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JICA'S Role and Cooperation on Disaster Risk Reduction during and Post Covid-19 Pandemic

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Abstract:- One of the disasters that is still a concern today is COVID-19. One of the countries considered to have high alertness in dealing with the Covid-19 pandemic is Japan. Various efforts have been made by the Japanese government to control the spread of Covid-19. In efforts to deal with disasters, Japan has a Japanese International Cooperation Agency, namely JICA. This study uses qualitative research methods. The data collection method used in this study is online interviews. The researcher chose this approach because this research was carried out during an Overseas Work Lecture (KKLN) through a Video Conference from Japan on June 14, 2022, with the reference for this research is "JICA's role and cooperation in reducing disaster risk during and post Covid-19 pandemic." From the paper we can concluded that JICA's cooperation priorities are based on the Sendai Framework for Disaster Risk Reduction (2015), for which Japan led the formulation process by incorporating Japan's own disaster risk reduction experiences. The challenges faced by JICA in implementing inter-agency and inter-state cooperation in disaster risk reduction during and after a pandemic are in terms of coordination and communication.

Keywords:- *JICA, Role, Cooperation, Disaster Risk Reduction.*

I. INTRODUCTION

Japan is a technologically and scientifically advanced nation in East Asia. In order for Japan to progress and become a developed nation, human resources in the nation are crucial. History teaches us that Hiroshima and Nagasaki were devastated together with the rest of Japan during World War I Japan is an island country off the coast of East Asia. There are four sizable islands and countless smaller ones in Japan. Japan's geographic shape stretches 3800 kilometers from north to south. It covers an area of about 370,000 square kilometers. 25% of the Japanese Archipelago is made up of land, and 75% of it is made up of mountains. Japan's mountains are very large.

The types of disasters that occur today are becoming more common as the years pass. One of the disasters that is still a concern today is Covid-19. Japan, which is one of the Asian countries that can be compared with Western countries, has a close relationship with China, the country where the initial case of Covid-19 was found. Various efforts have been made by the Japanese government to control the spread of Covid-19. In relation to the handling of the Covid-19 pandemic disaster that has just passed, it awakens all countries to work together for sustainable community development. And Japan is a country that learns from and adapts more quickly to natural disasters that have occurred hundreds of years ago. In terms of disaster management and adaptation, this is also reflected in the handling of the Covid-19 disaster risk.

As mentioned above, one of the countries considered to have high alertness in dealing with the Covid-19 pandemic is Japan. Developed countries known for their cherry blossoms and technological sophistication have been able to implement an effective and efficient Covid-19 handling model. This can be seen in the addition of positive cases of Covid-19 in Japan, which is much lower than other developed countries such as South Korea, England, and Russia (Sayeed & Hossain, 2020).

From a geological point of view, Indonesia and Japan have in common that they are crossed by the Eurasian and Pacific tectonic plate lines. According to data from the United States Geological Survey (USGS), Japan and Indonesia are the countries that experience the most frequent earthquakes. The difference between Indonesia and Japan is the disaster management technology they have and the mitigation actions they have taken. Related to the management of natural and non-natural disasters, the management of the Covid-19 pandemic that has just passed has made all countries aware of the importance of working together for sustainable community development. Japan is quicker to learn from and adapt to natural disasters that have occurred hundreds of years ago in terms of disaster management, and this adaptation is also reflected in coping with the risk of the Covid-19 disaster.

Disaster management and disaster risk reduction efforts are a joint affair, so they cannot be carried out only by one party. Continuous disaster risk reduction will be able to strengthen community resilience in the face of disasters while also allowing sustainable development to continue. The concept of community resilience to disasters and disaster risk reduction owned by the community will allow it to survive disasters and even carry out sustainable development. The Covid-19 pandemic has ravaged all aspects of human life, eliminated many victims, and caused psychological trauma that is not light.

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At present, the Covid-19 pandemic has indeed subsided, but that does not mean that the threat has disappeared. As a result, Indonesia must reflect on Japan's success in dealing with Covid-19 in order to reduce the risk of Covid-19 and create a society that is resilient to Covid-19 on a continuous basis, can continue community development, and even provides resilience in improving welfare.

In efforts to deal with disasters, Japan has a Japanese International Cooperation Agency, namely JICA, which stands for the Japan International Cooperation Agency, which is an institution established by the Japanese government to assist the development of developing countries. This institution is under the authority of the Ministry of Foreign Affairs and was established in August 1974. This institution is also intended to enhance international cooperation between Japan and other countries. JICA assists government development by providing technical assistance and non-binding funds. JICA's goals are to develop human capital in developing countries or strengthen organizations, assist in the development of policies in developing countries, and carry out research for basic plans or possible implementation of development operations.

Based on the background of the problems described above, research with the title "JICA's role and cooperation in reducing disaster risk during and post Covid-19 pandemic" needs to be carried out as learning material for increasing the role of disaster management agencies in reducing disaster risk in Indonesia.

II. METHODS

This study uses a qualitative approach, where researchers use descriptive methods to obtain data. The descriptive method is a research method that proposes conducting research solely on existing facts or phenomena that empirically live on in the speakers, so that what is produced or recorded is in the form of exposure as it is. The preparation of this manuscript uses library research methods, namely collecting all reading materials related to the problems discussed and then understanding them carefully according to research findings.

The data collected in this paper are secondary data derived from literature and documentation studies. The analytical method used is descriptive-qualitative. The data collection method used by researchers in this study is online interviews. The researcher chose this approach because this research was carried out during an Overseas Work Lecture (KKLN) through a video conference from Japan on June 14, 2022, with the material for the Overseas Work Lecture as a reference for this research being "Role and Cooperation on Disaster Risk Reduction During and Post Covid-19 Pandemic," with the resource person used in the research being Dr. Taichi Minamitani from Japan International Cooperation Agency (JICA).

III. THEORY

A. International Organization

An international organization was created with the intention of maintaining the norms so tha t they can function in an orderly manner, claims Le Roy A. Bannet in his book "International Organization: Principles and Issues." attaining common objectives and as a platform for international relations to make sure that each country's interests are safeguarded in the framework of ties. This justification explains how International was created as a forum for international collaboration and how it serves to safeguard the interests of its member states. Meanwhile, Clive Archer claims in his book International Organizations that the terms "organization" and "international organization" are descended from one another. There are various ways to interpret the word "international."

First, intergovernmental, which denotes a relationship or interstate between official representatives of various nations. Sovereign nations Second, transnational connections refer to both intergovernmental contacts and activities involving people and groups abroad. Third, the interaction between a branch of one government (like the Ministry of Health) and a branch of another government (like the Ministry of Health or its Intelligence Agency) is known as a transgovernmental relationship when it does not go through the normal channels of foreign policy. International relations encompass these three interactions (Perwita and Yuni, 2014:97).

According to Teuku May Rudy, "International Organization as a Pattern of Cooperation that Crosses Boundaries" country based on a clear and complete organizational structure and expected or projected to occur, a s well as carry out duties on an ongoing and institutionalized basis to strive for achieving the necessary goals and mutually agreed upon between the government and other non- governmental organizations (Rudy, 2005:50).

B. International Cooperation

International cooperation is collaboration between nations as well as with non-state actors, particularly international organizations; it results from a shared desire to accomplish the same objectives and is conducted more transparently in terms of the sharing of information (Keohane, Robert O., and Joseph S. Nye, 2012). Three categories can be used to classify international collaboration. The first type of collaboration is called "bilateral cooperation," and it is based on treaty contracts between two nations. The second is regional cooperation, which is a restricted treaty contract and is carried out by a number of nations in a region. Finally, there is multilateral collaboration, when numerous nations implement this cooperation pact without taking it into consideration. Finally, there is multilateral cooperation, which is a type of treaty that creates laws and is carried out by numerous nations without regard for specific regional boundaries (James Dougzgrherty; Robert Pfaltzgraff, 1997).

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The process of international cooperation and the pattern of cross-national cooperation are based on a distinct and comprehensive structure. It is desired that the cooperation function would continue and be implemented so that the objectives that have been mutually agreed upon, including agreements between state governments and with international non-governmental organizations, can be achieved (Rudy, 1993). Each nation and the parties involved in the cooperation are working to advance their individual interests through it. Its interests may be in the prosperity of a nation's citizens or the efficient operation of an organization that participates in the collaboration. Every actor that participates in collaboration must assume full responsibility for their part in making the goals and policies that have been established and agreed upon earlier a reality. (1984, Keohane RO) International institutions can take the form of formal organizations with the state government as the major actor, or they can take the shape of a number of loosely bound agreements that place more of an emphasis on global issues and activities (Robert Jackson and Georg Sorensen, 2005).

C. Disaster Risk Management

Disaster risk management can be interpreted as a continuous process of anticipating, overcoming, and following up on the risk of a disaster occurring. Disaster risk management can also be defined as the application of va rious knowledge to disaster management, beginning with disaster identification based on systematic observation and analysis to produce appropriate disaster prevention, disaster risk reduction, disaster response, and recovery actions after a disaster (Paidi, 2012).Disaster risk management is a formal process in which risk factors are identified, analyzed, and handled systematically so that losses and damage can be prevented or minimized (ISDR, 2009; Widana, 2019).

The implementation of disaster risk management is carried out in several stages, including (Vladut, 2014; Fraser & Cooper, 2005; and Mironescu, 2005):

➢ *Establish context*

This stage includes the activities of determining the management context, organizing and determining the strategy, composition, and risk assessment procedures, as well as building appropriate communication and consultation with the affected parties.

➢ *Disaster Risk Identification*

Risk identification is one of the most important steps in disaster risk management. This stage is the risk configuration stage, which is carried out by predicting, recognizing, and knowing the dangers and consequences of a disaster.

➢ *Disaster Risk Analysis*

Risk analysis is performed with the primary goal of understanding the possibility and impact of a disaster risk, as well as the relationship between the two in order to determine the nature of the risk and how to interpret the risk. In addition, the analysis is also aimed at obtaining the most appropriate response to address each identified disaster risk so as to estimate the estimated losses and benefits that will be obtained as a result of implementing the risk response.

➢ *Disaster Risk Response*

The goal of risk response is to determine what can be done to reduce disaster risk by reducing the probability and impact of threats and increasing the likelihood and impact of the chances of successful solutions to disasters.

➢ *Control and supervision of disaster risk*

The last stage of risk management is the step that determines the success of all the other stages, which are carried out by supervising all risks that have previously been identified and analyzed, monitoring the risk response implementation process, re-analyzing the remaining risks, and ensuring that risk management succeeds in achieving its goals. in the form of selecting and implementing the most appropriate risk response.

Disaster risk management consists of two parts: risk assessment and risk management.

- Risk Assessment

The risk assessment has several stages, namely:

✓ Disaster risk identification, i.e. identifying the risk factors, which in this case are (1) the source of the incident, namely the hazard, and (2) the condition of human vulnerability exposed to the hazard (vulnerability), so that their ability to face the disaster.

✓ Assessing risk is an effort to measure how big the risk will be. This can be obtained by calculating the risk, which is a function of hazards and vulnerabilities (R = H x V). In vulnerability, there is an element of capacity. From the results of the risk assessment, an overview is obtained of the level of disaster risk, whether high, medium, or low.

✓ Evaluating risk is an effort to find out which risk priorities must be handled, but not all high risks must be handled.

- Risk Management (Risk Treatment)

Each risk faced has four alternative treatments, namely:

✓ Avoiding risks (prevention) is done if we are unable to fight risks that will occur. Then we must avoid them by relocating and making spatial regulations that prohibit being in that place.

✓ Reducing risk (mitigation): if the risk is still within our ability to handle, we carry out mitigation efforts, which can be in the form of structural mitigation or non-structural mitigation.

✓ Diverting risk (transfer) is done if the risk that we should accept is transferred to another party. This is done to ease the burden on the risk recipient. This is done by paying for insurance.

✓ Accepting risk (Risk Acceptance) is the residual risk that we must accept after implementing the preceding efforts.

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IV. RESULTS AND DISCUSSION

JICA is the Japan International Cooperation Agency, or an extension of the Japan International Cooperation Agency, which is an institution established by the Japanese government to assist the development of developing countries. This institution is under the authority of the Ministry of Foreign Affairs and was established in August 1974. This institution is also intended to enhance international cooperation between Japan and other countries. JICA assists government development by providing technical assistance a nd non- binding funds. The aim of JICA is to develop human capital in developing countries, strengthen organizations, assist in the development of policies in developing countries, and carry out research for basic plans or possible implementation of development operations.

JICA stated that in making efforts to reduce disaster risk, we must first know the current disaster trends, namely.

- *Death rates from disasters in the world, 1994–2019*

The trend has decreased; the highest number in 1995 wasmore than 600,000.

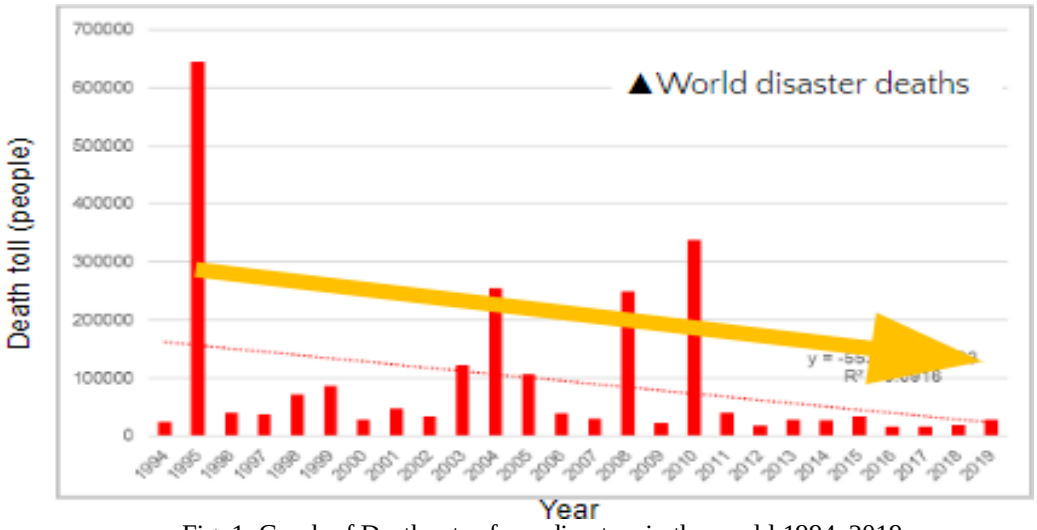

Fig. 1: Graph of Death rates from disasters in the world,1994–2019

(Source: Dr. Taichi Minamitani presentation onKKLN Unhan RI, 2022)

- *Victims of natural disasters in the world, 1994–2019*

The highest was in 2012, more than 600,000,000, then it decreased, and in 2017-2019 it was in the range of 100,000,000.

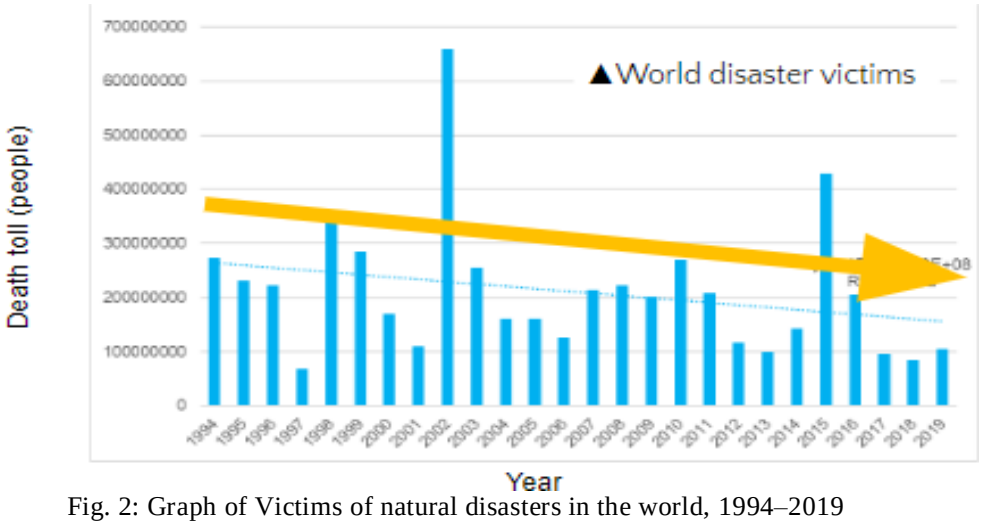

Fig. 2: Graph of Victims of natural disasters in the world, 1994–2019

(Source: Dr. Taichi Minamitani presentation on KKLN Unhan RI, 2022)

Economic losses due to the 1994-2019 world disasters The trend has increased. The highest was 350,000 million USD in 2011, the second highest was around 320,000 million USD in 2017, and the highest in 2019 is 100,000 million USD.

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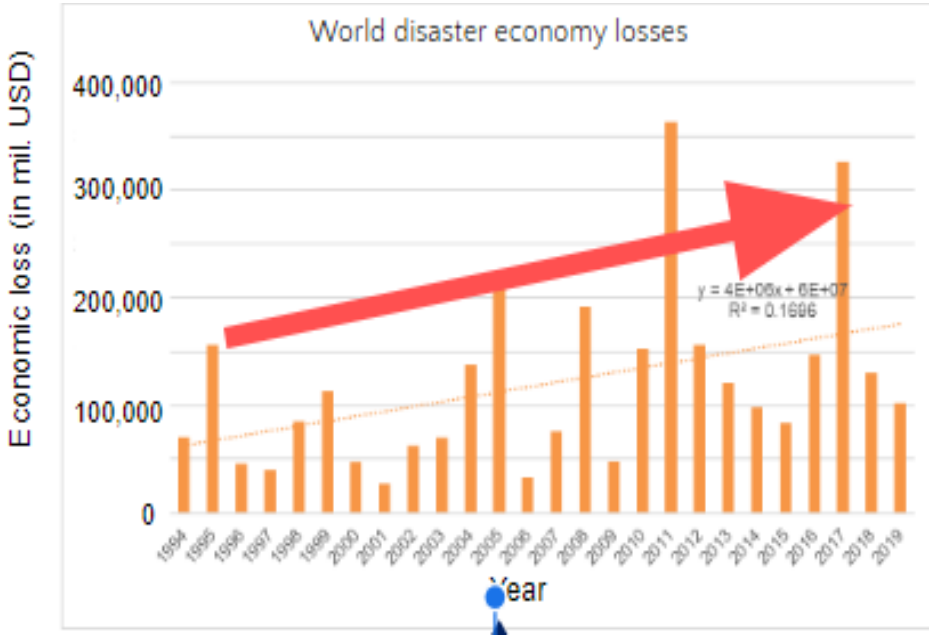

Fig. 3: Graph of Economic losses due to the 1994-2019 world disasters

(Source: Dr. Taichi Minamitani presentation on KKLN Unhan RI, 2022)

Breakdown of damage by type of hazard in developing countries Death is due to this type of hazard in developing countries. Largest due to earthquakes by 32%, due to the storm by 12%, and due to infectious diseases by 8%.

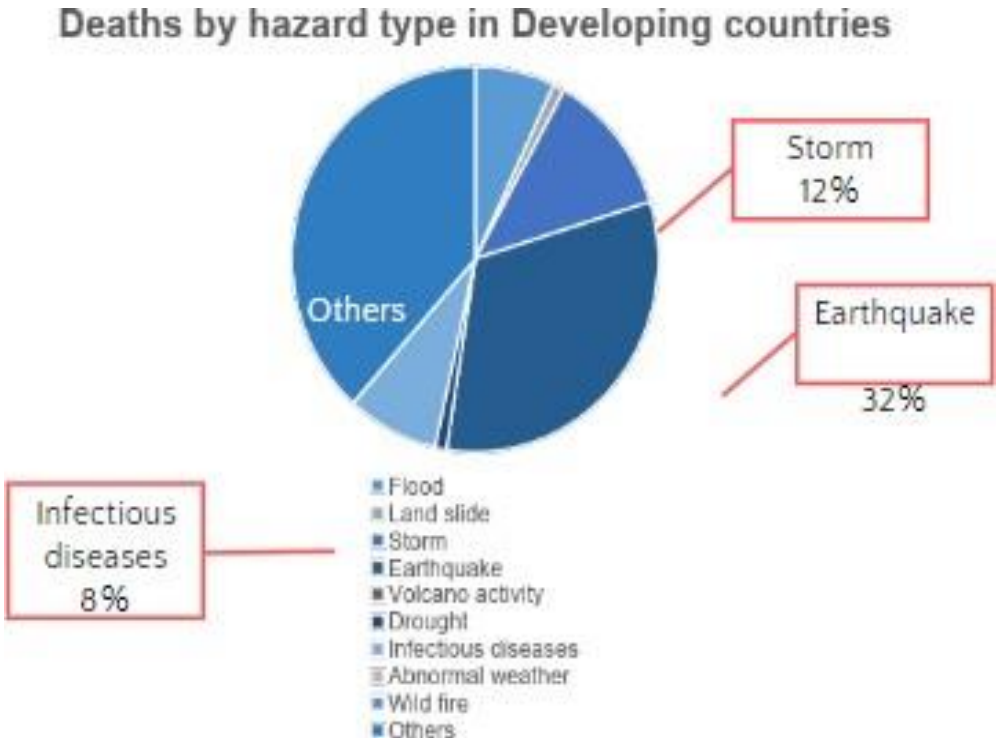

Fig. 4: Graph of Breakdown of damage by type of ha za rd in developing countries

(Source: Dr. Taichi Minamitani presentation on KKLN Unhan RI, 2022)

Victims of this type of hazard are mostly in developing countries.Drought caused 46% of the damage, floods 36%, and storms 13%.

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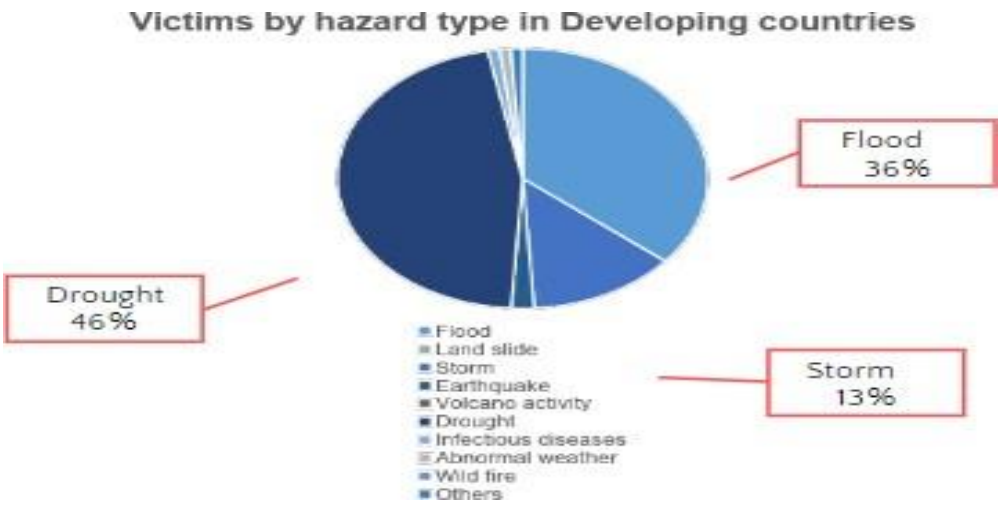

Fig. 5: Graph of Victims of this type of hazard are mostly in developing countries.

(Source: Dr. Taichi Minamitani presentation on KKLN Unhan RI, 2022)

- *Economic losses by hazard type in developing countries Due to the storm, 34.6%, due to flooding, 35.1%, and due to the earthquake, 19%*

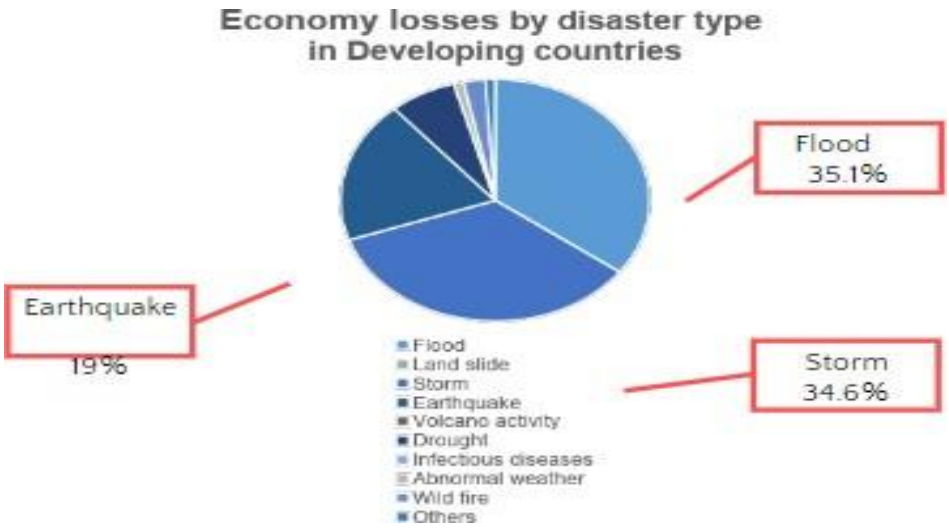

Fig. 6: Graph of Economic losses by hazard type in developing countries

(Source: Dr. Taichi Minamitani presentation on KKLN Unhan RI, 2022)

JICA's cooperation priorities are based on the Sendai Framework for Disaster Risk Reduction (2015), for which Japan led the formulation process by incorporating Japan's own disaster risk reduction experiences. The Sendai Framework for Disaster Risk Reduction 2015–2030 (Sendai Framework) is the first major agreement of the post-2015 development agenda and provides Member States with concrete actions to protect development gains from disaster risks. The Sendai Framework for Disaster Risk Reduction 2015–2030 outlines four priority actions to prevent and reduce the risk of new disasters, namely:

- Priority 1: Understand disaster risk.

Disaster risk management should be based on an understanding of disaster risk in all its dimensions: vulnerability, capacity, exposure of people and assets, hazard characteristics, and the environment. This knowledge can be used for risk assessment, prevention, mitigation, preparedness, and response.

- Priority 2. Strengthening disaster risk governance to manage disaster risk

Disaster risk management at the national, regional, a nd global levels is essential for prevention, mitigation, preparedness, response, recovery, and rehabilitation. This encourages collaboration and partnership.

- Priority 3: Invest in disaster risk reduction for resilience.

Public and private investment in disaster risk reduction and prevention through structural and non-structural measures is essential to enhance the economic, social, health, and cultural resilience of people, communities, and countries and their assets, as well as the environment.

- Priority 4: Enhance disaster preparedness for an effective response and to "Build Back Better" in recovery, rehabilitation, and reconstruction.

The growth in disaster risk means there is a need to strengthen disaster preparedness for emergency response, take action to anticipate events, and ensure that capacity is in pla ce for effective response and recovery at all levels. The recovery, rehabilitation, and reconstruction phases are important opportunities to build better, including by integrating disaster risk reduction into development measures.

V. GLOBAL CHALLENGES ACCORDING TO SFDRR (SENDAI FRAMEWORK FOR DISASTER RISK REDUCTION)

The desired result is a substantial reduction of disaster risks and losses in life, livelihoods, hea lth, and the economic, physical, social, cultural, and environmental assets of people, businesses, communities, and countries. While the goal is to prevent and reduce the risk of new disasters through the implementation of inclusive economic, structural, legal, social, health, educational, environmental, technological, political, and institutional measures that prevent and reduce hazard exposure and vulnerability to disasters, increase preparedness for response and recovery, and thereby strengthen resilience,

➢ *Input targets:*

- 2020: increasing number of countries with national and local disaster risk reduction strategies
- 2030: Enhance international cooperation with developing countries for the implementation of this framework.
- 2030: Increase availability and access to early warning systems and disaster risk information.

➢ *Output targets:*

- By 2030, reduce the number of deaths from disasters, reduce the number of people affected, reduce the direct economic losses from disasters, and reduce disaster damage to critical infrastructure and disruption of basic services, including health and education facilities.
- This target starts in 2015 (target E) and lasts until 2020; it then becomes the implementation target in 2030.
- Target E: In 2015, 49 countries had a DRR strategy, and by 2019, there were 93 countries that had one.

VI. JICA'S POLICY ON DISASTER RISK REDUCTION

JICA's cooperation priorities are based on the Sendai Framework for Disaster Risk Reduction (2015), for which Japan led the formulation process by incorporating Japan's own disaster risk reduction experiences. The Sendai Framework for Disaster Risk Reduction 2015–2030 (Sendai Framework) is the first major agreement of the post-2015 development agenda and provides Member States with concrete actions to protect development gains from disaster risks.

JICA has been working in Indonesia for a long time. In cooperating with Indonesia, the traditional method, namely empowering local wisdom, is a way that can be applied to Indonesian people who like to work together in disaster management. The challenges faced by JICA in implementing inter-agency and inter-state cooperation in disaster risk reduction during and after a pandemic are in terms of coordination and communication. JICA should pay more attention to the coordination aspect and clarify the responsibilities between the agencies involved and the description of the tasks they have to perform. JICA's efforts to reduce economic losses are still facing difficulties in balancing structural and non-structural mitigation efforts; for example, on one of the coasts of Japan, it plans to build a giant sea wall as high as 20 m, but it is ineffective because it disrupts the entry and exit of ships and community fishing activities. around. In the management of natural and non-natural disasters, the research must involve many organizations, so the problem is communication between the stakeholders.

In terms of disaster risk reduction, Japan can be considered a great country. This is different from developed countries, which do not want to spend money on disaster risk reduction because they have no more problems to solve, so their level of resilience tends to be lower. Proactive disaster risk reduction does not provide a clear investment effect before the disaster occurs. So many countries are struggling with increasing pre-disaster investments that are elevated, i.e., in disaster risk reduction. This is why JAICA wants to provide support to change their mindset and then successfully implement disaster risk reduction, which in this case needs to involve all the common stakeholders. Based on JAICA's mission, which is very closely related to the Japanese government, things that have been done in promotion related to socio-economic development in its partner countries are to provide learning opportunities on issues related to disaster risk reduction.

VII. CONCLUSIONS

Japan has a Japanese International Cooperation Agency, namely JICA, which stands for the Japan International Cooperation Agency, which is an institution established by the Japanese government to assist the development of developing countries, in efforts to deal with disasters. JICA's cooperation priorities are based on the Sendai Framework for Disaster Risk Reduction (2015), for which Japan led the formulation process by incorporating Japan's own disaster risk reduction experiences. JICA has been working in Indonesia for a long time. In cooperating with Indonesia, the traditional method, namely empowering local wisdom, is a way that can be applied to Indonesian people who like to work together in disaster management. The challenges faced by JICA in implementing inter-agency and inter-state cooperation in disaster risk reduction during and after a pandemic are in terms of coordination and communication. JICA should pay more attention to the coordination aspect and clarify the responsibilities between the agencies involved and the description of the tasks they have to perform.

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