Bridging Aceh's disaster risk reduction strategies within the 2005 Aceh Peace Agreement (Helsinki MoU) Agendas

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Abstract. The tsunami that occurred on December 26, 2004, devastated and damaged Aceh's coastal area. Several months after the event, the Aceh peace agreement was signed between the Free Aceh Movement (Gerakan Aceh Merdeka, GAM) and the Government of Indonesia (GoI) in 2005. This study aims to analyze the integration of disaster risk reduction strategies within the 2005 Helsinki MoU agendas. By employing multi-dimensional perspectives, this study highlights the development process of the Aceh DRR strategies within the 2005 Aceh peace agreement agenda. The data was collected and analyzed by reviewing some of the relevant documents. This study also included interviews with the key persons involved during the conflict and DRR actors. The result shows that the disaster and the 2005 Helsinki MoU have brought Aceh to be more conducive in implementing development within important sectors such as infrastructure, spatial planning, education, and the environment and building initiatives at the community level, both formal and informal. It should be noted that the result indicates that DRR strategies had no direct relation to the strategic issues as implemented of the 2005 Helsinki MoU.

Keywords: DRR; the 2005 Helsinki MoU; Aceh disaster risk reduction strategies, the 2004 Indian Ocean tsunami

1. Introduction
Aceh is located in the western part of Indonesia and experienced some massive disasters such as earthquakes, tsunamis, floods, typhoons, etc. [1]. On December 26, 2004, a magnitude 9.2 earthquake occurred in the Indian Ocean and triggered a powerful tsunami that caused enormous damage along the Aceh coastal area. More than 250,000 people were killed and still missing, more than 500,000 people affected. The 2004 Indian Ocean tsunami significantly changed the disaster management paradigm in Indonesia and globally [2].

Since the tsunami, Disaster Risk Reduction (DRR) efforts have been constructing and promoting comprehensive disaster management [3,4]. However, after the 15 years of the 2004 Indian Ocean tsunami, the perception of seeing disaster as certain events that humans are powerless and must accept as destiny is still found [5].
The 2005 Helsinki MoU implementation is still multi-interpreted and continuing controversial between the local government and central government. The Acehnese felt that there hadn't been a significant change in Aceh's development over the past 15 years. This condition is related to the established perception that Aceh's situation is not favorable, but in fact, it is safe [6].

The history of global consent on DRR was accumulated in 2005; the Hyogo Framework for Action (HFA) 2005-2015 was released and adopted by the countries as the international platform in reducing risk [7]. The HFA formulated based on increasing the occurrences of disasters and also the worst impact of the 2004 Indian Ocean tsunami. Then, the HFA evaluated in 2015 in Sendai, and the new international framework for disaster risk reduction, known as the 2015-2030 Sendai Framework for Disaster Risk Reduction (SFDRR) released. The SFDRR 2015-2030 states that international commitments to DRR efforts originate from the important roles of knowledge and legal, institutional, and policies related to DRR strategies [8]. Its strategies also need to be linked to regional and national agendas that apply in each region and country [9].

In the case of Aceh, a similar situation around the world affected by the conflict and disaster faces some of the different challenges and issues if compared to the disaster affected areas only. Many studies have been conducted on the intersection mega-disaster and experienced person by the longtime conflict [10,11]. Conflict affects people with reduced physical and psychological conditions. Conflict frequently prevents and cuts people's access to fulfill their essential needs, such as food, education, economics, medicine, social and cultural development. Conflict is also making difficulties for people to keep their properties and communities prepared for disasters.

In the context of Aceh of post-conflict and tsunami disaster means what Kelman (2011) says as bringing together ‘disaster’ and ‘diplomacy’ yields ‘disaster diplomacy’ [12]. Kelman (2011) mentions that an expectation is often implied that disaster should bring peace, whether or not any precedent or realism exists for that expectation [12]. In the case of Aceh, the 2004 Indian Ocean tsunami forced both parties, the Free Aceh Movement (Gerakan Aceh Merdeka, GAM) and the Government of Indonesia (GoI), to stop conflict by signing the peace agreement (the 2005 Helsinki MoU) on August 15, 2005, in Helsinki, Finland.

2. Purpose
The purpose of this study is to analyze the opportunity in the bridging of DRR strategies within the 2005 Helsinki MoU agendas. This study also presented the pragmatic framework in seeking the interrelationship between the DRR strategies and the 2005 Helsinki MoU and to identify the challenges and issues in mainstreaming the 2005 Helsinki MoU Aceh DRR strategies.

3. Methods
This research is a qualitative study by emphasizing the interrelationship between the development process of Aceh DRR strategies and the 2005 Helsinki MoU. Data obtained by collecting various data and materials of the 2005 Helsinki MoU, DRR strategies documents from related sources. This study was also interviewed some of the key persons, such as combatants and DRR actors. Data were analyzed using thematic and content analysis. This study is also focused on developing DRR strategies in the context of Aceh and Indonesia of post the 2004 Indian Ocean tsunami.

4. The 2004 Indian Ocean tsunami followed by the signing of the 2005 Peace Agreement.
The 2004 Indian Ocean tsunami's worst impact, with more than 250 thousand people killed [13]. On August 15, 2005, the GoI and GAM signed the 2005 Helsinki Memorandum of Understanding (MoU). It was ending after more than 30 years of conflict [14–17]. The conflict varied in intensity and scope, but in sum amounted to a massive level of atrocities, including the killing of tens of thousands of civilians, as well as innumerable cases of illegal detention, torture, rape, and arson [17]. Hundreds of thousands of Acehnese people lost their livelihoods and opportunities for development, and remain poor and marginalized, suffering mental trauma and physical disabilities [16,17]. Disaster studies tended to focus on the crisis and emergency stages. Since then, it has been realized that disaster studies should also consider comprehensive factors such as population growth, urbanization, environmental degradation, climate change, etc.[18].
Eight months after the massive earthquake followed by the deadly tsunami that occurred on December 26, 2004, has brought a bright for Aceh peace condition [16].

After the 2004 Indian Ocean tsunami, the immediate peace talks were settled in January 2005. Before that, there had already been two constructed peace meetings. In 2000, a Humanitarian Pause had agreed, but only a short implemented and continued Cessation of Hostilities Agreement (COHA) in December 2002 ended. After that situation, the Indonesian government declared a "military emergency" in Aceh in May 2003 and announced that it wanted to destroy GAM.

State recognition of the last Aceh region's special features and specialty was granted through Law No. 11 of 2006 concerning the Government of Aceh (LN 2006 No 62, TLN 4633). The Law on the Governing of Aceh is inseparable from the Memorandum of Understanding between the GOI and GAM [19]. The 2005 Helsinki MoU is a dignified reconciliation towards sustainable social, economic, and political development in Aceh. The basic matters that constitute the law's contents on the Governing of Aceh are set out in the following description:

- Aceh Government is the provincial government in the Unitary State of the Republic of Indonesia based on the 1945 Constitution, which organizes government affairs carried out by the Aceh Regional Government and the Aceh Regional Representative Council (DPRA) in accordance with their respective functions and authorities.
- The widest possible autonomy order was implemented in Aceh based on the law on the Governing of Aceh, a sub-system in the national government system.
- Regulations in the Aceh Qanun and Regencies/Cities that are widely mandated in the law on the Government of Aceh constitute a concrete form for implementing constitutional obligations in the government's implementation.
- Central and regional financial balance arrangements are reflected through granting authority to utilize existing funding sources.

Recognition of special and special characteristics by the State to Aceh did not happen suddenly. The process has gone through a long time and a long story [16]. There are at least three important regulations that have been imposed on Aceh's specialty, as follow:

- Decree of the Prime Minister of the Republic of Indonesia Number 1/Mission/1959 concerning the Privileges of the Province of Aceh.
- Law No. 44 of 1999 concerning the Implementation of Privileges for the Special Province of Aceh.
- Law No. 18 of 2001 concerning Special Autonomy for the Special Region of Aceh as the Province of Aceh.

In August 2006, the Indonesian Parliament agreed and released the law on the Governing of Aceh (LoGA), that as the implementation of the 2005 Helsinki MoU [17]. However, most consent of LoGA differs, which is concerned with a legal framework for the promised Human Rights Court and Truth and Reconciliation Commission (TRC) for Aceh.

With the issuance of the law on the Governing of Aceh, it is hoped that it will be utilized as much as possible for Aceh's welfare to accelerate the realization of equitable prosperity and prosperous justice.

5. The Disaster Risk Reduction Strategies in Aceh after the 2004 Indian Ocean Tsunami

The 2004 Indian Ocean tsunami was a turning point for Indonesia in reducing risk. Indonesia's disaster paradigm changed into a comprehensive and preventive approach [20]. Three years following the tsunami, the Indonesian government established a regulatory and institutional framework for DRR through Law 24/2007; this was followed by the establishment of the National and Local Disaster Management Agency [21,22]. The Indonesian disaster paradigm started moving from emergency response to a more comprehensive DRR approach. Since then, the Disaster Management Agency has taken a leading role in reducing risk.

In January 2005, the Hyogo Framework for Action (HFA) was settled as the international framework for DRR [23]. A month after the 2004 Indian Ocean tsunami, the GoI established the Tsunami Rehabilitation and Reconstruction Board (Badan Rehabilitasi dan Rekonstruksi, BRR) to manage and coordinate the processes of rehabilitation and reconstruction by managing and coordinating financial
and technical support from various international donors and agencies. Many structural and non-structural projects were implemented and constructed, and the concept of build back better was introduced. The targeted purposes which concerned by the BRR were to build back better structural and cultural services.

The lessons learned from the BRR were also a basis for the implementation of the DRR strategies. The integration of DRR efforts in facing disaster risk in more comprehensive approaches (before, during, and after the disaster). It should be implemented and integrated through all of the vital sectors of developments and issues. The international connections (regional and globally) should also be linked since the disaster also affected many people worldwide, just like what had happened from the 2004 Indian Ocean tsunami. The 2004 tsunami-affected not only Aceh (Indonesia) and some of the countries along the Indian Ocean.

Since the HFA 2005-2015 was released and adopted by many countries and Indonesia took apart in implementing the HFA. Some of the indications of the implementation of the HFA 2005-2015 in the context of Indonesia were the establishment of the Law on Disaster Management, number 24/2007 and continued with the settled of the National Disaster Management Agency (Badan Nasional Penanggulangan Bencana, BNPB) and the Disaster Management Agency in Province and District level. Various activities to strengthen community resilience were implemented by this agency and collaborated with related stakeholders and organizations. These organizations have the mandate and accountability of coordinating, planning, and implementing any aspects of DRM and DRR strategies in Indonesia, including in Aceh of post the 2004 Indian Ocean tsunami.

Ten years after the HFA released and the 2011 Tohoku tsunami’s experience, the new international platform on DRR was released in Sendai in March 2015, which is called Sendai Framework of Disaster Risk Reduction (SFDRR) 2015-2030. Lesson learned from the BRR of the 2004 Indian Ocean tsunami rehabilitation and reconstruction processes that “build back better and safer” was stated and included in SFDRR as the commitment to strengthening the community to be more resilient and better after hitting by a disaster.

Some of the DRR strategies documents were released and produced, such as the National Disaster Risk Management (DRM) guidelines and the National Action Plan for DRR. After the 2004 tsunami and the 2005 Helsinki MoU, the adapted documents on DRR strategies were also released, such as the Qanun’ No. 5 of 2010 on Aceh Disaster Management, Qanun No. 6 of 2010 on management and structure of the organization of Aceh Disaster Management Agency and the Governor Regulation No 43 of 2010 on the Aceh tsunami early warning system and emergency management. But since that time, there no other Qanun on the DRR strategies produced by the Government of Aceh. According to the Aceh disaster management agency that they and the Tsunami and Disaster Mitigation Research Center (TDMRC) of Syiah Kuala University already proposed the Disaster Education Qanun draft to the legislative in hoping this proposed Qanun will be released in 2020. The proposed disaster education Qanun will reach the significance of implementing DRR strategies through Aceh disaster education curricula. According to the head of the Aceh of Disaster Management Agency, the idea was already proposed in 2019, but the new legislative members just elected. Still, the proposed Qanun was not legalized yet.

6. Result and Discussion
The 2005 Helsinki MoU firmly headed for reform, which was marked by the implementation of decentralization in various fields, especially in the aspects of government and planning systems that impact the relationship between the political atmosphere, including the economic sector.

The 2005 Helsinki MoU has given local governments the power to determine policies and development directions in their respective regions based on the characteristics that exist in the region. The peace agreement included a framework for the future system of governance in Aceh, including an

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1 Qanun is laws and regulations enacted by a government. In Aceh, Qanun became an integral part of the legal system and also a generic name for all laws and regulations.
increased degree of autonomy for the region, and attempted to address the key social, political, and economic issues.

Providing DRR strategies as legal and governance guarantees to local governments, communities, and communities in designing, developing, and producing local legal and regulatory products in disaster management and or reducing disaster risk.

Table 1 The Selected Words Count on the 2005 Helsinki MoU Document.

| Word             | Total                                      |
|------------------|--------------------------------------------|
| Tsunami          | 2 (rebuilding Aceh after the 2004 tsunami) |
| Reconstruction   | 2                                          |
| People           | 5 (Acehnese)                               |
| Society          | 4 (civil society), 6 (social)              |
| Political        | 16                                         |
| Economic         | 4                                          |
| Aceh             | 86                                         |
| Indonesia        | 16                                         |
| Election         | 7                                          |
| Participation    | 2                                          |
| Reintegration    | 6                                          |
| Security         | 10 (including social security)             |
| Wali Nanggroe    | 1 (the institution)                        |
| Law              | 10 (1 qanun)                               |

Data source: Memorandum of Understanding between the Government of Republic of Indonesia and the Free Aceh Movement document which signed in triplicate in Helsinki, Finland on August 15, 2005 [24]

Table 1 shows that the 2005 Helsinki MoU's main focus is the Aceh reconsolidation (political). The 2005 Helsinki MoU was more focused on the law of governing Aceh. Aceh has authority within all sectors of public affairs, except external defense, field foreign affairs, national security, monetary and fiscal matters, justice, and freedom of religion, the policies of which belong to the GoI.

Even though most of the people agreed that the 2005 Helsinki MoU triggered by the 2004 Indian Ocean tsunami, but they're no significant statement mentions about that fact through the 2005 Helsinki MoU document. The word of the “tsunami” mentions two times in the document, to rebuild Aceh after the 2004 tsunami and include the combatant in the rehabilitation and reconstruction processes. According to the Deputy of Law of National Disaster Management Agency of Indonesia (BNPB), who interviewed on July 18, 2019, mentioned that before the 2004 Indian Ocean tsunami, the Indonesia disaster paradigm focused more on responses than the comprehensive disaster management approach. So it is why the word "tsunami" and the post-disaster situation did not mention significantly in the 2005 Helsinki MoU.

A similar explanation also came out from combatants that mentioned the worst impacts of the 2004 tsunami and the longtime conflict. Both parties were concerned about the peaceful and how Aceh could recover immediately.

“The 2004 tsunami was the worst disaster and a blessing for us which forced both parties to stop a longtime conflict,” a combatant, male 58 years old, interviewed in June 2019.

They argue that the situation after the tsunami was complicated, and everyone focused on bringing both parties to stop the conflict. The DRR strategies did not change much as the main focus for GAM and GoI.
“After that, there should be urgent attention for all of us to be more concerned about natural hazards and disaster risk issues and how we could deal with it,” the acting head of deputy of Law of BNPB interviewed on July 17, 2019

Figure 1 shows the pragmatic framework of integrating the 2005 Helsinki MoU agendas within the Aceh DRR strategies. It also recognizes the development of the international platform (framework) on disaster risk reduction, such as the Hyogo Framework of Action (HFA) 2005-2015 and Sendai Framework for Disaster Risk Reduction (SFDRR) 2015-2030. Both of the International frameworks (HFA and SFDRR) developed based on what had happened around the world. Especially from the 2005 Indian Ocean tsunami and the 2011 Tohoku, Japan tsunami.

The impact of the 2005 Helsinki MoU implementation recognizes Aceh as the special autonomy that shows the tendency of the positive impact of this decentralization. Several studies have shown the occurrence of differences in the quality of the impact experienced by local governments in undertaking disaster risk reduction efforts.

After the 15 years of the 2004 Indian Ocean tsunami seems much homework should be noted in responding to the changes in the society, the way people move, act, and interact with the global interaction. The implementation and the interpretation of the 2005 Helsinki MoU are still continuing debating in many levels and contexts, for example, the issue of land that was promised to be given to [former] combatants. There are also problems with regional administrations and economic problems that have yet to be solved. It should be noted that the DRR strategies is still not as the main focus.

The twin earthquakes that occurred in 2012 showed the unprepared of the Acehnese people in facing the disaster. Initially, authorities feared that the initial earthquake would cause a tsunami and issued a warning across the Indian Ocean; however, these warnings were subsequently delayed and canceled.
This situation showed that the implementation of DRR still far from the right direction. It also describes that Aceh is located in the most prone tsunami areas, and the DRR strategies should be sustained through the all Aceh development agendas.

7. Conclusion
The earthquake and tsunami disaster has brought a peaceful path between the relevant parties, the GAM and the GOI, to stop the conflict by signing the 2005 Helsinki MoU on August 15, 2015. The 2004 earthquake and tsunami has become a stepping stone for Aceh and Indonesia managing disaster risk (natural hazards). The marked changes were indicated by the issuance of Law No. 24 of 2007 concerning Disaster Management. This is to be a good opportunity for Aceh to develop the local law related to DRR as the recognition of the implementation of the 2005 Helsinki MoU.

To mainstreaming of DRR strategies within the implementation of the 2005 Helsinki MoU is needed and urgent since Aceh is located in the area with the highest natural hazards. The pragmatic framework of the intersection of DRR strategies within the 2005 Helsinki MoU could be concerned with the law governing Aceh and the rule of law that could be proposed to any related parties and stakeholders in contributing to the Aceh disaster resilience in the future. Strategies and Efforts to Disaster Risk Reduction (DRR) began to become the Aceh government's awareness marked by the inclusion of these efforts into Aceh's development priorities. After the 15 years of the tsunami, the DRR strategies have not shown significant results; one of the contributing factors is that the government's focus is still on economic growth and development issues.

Acknowledgment
The authors gratefully acknowledge the Institute for Research and Community Services (Lembaga Penelitian dan Pengabdian kepada Masyarakat, LPPM) Universitas Syiah Kuala, who fully supported and funded this research.

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