Multi Hazards in The Democratic Republic of Congo

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ABSTRACT: Democratic Republic of the Congo (DRC) is a country in the Central African region that became independent from Belgian colonialism on June 30, 1960. DRC is a country with abundant natural resources and fertile soil. On the other hand, DRC has always been in a state of conflict and a prolonged civil war involving several neighbouring countries, resulting in slow economic growth. DRC also faces other threats such as the Nyiragongo volcanic eruption, Ebola, andthe Covid-19 pandemic. The research method used is descriptive qualitative by collecting data from the literature related to multi-disaster in the DRC and the observations of one of the researchers while on duty in the DRC. The purpose of this study was to analyze the multi-hazards in the country. The results of this study indicate that DRC has multiple natural and non-natural hazards. These hazards are in the form of armed conflict, the eruption of Mount Nyiragongo, the Ebola disease outbreak, and the Covid-19 pandemic. Risks that exist can affect the condition of society, economy, social, and environment. The national security of the country can also be affected. Efforts to reduce the risk of danger also need to be carried out by the government to minimize the impact arising from armed conflict, the eruption of Mount Nyiragongo, the Ebola disease outbreak, and the Covid-19 pandemic.

KEYWORDS -Congo, Multi Hazards, Nyiragongo Eruption, Covid-19.

I. INTRODUCTION

The Democratic Republic of the Congo (DRC) is the second-largest country in the African continent after Algeria. The wide of DRC is 2,344,885 km2, approximately 1,900 km long from west to east and 2,010 km from north to south. The terrain consists of hills in the east and lowlands in the west, with tropical forests dominating most of Congo. Several rivers, with the largest rivers being the Congo River and Lake Kivu, borders Rwanda and Burundi. It has two seasons, rainy and summer. Total population is about 71 million people with a density of 25 to 65 people/km2.

This country is directly adjacent to other countries. They are Angola, Burundi, the Central African Republic, Rwanda, South Sudan, Tanzania, Uganda, and Zambia. Meanwhile, the government area is divided into 11 (eleven) provinces. Those are Orientale, Katanga, Equateur, Bandundu, Kasai Oriental, Kasai Occidental, Maniema, Sud Kivu, Nord Kivu, Bas Congo, and Kinshasa (the nation's capital). The DRC country consists of 300 ethnic groups. It automatically also has more than 300 regional languages. 4 (four) languages are the majority. They are Swahili, Tsiluba, Kikongo, and Lingala, while the official language used is French.

The DRC, formerly known as "Zaire," is a country in Central Africa that became independent of Belgian colonialism on June 30, 1960. The DRC has abundant natural resources and fertile soil, including diamonds, gold, coltan, cobalt, copper, cadmium, oil, zinc, tin, manganese, germanium, uranium, radium, bauxite, iron ore, coal, and forest wood.

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The DRC has always been in a state of conflict and prolonged civil war involving several neighbouring countries since independence from Belgium in 1960 until 1965. In February 1961, the United Nations (UN) peacekeeping force was brought in for the first time. However, the conflict continues today, resulting in a significant slowdown in economic growth, resulting in most of the population living below the poverty line.

In addition to the prolonged conflict, the DRC also faces other threats. Namely, the Nyiragongo volcano's existence is a real threat to the lives of the people of the DRC, especially the areas around the volcano, then with the Ebola outbreak and the Covid-19 Pandemic further worsening the condition of the DRC community.

The researchers learned more about Multi Disaster in DRC based on these multi-threat conditions there. This study aimed to analyze multi-hazards in the DRC. Hopefully, this research will be considered in developing DRC in the future by state policymakers.

II. METHODOLOGY

The research method used in this research is descriptive qualitative. The DRC is a complex country with threats from various factors, both natural and non-natural. Data were obtained by collecting from literatures related to multi-disaster in the DRC and the observations of one of the researchers while on duty in the DRC.

III. RESULTS AND DISCUSSION

Hazard is a physical phenomenon or human activity that has the potential to damage, which can cause loss of life or injury, property damage, social and economic disruption, or environmental damage (ISDR, 2004). A hazard can also be defined as a potential event that is a threat to health, security, public welfare, economic function, society, or a broader unit of government organization that directly impacts assets in the community. A hazard is a threat event that can affect human life, livelihood assets, and the environment. The danger is always associated with disaster risk. Multi hazards are a combination of several existing hazards, both in the form of hazards from nature and hazards caused by human activities and other activities.

DRC is one of the countries with extraordinarily abundant natural resources, abundant natural wealth, and fertile soil for growing any plant that will produce good harvests to fulfil the life of its people. However, this condition can be maximized because the DRC is also a country with multiple complex threats, both natural and non-natural and social threats. These threats include armed conflict, the eruption of Mount Nyiragongo, the Ebola disease outbreak, and the Covid-19 pandemic.

Armed conflict

The DRC has experienced conflict dynamics for a long time. There were two significant wars involving other African countries even during the conflict. The two wars were the Congo War I, which took place in 1996-1997, and the Congo War II in 1998-2003 (Herbert, 2000, p.3). The conflict occurred because of ethnic Tutsi and Hutu fighting for territorial power. In the DRC, a rebel group also wanted to overthrow the then President of the DRC, namely Mobutu SeseSeko, who was considered too pro-American. The rebel group led by Laurent Desire Kabila took advantage of the Tutsi and Hutu ethnic conflict by garnering support from the Tutsi ethnic group. On October 4, 1996, rebel groups from Banyamulenge carried out a direct attack on the village ofLamera, eastern the DRC, where the Hutu were displaced (Herbert, 2000, p.88).

In 1998, conditions in the DRC heated up again. Laurent Desire Kabila failed to share his power with his supporting groups so that those who initially supported Kabila turned against him by revolting again (Williams, 2013). Kabila then garnered support from the Hutu ethnic group against the Tutsi-backed rebel group. Kabila also mobilized aid from neighbouring countries such as Angola, Chad, Namibia, and Zimbabwe. War broke out again with this foreign aid between DRC, Angola, Chad, Namibia, and Zimbabwe against Rwanda, Uganda, and Burundi. This war is known as the Congo War II or the Great African War (Christopher, 2007).

The conflict then became an open war with the intervention of neighbouring countries, namely Angola, Burundi, Rwanda, and Uganda, and was known as the Congo War I. This country's involvement was due to the

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interests of natural resources, support for the Tutsi ethnicity, and the dislike of these countries towards the proregime. -America Mobutu. Mobutu, who lost the help of the United States because the cold war had ended, finally surrendered and fled outside the DRC. This war ended with the victory of the anti-Mobutu insurgency in 1997, and Laurent Desire Kabila was later appointed President of the DRC (International Crisis Group, 1998).

The International Rescue Committee (IRC) has documented the humanitarian impact of the Second Congo War. The first IRC study between 2000 and 2004 estimated that 3.9 million people have been killed since 1998. More than 10% of people died due to violence, while most others died from the effects of war, such as infectious diseases, malnutrition, infant mortality, starvation, and so on. It was caused by inadequate health facilities and threats to food safety. This figure makes the Congo War the deadliest war since World War II (Benjamin et al., 2007).

The conflict in DRC is a form of social threat. If this condition is not controlled immediately, it will lead to prolonged conflict and broader threats. The loss of life, economy, social and so on will continue to increase. The role of the UN Security Council is also very much needed in efforts to improve the condition of the DRC.

The impact of the Second Congo War was enormous, and the DRC government was unable to deal with it. The UN Security Council (UNSC) also intervened by urging the conflicting parties to carry out a ceasefire. On July 10, 1999, a ceasefire agreement was made and known as the Lusaka Agreement (Herbert, 2000). One of the deal's contents is that the parties to the conflict allow the entry of UN peacekeeping operations. UN Security Council Resolution Nomor 1279, dated November 30, 1999, placed Peacekeeping Operations (PKOs) in the DRC (UN). The peacekeeping operation was called Mission de l'Organization des Nations Unies en Républiquedémocratique du Congo (MONUC). The mandate given through the UN Security Council Resolution is to oversee the implementation of the Lusaka agreement and assist the peace process. This mandate is based on CHAPTER VI of the UN Charter Pacific Settlement of Dispute (Latif&Jamaan, 2014).

Nyirangonggo Volcano Eruption

Mount Nyiragongo is an active volcano located about 20 km from Goma City and Lake Kivu, located in the Virunga National Park of the DRC and directly adjacent to the country of Rwanda. The height of the mountain is 3,470 meters above sea level (masl) with a Stratovolcano type. The width of the main crater is 2 km and contains a lava lake with a maximum depth of 600 m when it erupted in 1977, then increased to 900 m after it erupted in 2002 (Wikipedia, 2022).

Mount Nyiragongo has erupted 34 times since 1882, but the most devastating was the 1977 eruption, which killed 600 people. The 2002 eruption killed 245 people due to carbon dioxide and methane gas, and the last one in 2021 killed 32 people (Wikipedia, 2022).

Volcanic eruptions certainly have positive things and are accompanied by negative impacts. The positive thing is that the area around the mountain is becoming more fertile, which is suitable for agriculture. On the other hand, volcanic eruptions also have an impact on loss of life, material, physical and environmental. Through capacity building and vulnerability reduction, mitigation efforts are also critical to reduce more significant risks.

Capacity building can be implemented through increasing knowledge and skills in disaster management. Capacity-building activities must also be activated regularly to reduce disaster risk and its consequences (Azizah et al., 2022).

Ebola Outbreak

Ebola virus disease (PVE) is a disease caused by the Ebola virus, a member of the filovirus family. This disease is known as Ebola Virus Disease (EVD) or Ebola Hemorrhagic Fever (EHF). The Ebola virus was first identified in 1976 in two places simultaneously: in Yambuku, a village not far from the Ebola River in the Democratic Republic of Congo, and in Nzara, South Sudan.

The first reported case occurred in North Kivu province in late July 2018 and was confirmed as an EVD at the national laboratory in Kinshasha on August 1, 2018. The outbreak was reported to the World Health Organization (WHO). Until November 2018, there have been 279 cases, and in early March 2019, there were

897 cases with a mortality rate of 63%. The number of cases increased dramatically from March 2019 to 2,713 cases in July 2019 (CFR 67%) and 3191 cases at the end of September 2019. The number of issues can be seen in Figure 1.

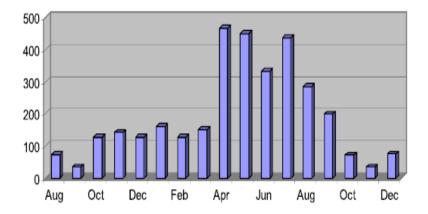


Figure 1. Number of Ebola Cases August 2018 – December 2019 Source: Shears &Garavan (2020)

Figure 1 shows that the Ebola outbreak in DRC increased sharply from April 2019 to July 2019 and slowly began to decline. This cannot be separated from the assistance of various parties.

Covid-19 pandemic

The Covid-19 pandemic is a global health problem that occurs in almost every country in the world. The DRC is very vulnerable to the entry of Covid-19. It was recorded that on July 22, 2020, there were 8,533 confirmed cases of Covid-19, with 195 deaths and 91 new cases reported in a day. Most of the people of DRC think that Covid-19 is a disease of white foreigners and believe that their immunity can protect the locals from this virus. Although all activities are restricted in the DRC, Covid-19 cases continue to increase because people ignore health protocols in addition to low levels of education and awareness in responding to the existence of Covid-19.

The Covid-19 pandemic has occurred in almost all countries in the world, including the DRC. The Covid-19 pandemic should not be taken lightly. Covid-19 has affected many sectors of the economy, society, culture, environment, and even national security. Implementing health protocols is essential in preventing the spread and transmission of Covid-19 and supporting regulatory regulations and health services.

Previous research in Indonesia has shown that Covid-19 impacts national security, military, political, economic, social, environmental, and human security. Regulations from the government health services, including vaccinations, are essential in dealing with Covid-19 (Azizah et al., 2021). Steps to handle Covid-19 can also be carried out through increasing socialization activities, education, enforcement of discipline in implementing health protocols, and vaccinations to achieve herd immunity (Islami et al., 2022).

Multi-Hazard Risk Reduction

From the above description, the DRC community has a complex level of threat, both natural and non-natural threats, that will harm people's lives. The presence of the state in resolving all potential dangers is very influential on the success of risk reduction from various kinds of threats. The condition of the DRC country is not good because the conflict will further exacerbate all threats that occur to the community and even affect the national security of the DRC country.

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Sendai Frame Work can be a reference to improve and reduce the risk of threats that occur in DRC. The Sendai Framework is a voluntary, non-binding 15-year agreement recognising that the state has a vital role in tackling disaster risk. The goal is to produce a reduction in risk and loss from disasters in lives, livelihoods, health, economic, physical, social, cultural, and environmental assets, businesses, communities, and nations.

The Sendai Framework for Disaster Risk Reduction 2015-2030 has seven global targets (United Nations, 2015).

- Substantially reduce global catastrophic deaths by 2030.
- Substantially reduce the number of people affected globally by 2030.
- Reduce direct catastrophic economic losses about the Gross Domestic Product (GDP) by 2030.
- Substantially reduce catastrophic damage to critical infrastructure and disruption of essential services.
- Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020.
- Substantially enhance international cooperation for developing countries through adequate and sustainable support through 2030.
- Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030.

The four priority actions to achieve these goals include Priority 1. Understanding disaster risk; Priority 2. Strengthening governance in disaster management; Priority 3. Investment in disaster risk reduction by strengthening resilience; Priority 4. Strengthening disaster preparedness for effective response and rebuilding better in the process of recovery, rehabilitation, and reconstruction (United Nations, 2015).

IV. CONCLUSION

The multi-hazards in the Democratic Republic of the Congo (DRC) include armed conflict, the eruption of Mount Nyiragongo, the Ebola disease outbreak, and the Covid-19 pandemic. Hazards that exist can affect the condition of society, economy, social, and environment. The national security of the country can also be affected. Efforts to reduce the risk of danger also need to be carried out by the government to minimize the impacts arising from armed conflict, the eruption of Mount Nyiragongo, the Ebola disease outbreak, and the Covid-19 pandemic.

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