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LOSS AND DAMAGE DUE TO CLIMATE CHANGE IN INDONESIA: AN OVERVIEW OF THE ASEAN COOPERATION ADAPTING TO GLOBAL WARMING

Diah Apriani Atika Sari & Rachma Indriyani*

Abstract

Climate change is already causing significant loss and damage, and this issue has only become more urgent. Indonesia as the biggest archipelagic state in the world has faced great challenge of loss and damage due to climate change. Moreover, Southeast Asia is highly vulnerable to climate change as a large proportion of the population and economic activity is concentrated along coastlines; the region is heavily reliant on agriculture for livelihoods; there is a high dependence on natural resources and forestry; and the level of extreme poverty remains high. Vulnerability differs between South East Asia's countries, however they are not immune from the occurrence of bad impacts. For that reason, regional cooperation is essential to cope with climate change and its impacts. The United Nations Framework Convention on Climate Change (UNFCCC) has stated loss and damage as the actual and/or potential manifestation of impacts associated with climate change in developing countries that negatively affect human and natural systems. Future loss and damage is potentially of unimaginable magnitude. These associated loss and damage now require new approaches that must also consider the challenge of addressing non-economic losses. In 2009, an ASEAN Climate Change Initiative (ACCI) was created to enhance coordination and cooperation in addressing climate change. This article will presents an overview of strategy and mechanism on ACCI as loss and damage response, furthermore, what kind of prospect can be taken by Indonesia. Therefore, it will analyze how such regional cooperation are made possible to be a panacea for climate change problem.

Keywords: ACCI, regional cooperation, loss and damage

I. INTRODUCTION

Climate change has created a dilemma between what is morally right and what is economically appropriate both for the developed and developing countries. Although there is a consensus that it must be addressed, the approach on how to address it differs especially if it involves a degree of sacrifice for the sake of the common good. This dilemma has been heightened due mainly to the attitude that time is on our side. This dilemma is evident in the ASEAN, hence its failure to reach a consensus for a strong position on climate change, considering

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its vulnerability geo- physically and economically. But it can no longer deny that it plays a major role in influencing the rest of the world and much a bigger role in addressing climate Change.¹

The Southeast Asia's countries region is particularly vulnerable to climate change. Its million people are concentrated along coastlines measuring 173,251 kilometers long, leaving them exposed to rising sea levels. At the same time, the region's heavy reliance on agriculture for livelihoods—the sector accounted for 43% of total employment in 2004 and contributed about 11% of gross domestic product (GDP) in 2006—makes it vulnerable to droughts, floods, and tropical cyclones associated with warming. Its high economic dependence on natural resources and forestry—as one of the world's biggest providers of forest products—also puts it at risk.² Indonesia, Thailand, and Viet Nam are expected to experience increasingly drier weather conditions in the next 2–3 decades, although this trend is likely to reverse by the middle of this century.

Being an archipelago, Indonesia is very vulnerable to the impacts of climate change. Prolonged droughts, increased frequency in extreme weather events, and heavy rainfall leading to big floods, are a few examples of the impacts of climate change. The inundation of some parts of the country, for instance Jakarta Bay, has come to pass; Indonesia's rich biodiversity is also at risk. In turn, this may lead to harmful effects on agriculture, fishery and forestry, resulting in threats to food security and livelihoods.³

Moreover, many developing countries are seriously threatened by climate change slow-onset processes—sea-level rise, increasing temperatures, ocean acidification, glacial retreat and related impacts, land and forest degradation, loss of biodiversity, salinization and desertification. These processes are exacerbating threats already posed by extreme events and seriously undermine prospects for achieving sustainable de-

¹ *ASEAN's Challenges in The Cancun Climate Change Talks*, Coalition of WWF-Oxfam-Greenpeace, 2010.

² *ASEAN and The Economics of Climate Change in Southeast Asia: A Regional Review*, The Fourth Environment Report, ADB, April 2009.

³ *Executive Summary : Indonesia and Climate Change*, Working Paper on Current Status and Policies, Department for International Development, The World Bank, March 2007

velopment. Permanent loss and damage from slow-onset disasters will go far beyond economic losses alone – livelihoods will be lost, nation states and their territory will have to be abandoned and migrants from climate impacted lands will lose their homes, culture and community.⁴ The loss and damage concept refers to unavoidable character of extreme weather and slow onset events, which is the impact of climate change. Defects resulting from extreme weather and slow onset events cannot be avoided through adaptation and mitigation efforts due to the impact of climate change is irreversible.

Slow onset events from the perspective of the UNFCCC is defined as an increasing in sea levels, increasing in temperatures, ocean acidification, shrinking glaciers and related impacts, salinization, land and forest degradation, loss of biodiversity and desertification. The impact of slow-onset is chronic that greatly affect humans on a large scale and over long periods of time rather than rapid-onset events. Chronic effects in the form of long-term damage such as: damage to ecosystems, loss of livelihood, economic loss, loss of territory, and population displacement. Efforts loss and damage is a step in the handling of the impact of slow-onset events.

As an archipelagic state, Indonesian has thousands of islands scattered across the archipelago. Sea level rise as one of the events of slow-onset events pose a threat to the existence of the Indonesian islands, especially small islands, where the island is in danger of losing most of its land and even sunk completely. If the small islands are completely submerged, the major impact will be a major influence on local communities and ecosystems.

Loss and damage issues of Indonesia, is a picture that can be used as a reflection of the problems of climate change for countries in Southeast Asia and can be used as a ground to further enhance regional cooperation in the region. Moreover, ASEAN's ability to support regional climate change adaptation actions is dependent on external agencies. Yet, this can undeniably restrict the scope of the measures. In addition to that, the efficiency and effectiveness of ASEAN cooperation in terms of mitigation and adaptation depend on its member countries level of

⁴ *Tackling the limit to Adaptation : An International Framework to Address 'Loss and Damage' from Climate Change Impacts*. November 2012, p.5

development as well as development path. Nonetheless, ASEAN is a diverse group of countries with varying levels of development.

II. RESULT AND DISCUSSION

A. INTERNATIONAL NEGOTIATION UNDER UNFCCC

The first agreement for regulating international action on global warming was forged at the 1992 Rio Summit, when approximately 180 countries signed the United Nations Framework Convention on Climate Change. The convention went into force relatively easily, because it did not obligate countries to make quantitative commitments to reduce greenhouse gas (GHG) emissions. The objective of the United Nations Framework Convention on Climate Change (UNFCCC) is to stabilise greenhouse gas (GHG) concentrations to avoid dangerous anthropogenic interference with the climate system. Under the UNFCCC and the Kyoto Protocol, participating countries agreed on different commitments and emissions reduction targets. To start to reduce global emissions, more substantial reductions of greenhouse gases are necessary

The key provision of the United Nations Framework Convention on Climate Change is its objective, which is outlined in Article 2:

“The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system”.

Increasingly severe predictions of climate change and the future impacts it could bring are contained in the assessment reports of the Intergovernmental Panel on Climate Change (IPCC) which has made it clear that current levels of mitigation and adaptation efforts are insufficient to prevent the impacts of climate change from inflicting loss and damage in both developing and developed countries.⁵ This recognition has led to the rise of loss and damage (L&D) as an agenda item under the Unit-

⁵ Warner and Zakieldeen, *Loss and Damage due to Climate Change : an Overview of The UNFCCC Negotiations*, Oxford : European Capacity Building Initiative, p.3

ed Nations Framework Convention on Climate Change (UNFCCC).⁶

At the fifteenth conference of parties (COP15) in Copenhagen in 2009, a draft negotiating text included several key references to risk reduction and specific tools like insurance. Loss and damage was addressed in paragraph 8 of the AWG-LCA's text related to adaptation. At COP 16 in Cancun, the Cancun Agreements, recognized the need to strengthen international cooperation and expertise in order to understand and reduce loss and damage associated with the adverse effects of climate change, including impacts related to extreme weather events and slow onset events. In response, it was decided to establish a work programme in order to consider, including through workshops and expert meetings, as appropriate, approaches to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change.⁷

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International law imposes legal obligations on states to act to prevent climate change and to address its adverse effects. These obligations are clearly contained in the UNFCCC and the Kyoto Protocol, and can also be derived from international human rights law and the no-harm rule contained in customary international law. To ensure achievement of its objective, cited above, the Convention establishes a number of important principles, as well as further obligations on Parties, regarding adaptation and support to developing countries. Articles 3.1 and 3.2 frame the discussion regarding responsibility and the need to give full consideration to the needs of developing countries that are

⁶ Erin Roberts, *Loss and Damage*, SEAN CC Negotiations Briefing Paper, June 2014, p.3

⁷ See < www.climate-insurance.org >

particularly vulnerable to the adverse effects of climate change.⁸ Article 3.1 establishes the principle that:

“Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.”

Article 3.2 further states:

“The specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, especially developing country Parties, that would have to bear a disproportionate or abnormal burden under the Convention, should be given full consideration.”

In the coming decades, climate impacts will bring about even further significant loss and damage in developing countries that are particularly vulnerable to the adverse effects of climate change. The spiraling impacts of slow-onset disasters will further threaten vulnerable countries, and undermine human rights and the right to development. The UNFCCC is the most appropriate forum for addressing the challenges of loss and damage. Countries’ obligations should be acted upon systematically, within a comprehensive framework.

A comprehensive framework should broadly accomplish two objectives: facilitate risk reduction and other risk management measures that can prevent and avoid loss and damage; provide for redress in the case of loss and damage that is not prevented or is unavoidable. A third objective, co-ordination between the various components, would be necessary at regional and global levels. A comprehensive framework under the UNFCCC would provide coherence between these three necessary functions of Convention bodies related to loss and damage:

1. Prevention through climate change mitigation, disaster risk reduction and adaptation approaches, supported by adequate means of implementation, including finance, technology and capacity building
2. Compensation and rehabilitation through the establishment of an

⁸ *Tackling the limit to Adaptation, ibid*, p.18

International Mechanism on Compensation and Rehabilitation

3. Leadership and regional and global co-ordination of efforts to address loss and damage outside of the Convention to ensure coherence, including efforts related to migration, displacement and planned relocation, and international finance.

A study to map the vulnerability of Southeast Asian countries to climate change found a number of climate “hotspots” in the region, including droughts in Northwestern Vietnam, Southern Thailand, the Philippines and parts of Malaysia and Indonesia and sea level rise in the Mekong Delta and parts of Indonesia and Thailand and floods – among others.⁹ The report concluded that the most vulnerable areas in the region included all of the Philippines, the Mekong Delta, almost all of Cambodia, North and East Lao PDR, Bangkok and Western and Southern Sumatra and Western and Eastern Java in Indonesia. Policy-makers throughout the region are grappling with addressing losses and damages from both extreme weather events and slow onset Climatic processes.¹⁰

B. REGIONAL COOPERATION WITHIN ASEAN

The climate regime cannot succeed in the absence of a concerted effort to address the priority concerns of the world’s developing countries. While the affluent residents of the industrialized countries are increasingly attentive to matters of environmental quality, many developing country leaders are understandably concerned that a focus on environmental issues will deflect worldwide attention from their economic problems, or even lead to the promulgation of restrictive rules that hinder their efforts to achieve sustained economic growth and a reasonable standard of living for their citizens. Given the fact that the increases of greenhouse gases (GHGs) now resident in the Earth’s atmosphere are attributable in large measure to the industrialization of ‘First World’ countries, and that no climate regime can be effective in

⁹ Yusuf and Fransisco, *Climate Change Vulnerability Mapping in Southeast Asia*, Economy and Environment Program for Southeast Asia (EEPSEA) : Singapore, 2009, available at: http://web.idrc.ca/uploads/user-S/12324196651Mapping_Report.pdf

¹⁰ Erin Roberts, *Loss and Damage*, SEAN CC Negotiations Briefing Paper, June 2014, p.5

the absence of acceptance and active participation on the part of the principal countries of the developing world, there is no avoiding the need to accommodate the development concerns of developing countries as part of a planetary bargain relating to climate change.¹¹

Climate change is a transnational issue but adaptation measures are usually developed at the regional, national and local levels. This trend is being more frequently witnessed in developing countries, including Southeast Asian countries, which are most vulnerable to the impacts of climate change. Ten of these countries - Brunei, Cambodia, Indonesia, Laos, Myanmar, Malaysia, the Philippines, Singapore, Thailand and Vietnam- are members of the Association of Southeast Asian Nations (ASEAN), which was established in 1967. All of these countries have ratified the UNFCCC and the Kyoto Protocol.¹²

Despite the developing countries hold important roles, climate change-induced impacts in such countries, specifically in Southeast Asia. One of its factors is adaptive capacity that constrained by the limited availability of experts, accurate information on the climate change situation at the national level, and adaptation options, the current state of technology, and the limited availability of financial resources.¹³ Nevertheless, a number of adaptation measures have been adopted and work is ongoing both at the ASEAN level as well as at the national level.

Each country in Southeast Asia has developed its own national plan or strategy for climate change, established a ministry or agency as the focal point to deal with climate change and its impact, and implemented many programs supporting adaptation and mitigation activities. But more action is needed. There is urgent need for: (i) raising awareness of climate change impacts and risks; (ii) mainstreaming climate change considerations in development planning and policy making; (iii) putting in place an effective institutional framework for better policy coordina-

¹¹ Kilaparti Ramakrishna, *The UNFCCC-History and Evolutions of The Climate Change Negotiations*, Woods Hole Research Center, Massachusetts, USA, p.48

¹² Koh Kheng Lian and Loveleen Bhullar, *Governance on Adaptation To Climate Change in The ASEAN Region*, International Environmental Law Research Centre, 2011, p.83

¹³ Ibid, p. 84

tion; (iv) investing more resources in climate adaptation and mitigation; (v) providing adequate information on win-win adaptation and mitigation; (vi) addressing market failures and eliminating market distortions that impede the implementation of such options; (vii) strengthening international and regional cooperation in knowledge, technology, and financial transfers; (viii) undertaking more research and filling knowledge gaps on climate change-related challenges and solutions at local levels; and (ix) making more capacity building efforts.¹⁴

Within ASEAN, There are three ASEAN Community Councils: ASEAN Political Security Community Council, ASEAN Economic Community Council, and ASEAN Socio-Cultural Community Council, which addresses environmental sustainability and includes the Working Group on Climate Change. Further, ASEAN cooperation on climate change is guided by the ASEAN Socio-Cultural Community Council Blueprint. The Blueprint also identifies certain priority actions to respond to climate change and to address its impacts. These include encouraging a common understanding of and joint action on climate change issues; developing an ASEAN Climate Change Initiative, which will be implemented by the Working Group on Climate Change; research; deploying and transferring adaptation measures; enhancing regional capacities for adaptation, and creating public awareness.¹⁵

Further, somehow, those bodies do not have the mandate to enable them to achieve their objective, i.e. to strengthen cooperation among its members and to consolidate and reinforce ASEAN's position as a bloc within the UNFCCC. Despite repeated affirmation of its commitment to addressing climate change and its call for cooperation, ASEAN is still far from addressing climate change as a unified body. The ASEAN has been criticized for its lack of political will to put its declarations into action. In the latest ASEAN summit, in May 2011, in Jakarta, climate change was even entirely dropped from the agenda. This action indicates the low priority climate change is given and the lack of the much needed political will to address what many consider the greatest threat to the life and wellbeing of more than 600 million people living

¹⁴ Jorn Brommelhorster, *The Economics of climate change in Southeast Asia : A Regional Review*, Asian Development Bank, p.11

¹⁵ Koh Kheng Lian and Loveleen Bhullar, *ibid*, p. 85

in the ASEAN region.

In order to strengthen regional cooperation on these issues and to give the region a single voice in climate change negotiations, a regional consulting platform known as the ASEAN Climate Change Initiative (ACCI) was established in 2010. Through internal negotiations, ACCI promotes coordination among the member governments in policy and strategy formulation, information sharing, capacity building, and technology transfer. On the international level, ACCI encourages all the member countries to take action, supporting the work of the IPCC and the UNFCCC process, according to the principle of common but differentiated responsibility and respective capability.¹⁶

ACCI is envisaged to be a consultative platform to further strengthen regional coordination and cooperation in addressing climate change, and to undertake concrete actions to respond to its adverse impacts and dealing with sectors impacted by climate change such as energy, forestry, agriculture, disaster management etc to ensure a well coordinated and integrated approach to address climate change.

The scope of collaboration through the ACCI will include: (i) policy and strategy formulation; (ii) information sharing; (iii) capacity building; and (iv) technology transfer. The ACCI seeks to enhance regional and international cooperation to address climate change and its impacts on socio-economic development, health and the environment, in ASEAN Member States through implementation of mitigation and adaptation measures, based on the principles of equity, flexibility, effectiveness, common but differentiated responsibilities, respective capabilities, as well as reflecting on different social and economic conditions.¹⁷

The following the implementation mechanism of ASEAN Action Plan on Joint Response to Climate Change:¹⁸ The ASEAN is obligated under the ACCI to provide for a consultative mechanism and process for ASEAN peoples' engagement in the formulation, implementation, and review of ASEAN climate change policies and stance. The ACCI is

¹⁶ Jan Trevisan, *The Common Framework for Climate Policy in South-East Asia*, International Center for Climate Governance, ICCG Reflection No. 13/2013, p.5

¹⁷ Raman Letchumanan, *Is There an ASEAN Policy on Climate Change*, p. 57

¹⁸ Adopted at the 12th AMME (ASEAN Ministerial Meeting on Environment) 2012

rationalized not only by the fact of the region's particular vulnerability to climate change but also by the catalogue of ASEAN's obligations under the ASEAN Charter of 2007. By concluding the ASEAN Charter - a legally binding agreement - ASEAN's leaders have indicated their commitment to legal obligations and rights; thus making ASEAN a rules-based inter-governmental organisation.

The new ASEAN charter also provides for a legal framework for incorporating ASEAN decisions, such as the ACCI, other policies, treaties, and conventions, into the national legislation and policy of member countries. Article 2, paragraph g of the ASEAN Charter mandates ASEAN to enhance its consultations, to distinguish from usual consensus meetings, on matters that seriously affect the region. Climate change is such a serious matter affecting the development, and poverty eradication of ASEAN member-states. The ACCI, therefore, is grounded on ASEAN's obligations under the Charter. Under the ACCI, ASEAN can rightfully speak and negotiate for its common interest in the UNFCCC negotiations.¹⁹

Plan of Action	Output	Lead Country
C.1 Adaptation		
i) Sharing information on ongoing and planned efforts on research and development (R&D) in hydrological and agricultural management and practices that aim to enhance food security, agricultural productivity and water resources sustainability;	Compilation of ongoing and planned efforts on research and development (R&D) in agricultural management and practices that aim to enhance food security, agricultural productivity and water resources sustainability;	Thailand
ii) Sharing information on ongoing and planned adaptation efforts in urban, rural, and coastal areas;	Compilation of on ongoing and planned adaptation efforts in urban, rural, and coastal areas;	Thailand
iii) Enhancing existing ASEAN climate/meteorological/oceanographical centers and networks to possibly look into:	Better understanding of the vulnerability of the region to climate change.	

¹⁹ *ASEAN's Challenges in The Cancun Climate Change Talks*, Policy brief 2010-01, Coalition of WWF-Oxfam-Greenpeace

<ul style="list-style-type: none"> Assessing climate change impacts on socio- economic development, health, environment protection for example by establishing a network of academics to undertake a regional vulnerability study on climate change; 	Thailand
<ul style="list-style-type: none"> Assessing detailed climate change impacts, vulnerability, adaptation options and needs for the region and sub- regions such as the Brunei Darussalam- Indonesia- Malaysia- Philippines East ASEAN Growth Area (BIMP- EAGA) and Greater Mekong Sub-region (GMS); 	Assessment Report on detailed climate change impacts, vulnerability, adaptation options, and needs for the Southeast Asian region and sub- regions such as BIMP- EAGA and Greater Mekong Sub-region;
<ul style="list-style-type: none"> Promoting regional climate information/data sharing in order to develop ASEAN climate change impact scenarios, and also to provide inputs to the Assessment Reports of the Intergovernmental Panel on Climate Change (IPCC); 	
<ul style="list-style-type: none"> Enhancing climate/meteorological / oceanographical observatory systems in the ASEAN region; 	
<ul style="list-style-type: none"> Downscaling global climate models to produce climate change impact scenarios at the regional, national and local levels. 	Thailand
iv) Developing ASEAN work programme to address loss and damage, and options for risk management and reduction.	tbd
C.2 Mitigation	
i) Sharing best practices on mitigating greenhouse gas (GHG) emissions from energy production and use, agriculture, land use, land- use change and forestry (including REDD/REDD+), industrial processes, and waste in the region:	Compilation of best practices on mitigating greenhouse gas (GHG) emissions from energy production and use, agriculture, land use, land- use change and forestry (including REDD/REDD+), industrial processes, and waste in the region

<ul style="list-style-type: none"> • Highlighting the co- benefits of achieving GHG emission reduction and sustainable economic growth (such as through clean energy, renewable energy, energy efficiency, etc.); 		
ii) Promoting common understanding on Nationally Appropriate Mitigation Actions (NAMAs), and Measurement, Reporting and Verification (MRV);	better understanding on NAMAs and MRV;	tbd
iii) Sharing information and experiences on promoting, developing, and enhancing Clean Development Mechanism (CDM) activities through workshop(s) and other activities.	Workshop(s) and/or other activities to share the information and experiences	tbd
iv) Exploring possibility to develop carbon cap and trade system in the region.	Possible feasibility study to develop carbon cap and trade system in the region	tbd
C.3 Finance and Investment		
Promoting common understanding on institutional arrangements for accessing multilateral funds such as Green Climate Fund, Green Investment Fund, Adaptation Fund, etc;	Better understanding on institutional arrangements for accessing multilateral funds such as Green Climate Fund, Green Investment Fund, Adaptation Fund	tbd
<ul style="list-style-type: none"> • Sharing information and experience on promoting private sector investment in low carbon development, production, and technology; 		
<ul style="list-style-type: none"> • Sharing information and experiences on accessing multilateral funds. 		
C.4 Technology Transfer		
i) Facilitating international support for technology transfer to ASEAN, including through the UNFCCC Climate Technology Centre and Network (CTCN), based on the technology needs assessment for mitigation and adaptation;	Application of climate friendly technology transferred among AMS and from developed countries, towards low carbon and green economy	tbd

ii) Sharing information and experiences on strengthening science and policy interface towards low carbon development and green economy;	Workshop(s) and/or other activities to share the information and experiences	tbd
iii) Establishing strategic alliances with private sector to promote R&D collaboration and technology transfer and commercialisation.	Clean technology development workshop(s) / exposition(s).	tbd

C.5 Capacity Building

i) Facilitating regional and international support for capacity building for ASEAN based on capacity building needs for mitigation and adaptation; such as organizing training courses on developing national GHG inventories for AMS.	Capacity development for relevant officials / national experts	Singapore /Thailand
ii) Facilitating long-term regional cooperation in strengthening negotiating skills;	Strengthened negotiating skills	Viet Nam
iii) Sharing information and experiences on strengthening of adaptive capacities of communities, including through the enhancement of education on climate change, towards a low carbon society.	Workshop(s) and/or other activities to share information to strengthen adaptive capacities of communities	Indonesia Thailand

C. INDONESIA'S PROSPECTS

Loss and damage is a concept that is getting attention and had been the subject of climate policy since the UNFCCC Conference of the Parties-16 (COP / Conference of the Parties) in Cancun Mexico on December 2010. In a report made by the COP, Loss and Damage is defined as the loss and damage which includes the inability to adequately respond to climate stressors (drought, floods, storms, rising sea levels, changing rainfall patterns, and so on) as well as the cost and side effects related to adaptation measures and actions to address these impacts. Loss and damage refers that humans have not been able to cope with and adapt to the negative effects of climate variability and climate change. The

Cancun Agreements recognize the need to strengthen international cooperation and expertise to understand and reduce loss and damage associated with the adverse effects of extreme weather events and slow onset events.

Indonesia as one of the developing countries most vulnerable to climate change impacts is important to pay attention to the loss and damage of adaptation action in view of the geographical characteristics of the Indonesian archipelagic with thousands of islands that are currently threatened with drowning existence. Implications for Indonesia loss and damage are the potential for loss and damage to both material and non-material. Loss and damage shall include loss of livelihood, loss of the ability of ecosystems to meet the needs of human life, loss of biodiversity, loss of life, and other related matters. We need to realize here that the loss and damage will not only have an impact on aspects of the economy. At a further stage, the social aspects; culture; and politics will also be much affected by the reduction in social welfare significantly on a wide scale.

With the ACCI as a regional consultative platform, Indonesia can take opportunities for cooperation to prevent and overcome the problems of loss and damage, especially in Indonesia where the risk assessment is still limited to the risk of loss and damage to identify and determine the strategy and priorities for action (risk management). Furthermore, the prospect of such cooperation may be based on the needs to build Indonesia's resilience to loss and damage. Some of these needs include:²⁰

1. The availability of data.

The data required includes the hazard, vulnerability and exposure, including information about climate change in the countries concerned. This is important in determining the scale and scope of the assessment of loss and damage will be done. In developing countries, the provision of data is often a constraint as it is still minimal and less reliable. In addition to information on climate change itself, integration and access to data vulnerability and exposure is also another challenge because it is still limited.

2. The skills and technical capabilities

²⁰ Policy Recommendation, National Council on Climate Change, 2013

To be able to use a risk assessment method to be applied, the user needs to have the skills and technical abilities such as the ability to interpret the methods and devices.

3. Funding

Development and application of a risk assessment devices require funding.

4. Education and socialization.

Society needs to get education and proper socialization to help them in their efforts to build resilience against loss and damage.

III. CONCLUSION

Since the issue of loss and damage was first acknowledged in the Bali Action Plan of 2007 (UNFCCC, 2008), interest in this emerging subject has successfully pushed it up the international agenda at recent climate change negotiations. The establishment of a UNFCCC work programme to explore approaches for assessing and addressing this issue in vulnerable, developing countries is a testament to the increasing international salience of this subject. However, as loss and damage is incurred at the national and local levels, international discussions on this subject must eventually translate into concrete and practical approaches on the ground, where they are most needed.

This paper has elaborated ACCI legal framework as a response to the problems of climate change in Southeast Asia. The discussion here therefore has taken a broad-based approach highlighting how regional cooperation within ASEAN rules to respond to the potential loss and damage in the territory of Member States. ASEAN Climate Change Initiative (ACCI) was created to enhance coordination and cooperation in addressing climate change. The ASEAN is obligated under the ACCI to provide for a consultative mechanism and process for ASEAN peoples' engagement in the formulation, implementation, and review of ASEAN climate change policies and stance. With the ACCI as a regional consultative platforms, Indonesia can take opportunities for cooperation to prevent and overcome the problems of loss and damage, especially in Indonesia where the risk assessment is still limited to the risk of loss and damage to identify and determine the strategy and priorities for action. Furthermore, ASEAN can enhance its position in

the UNFCCC forum related to loss and damage issues.

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