain has a high activity and also has taken many victims in the year 2010. In Yogyakarta, the area affected by Merapi eruption is located in Bantul, Sleman, Kulon Progo and Yogyakarta.

The concept of disaster risk reduction (Disaster Risk Reduction) is not evenly distributed in all regions in Indonesia, and weak in analyzing disaster risks, limited funds and weak coordination between government agencies, exacerbating mitigation conditions. With the frequent natural disasters that occur in Indonesia, disaster risk reduction is needed for better and systematic disaster management.[7]

Disaster mitigation measures must be a real and ongoing action to be undertaken by the government. Disaster mitigation itself takes quite a long time even arguably years and the mitigation itself involves many parties such as government and agencies whether it is private or state, where each still has its role in Mitigation and should have effective coordination and communication.

Disaster mitigation also includes things such as civil engineering, spatial planning, socio-economic and political aspects. This is what makes mitigation a collective action in overcoming disasters, in this case the object of mitigation itself is primarily the community affected by the disaster. Basically, disaster management is carried out after a disaster occurs, but to reduce and prepare for emergency response, adding insight into the disaster

[7] Sukowati, Praptining. 2008. "Manajemen Bencana Integratif Berbasis Masyarakat terhadap Daerah Rawan Bencana Untuk Meningkatkan Kesejahteraan Paska Bencana". *Jurnal Administasi Negara*, Malang: Fakultas Ilmu Administrasi UNIBRAW Vol.X No.2

itself can reduce the risk and reduce the amount of damage that occurs due to disasters, especially in land administration which includes the economy, social and environment affected by the eruption.

This then makes the government the foremost role in making policies and driving force in regional development, as well as providing understanding and insight to the community to be more agile in dealing with disasters. The role of the private sector is the assistance needed by the community and government. The government must provide security and safety for all aspects of Indonesian society without exception. This is as stated in Law no. 24 of 2007 article 6 and article 7 concerning the authorities and responsibilities of the government in disaster management. In the event that occurs in the special region of Yogyakarta, countermeasures such as development regulations that are adjusted to certain structures and the speed of local government in responding and overcoming disasters are in the Yogyakarta Special Region Regional Regulation Number 13 of 2015 concerning amendments to regional regulations of the Special Region of Yogyakarta province number 8 year 2010 concerning disaster management.

B. Research Question

Based on the background described above, it can be stated that the research question are:

1. What is the role of Local Government in Disaster Risk Management through Land Administration after the 2010 Merapi Eruption in DIY?
2. What are the obstacles faced by Local Governments in Disaster Risk Management through Land Administration after the 2010 Merapi Eruption in DIY?

C. Objective of Research

Based on the formulation of the problem, the objectives of this study can be formulated as follows:

1. Objective
    a. To Determine and identify the role of Local Government in Disaster Risk Management through Land Administration after the 2010 Merapi Eruption in DIY
    b. To Determine and identify the obstacles faced by local governments in implementing their performance, especially those related to Disaster Risk Management processes through Land Administration after the 2010 Merapi Eruption in DIY

D. Benefits of Research

There are some benefits of this research, namely:

1. Theoretical Aspect

   This research provides benefits such as an insight enhancer and to know the role of the Local Government in Disaster Risk through land Administration after Merapi Eruption 2010 in DIY

2. Practical aspects

   This research as an input and donation for the government in disaster management and development planning related to disaster mitigation