



MEASURING THE ROLE OF ACCESS TO INFORMATION CONCERNING CLIMATE ADAPTATION

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Chapter I

Introduction

Access to information is a globally acknowledged legal concept both at the international and domestic level. It traverses multi-legal fields, including climate change. The United Nations Framework Convention on Climate Change (UNFCCC) is the first international treaty that upholds public access to information as a legally binding instrument.¹ Subsequently, the Paris Agreement reiterates public access to information as one of the tools to enhance actions established in it, which comprise adaptation and mitigation primarily.² Nevertheless, to date, the evaluation of the implementation of the instrument of access to information concerning climate change in the field after it was adopted in climate change treaties is lacking³ compare to the right to access information in general context. The focus of this research is on the interpretation of access to information on climate adaptation and its implementation at the domestic level.

Among the scope of climate actions within the climate change treaties, this research focuses on access to information concerning climate adaptation for some reasons. Adaptation requires more intense community engagement compare to mitigation. There is a growing body of literature which argues that climate adaptation involves more societal considerations, including human rights, compared to mitigation.⁴ Paris Agreement itself has emphasized that ‘climate adaptation should follow a country driven, gender responsive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems.’⁵ Climate adaptation

¹ United Nations Framework Convention on Climate Change (UNFCCC), New York, 9 May 1992, entry into force 21 March 1994; Indonesia, Act No. 6 year 1994 on the Ratification of United Nations Framework Convention on Climate Change, (UNFCCC), art.6.a.ii.

² Paris Agreement, Paris, 12 December 2015, entry into force 4 November 2016; Indonesia, Act No. 16 year 2016 on the Ratification of Paris Agreement to the United Nations Framework Convention on Climate Change, (Paris Agreement), art.12.

³ The most recent research concerning by the UNESCO and UNCC was focused on the implementation of Action PE at continental level based on country submissions submitted under the UNFCCC and Paris Agreement processes. However, the content on evaluation for access to information is not highlighted in this presentation report. See: UNESCO and UNFCCC, ‘Tracking and Reporting Progress on ACE Implementation’ a presentation report delivered in the 7th Dialogue on Action for Climate Empowerment, <<https://unfccc.int/sites/default/files/resource/16%20Ms.%20Marcia%20McKenzie%2C%20Canada.pdf>> accessed 5 August 2019; Other previous research is explained further in the following paragraphs: para.4-7.

⁴ See for instance: Margaux J. Hall, David C. Weiss, (2012), ‘Avoiding Adaptation Apartheid: Climate Change Adaptation and Human Rights Law’ 37 Yale J. International Law, 309, p. 320-324, 348.

⁵ Paris Agreement, *ibid*, art.7(5).

should also 'be based on and guided by the best available science and, as appropriate, traditional knowledge, knowledge of indigenous peoples and local knowledge systems, with a view to integrating adaptation into relevant socioeconomic and environmental policies and actions, where appropriate.'⁶ The consideration to local distinctiveness and culture are not present in the provisions concerning climate mitigation actions.⁷ By contrast, mitigation action focuses more on the national effort that contributes to achieving the global goal of greenhouse gasses emissions reduction. It does not address societal issues like adaptation action. Therefore, the functionality of access to information will be more demanded when applying adaptation measures compare to mitigation measures.

Access to information in this research refers to an instrument that enables every individual to access information concerning environmental matters, including climate change.⁸ Its primary objective is to empower the people's ability to make better decisions or measures based on sufficient understanding of environmental matters. Theoretically, it aims to help the people to participate in the decision-making process⁹ and reduce the opportunity of abusive government actions.¹⁰ Access to information is designed to play an important role to help the potentially impacted communities engage in the planning and implementation of climate adaptation.¹¹

Previous discussions on climate adaptation confer access to information as one of the essential features to enhance climate adaptation.¹² There are also discussions on access

⁶ *ibid.*

⁷ *ibid.*, art.4.

⁸ Svitlana Kravchenko, 'Procedural Rights as a Crucial Tool to Combat Climate Change' [2010] Vol. 38, No.3, Georgia Journal of International and Comparative Law, p. 618, 620.

⁹ Rio Declaration on Environment and Development, UN Doc. A/CONF.151/26/Rev.1 (Vol. I), 14 June 1992, (Rio Declaration), Principle 10.

¹⁰ Victoria L. Lemieux and Stephanie E. Trapnell (2016) 'Public Access to Information for Development: A Guide to the Effective Implementation of Right to Information Laws', Directions in Development. Washington, DC: World Bank. doi: 10.1596/978-1-4648-0879-1. License: Creative Commons Attribution CC BY 3.0 IGO, p. 2.

¹¹ UNHRC, 'Report of the Office of the UN High commissioner for Human Rights on the relationship between climate change and human rights' A/HRC/10/61, 15 January 2009, (UNHRC 2009), para. 78; Svitlana Kravchenko, p. 616, 618; IPCC, 2014: *Climate Change 2014: synthesis Report. Contribution of Working Groups I, II, and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)], IPCC, Geneva, Switzerland, 151 pp, (IPCC 2014), p.27.

¹² See inter alia: Mariya Gromilova and Nicola Jägers, *Climate Change induced displacement and international law*, in Jonathan Verschuuren (ed.), *Research Handbooks on Climate Change Adaptation Law*, Edward Elgar: Cheltenham, 2013, p.92; Michael Faure, *Climate change adaptation and compensation*, in Vershuuren (ed.), *ibid.* p. 116; Margaux J. Hall, David C. Weiss (n 4) p.357-358.

to information which highlight its conceptual relation with human rights and its role as procedural rights concerning environmental matters.¹³ However, the researches cease to observe further whether the implementation of access to information has contributed to enhancing climate adaptation.

Historically, the concept of access to information concerning environmental matters was engendered from empirical findings that the absence of access to information would fail the prevention of environmental damage and human rights violation or aggravate the negative impacts of such damage.¹⁴ After the instrument of access to information was developed and implemented, some research has revealed that the most vulnerable people often outside the radar of access to information.¹⁵ Besides, the difficulty to determine the scope of information on environmental matters and to ensure accessibility of such information considering the information's complexity both substantially and technically increase the challenge poses to the requester information. In the case of the developing country, the government strives to increase outreach by prioritizing the online system while putting less effort to expand the culturally accessible system.¹⁶ These previous findings bring the question of effectiveness.

The attempt to measure the effectiveness of access to information has been conducted, for instance, by World Bank Group that establishes a guide to the effective implementation of the right to information laws in 2016. According to the guide, measuring the effectiveness of the right to access information to achieve the first-tier (disclosure of information) and second-tier (information usage for accountability) objectives are already complicated, but measuring the effectiveness of the right to access information in achieving the third-tier outcome (improved development outcome) is

¹³ See inter alia: Maeve McDonagh, *The Right to Information in International Human Rights Law*, Human Rights Law Review 13:1, Oxford University Press, doi: 10.1093/hrlr/ngs045, 20 February 2013; Cheryl Ann Bishop, *Access to Information as a Human Right*, LFB Scholarly Publishing LLC: El Paso, 2012, p.148; Benjamin W Cramer, *Freedom of Environmental Information*, LFB Scholarly Publishing LLC: El Paso, 2011, p.224; Giulia Parola, *Environmental Democracy at the Global Level: Rights and Duties for a New Citizenship*, Versita Ltd, London: 2013, p.66-68.

¹⁴ See inter alia: UN Economic and Social Council (UNESCO), "Review of Further Developments in Fields with which the Sub-Commission has been concerned Human Rights and the Environment", Final report prepared by Mrs. Fatma Zohra Ksentini, Special Rapporteur, E/CN.4/Sub.2/1994/9, 6 July 1994, (UNESCO, Ksentini, 2014), para.203-216; UNHRC, 'Report of the Office of the UN High commissioner for Human Rights on the relationship between climate change and human rights' A/HRC/10/61, 15 January 2009, (UNHRC 2009), para.74; Budayeva and Others v. Russia, ECHR, No. 15339/02.

¹⁵ See in general: ¹⁵ Victoria L. Lemieux and Stephanie E. Trapnell, (n 10); Based on observation to Bali Province's Information System website on the statistics of accessed documents < <http://siki.baliprov.go.id/>> accessed 24 April 2019.

¹⁶ Explained further in Chapter III and IV. See also Appendix II.

even more complicated.¹⁷ The guide itself only managed to establish a guide for measuring the effectiveness of access to information to achieve the first-degree outcome.¹⁸

Another attempt is the environmental democracy index run by The Access Initiative. This index has reported that many developing countries, including Indonesia, have a good quality of law accommodating the implementation of access to information on environmental matters.¹⁹ The indicators used in this research, however, focused only on legislation while the implementation gap was untouched.

Associating the lessons learned from the abovementioned researches and reports with the construction of access to information in climate change treaties lead us to learn that observing the implementation of access to information is an essential prerequisite to evaluate the role of this instrument for climate adaptation, hence motivate this research. This research aims to enrich the discourse on evaluation to the implementation of access to information by focusing on its role to enhance climate adaptation.

A. Research Question

This research attempts to answer an overarching question: ***to what extent the current legal framework on access to information accommodates climate adaptation?***

The assessment consists of two stages. The first stage scrutinizes *the extent to which the existing legal framework regulates access to information concerning climate adaptation*. The second stage observes *the implementation of access to information on climate adaptation*. In detail, this research confines in answering the following sub-questions:

1. To what extent international law govern access to information concerning climate adaptation?

¹⁷ Victoria L. Lemieux and Stephanie E. Trapnell, (n 10), p.5.

¹⁸ *ibid.*

¹⁹ Indonesia Environmental Democracy Index, <<http://environmentaldemocracyindex.org/country/idn>> accessed 14 April 2019.

2. To what extent national law (Indonesian law) govern access to information concerning climate adaptation?
3. To what extent the implementation of access to information influence climate adaptation in Nusa Penida?

B. Methodology

This research relies primarily on doctrinal research conducted through desk study analysis. The desk study will focus on analyzing the existing legal framework, which governs access to information concerning climate adaptation. It is necessary to look at the law to figure out the objective, desired role, and subsequent instruments of access to information for enhancing climate adaptation. The first stage of the desk study consists of interpretation to international legal framework pertaining to access to information and climate adaptation. The second stage of desk study focuses on the assessment of the implementation of the international legal framework at the national and local legislation and other measures.

Since the implementation of both access to information and climate adaptation law must be sensitive to local distinctiveness, it is necessary to conduct a case study to achieve the research objective. The case study of this research focuses on the implementation of access to information concerning climate adaptation in Nusa Penida Island in Indonesia. There are two reasons behind the choosing of Nusa Penida in Indonesia. First, Indonesia hosts various distinct geographical areas which prone to the adverse impact of climate change.²⁰ Among the vulnerable geographical areas are small islands which neither enjoying the privilege of small island state categories under climate treaties²¹ nor the privilege as an area of priority in Indonesia's climate adaptation policy.²² Second, despite its vulnerability as small islands, Nusa Penida attracts lots more international funding and tourism compared to other small islands in Indonesia.²³ The activities of non-

²⁰ Global perspective: IPCC 2018, (n 20), para. B6.2; Local perspective: Republic of Indonesia, *Third National Communications to the UNFCCC*, 2017, (Third National Communications 2017), p.69-95.

²¹UNFCCC, preamble and Article 4.8.a: refers only to small island *countries* (emphasize added).

²² Third National Communications 2017, p.102.

²³ See inter alia: IUCN, 'Nusa Penida: A Blue Solution to learn from' <<https://www.iucn.org/content/nusa-penida-blue-solution-learn>> (accessed 2 April 2019); Coral Triangle Centre project in <https://www.coraltrianglecenter.org/nusa-penida-mpa/> (accessed in 2 April 2019); Coral Triangle Initiative project <<http://www.coraltriangleinitiative.org/content/community-training-nusa-penida-0>> (accessed 2 April 2019).

governmental organizations and tourisms in addition to government-led policy implementation exposes the Nusa Penida people to the empowerment initiatives, which related to enhancing climate adaptability more than the other small islands in Indonesia.²⁴ These conditions make Nusa Penida a good candidate for conducting an in-depth analysis of the implementation of access to information on climate adaptation in small island inside the jurisdiction of a non-small island developing state.

The case study employs qualitative approaches to empirical legal research.²⁵ It explores whether the implementation of the legal frameworks discussed beforehand has a role in enhancing climate adaptation in Nusa Penida. The empirical research relies on qualitative study generated through the combination of a semi-structured interview, observation, websites assessment, and information request simulation. The combination of the top-down and bottom-up research is chosen to evaluate the gap in between.²⁶ This research will not assess the effectiveness of access to information in accommodating climate adaptation. Instead, it explores the facts, patterns, and impressions surrounding the implementation of access to information related to climate adaptation issues in Nusa Penida.²⁷

C. Structure

This thesis proceeds in five parts. After the introduction, the second chapter examines the international legal instruments related to climate adaptation, particularly the Paris Agreement, UNFCCC, and Kyoto Protocol (Climate Change treaties).²⁸ Some legal

²⁴ See for instance: FNFP, 'Nature becomes a classroom for Nusa Penida student' < <https://www.fnfp.org/news/newsletters/news-announcements-2013/nature-becomes-a-classroom-for-nusa-penida-students>> accessed 2 April 2019; Global Island, 'Indonesia: Nusa Penida' < <http://www.globalislands.net/greenislands/index.php?region=11&c=37>> accessed 2 April 2019.

²⁵ See inter alia: Lisa Webley, 'Qualitative Approaches to Empirical Legal Research' in Peter Cane and Herbert M. Kritzer (Ed.), *The Oxford Handbook of Empirical Legal Research*, 2012, DOI: 10.1093/oxfordhb/9780199542475.013.0039, p.3.

²⁶ This method is in line with the guideline to develop National ACE Strategy. See: UNESCO and UNFCCC, *Action for Climate Empowerment: Guidelines for accelerating solutions through education, training and public awareness*, 2016 (ACE Guidelines), p.15.

²⁷ As the characteristics of qualitative approach is to explore more on meanings and in-depth detail or certain matters. See inter alia: Robert K. Yin (2011), *Qualitative Research from Start to Finish*, The Guilford Press: New York and London, p.7-8. Frans L. Leew and Hans Schmeets (2016), *Empirical Legal Research: A Guidance Book for Lawyers, Legislators and Regulators*, Edward Elgar Publishing, Cheltenham and Northampton, p. 198.

²⁸ Kyoto Protocol to the United Nations Framework Convention on Climate Change, Kyoto, 11 December 1997, entry into force 16 February 2005 (Kyoto Protocol).

instruments like Aarhus Convention²⁹, Escazú Agreement³⁰, and Bali Guidelines are used as the benchmarks because of their remarkable specificity on stipulating and interpreting access to information. The research inevitably includes the assessment of some documents related to human rights and the environment.³¹ Primarily, the assessment uses the general rule of treaty interpretation according to Article 31 Vienna Convention on the Law of Treaties (VCLT).

Chapter three analyses the provisions concerning access to information and climate adaptation in the Indonesian constitution, Environmental Protection and Management Act (EPMA), Public Information Disclosure Act (PIDA), and other relevant implementing regulations. This part provides an assessment of how these legal instruments together influence the construction of access to information in climate adaptation. Chapter four explains the empirical research findings in Nusa Penida, comprising whether any of the legal instruments on access to information has been used to enhance climate adaptation. This chapter also identifies obstacles and opportunities for local people in Nusa Penida to utilize access to information, particularly for climate adaptation needs. Chapter five accounts for the research conclusion.

²⁹ Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, 25 June 1998 (Aarhus Convention).

³⁰ Regional Agreement on Access to Information, Participation and Justice in Environmental Matters in Latin America and the Caribbean, San Jose, 4 March 2018 (Escazú Agreement).

³¹ UNESCO, Ksentini, 2014 (n 14); United Nations Human Rights Special Procedures, "Framework Principles on Human Rights and the Environment, the main human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment," (UNHR, UNEP, Raoul Wallenberg Institute, Sida: 2018).

Chapter II

Access to Information Concerning Climate Adaptation According to International Law

Access to information is one of the prerequisites for protecting the environment and preventing human rights violation caused by environmental damage,³² such as the adverse impact of climate change. This legal concept manifests the opportunity for individuals to access information concerning the environment. It helps individual or society to engage in decision-making process pertaining to environmental matters,³³ including climate change matters.³⁴ The implementation of access to information is also necessary to meet the objective of climate treaties.³⁵ Access to information is a concept where the law governing the environment, climate change, and human rights are intertwined.

The concept of access to information can be different depending on the sectoral context. It is increasingly conceived as a concept which links environmental law and human rights. It is often called the first of three pillars of procedural rights.³⁶ Some argue that access to information is the derivative of the right to freedom of expression.³⁷ Others argue that it is an ancillary right to the other human rights.³⁸ There is also a growing trend to recognize access to information as fundamental human rights.³⁹ Among others,

³² UN Economic and Social Council (UNESCO), "Review of Further Developments in Fields with which the Sub-Commission has been concerned Human Rights and the Environment", Final report prepared by Mrs. Fatma Zohra Ksentini, Special Rapporteur, E/CN.4/Sub.2/1994/9, 6 July 1994, (UNESCO, Ksentini, 2014), para. 203.

³³ UN, Rio Declaration on Environment and Development 1992 (Rio Declaration), Principle 10.

³⁴ The scope of accessible information within this concept has long been construed as include climate change matters, specifically since the UNFCCC entered into force.

³⁵ UNFCCC, 'Doha work programme on Article 6 of the Convention', FCCC/CP/2012/8/Add.2, Decision 15/CP.18, 9th plenary meeting 7 December 2012 (Doha Work Programme), para 1.

³⁶ Cheryl Ann Bishop, *Access to Information as a Human Right*, LFB Scholarly Publishing LLC: El Paso, 2012, p.29, citing Sumundu Atapattu 'The Right to a Healthy Life or the Right to Die Polluted?: the Emergence of a Human Right to a Healthy Environment Under International Law' *Tulane Environmental Law Journal*, Vol.16 (2002), 65 and Richard Desgagne, 'Integrating Environmental Values into the European Convention on Human Rights,' *American Journal of International Law*, Vol.93 (1999), 246.

³⁷ Cheryl Bishop, *ibid*, p.37-38.

³⁸ Christopher Gregory Weeramantry, *Access to Information: A New Human Right. The Right to Know*, 4 *Asian Y.B. of International Law* 99, 99-100 (1994), p.101-102.

³⁹ Action for Climate Empowerment Workshop: Outcomes of SB48 in-session workshop, 1 May 2018 (ACE 2018 workshop), key recommendations; Toby Mendel, 'Freedom of Information as an Internationally Protected Human Right' < <https://www.article19.org/data/files/pdfs/publications/foi-as-an-international-right.pdf>> accessed 21 April 2019; Svitlana Kravchenko, *ibid*, p.618,620.

the main interest of this chapter is narrowed on the concept of access to information stipulated in Climate Change treaties and limited to the information concerning climate adaptation. Discussing the access to information to enhance climate adaptation is inseparable to the issue of human rights. Nevertheless, Climate Change treaties do not use the term 'right' either for access to information or all substantive provisions in its text. Thus, interpretation is needed to clarify the concept of access to information for climate adaptation according to Climate Change treaties.

The future of national climate adaptation law in Indonesia will stem on the implementation of Climate Change treaties as the latter introduced the climate change rules to Indonesian law. However, there is no guidance yet to implement access to information which specifically designated for climate adaptation whereas there are some developments on the implementation of access to information concerning the environment in general at the international and regional level.

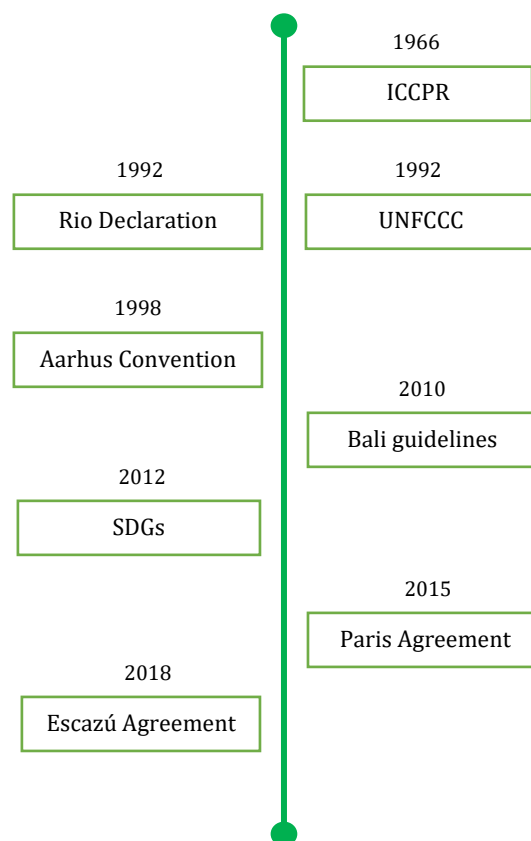


Figure 1. List of international legal instruments related to access to information concerning environmental matters and climate change

The legal instruments mentioned in the above figure establish the characteristics underpinning the access to information on climate adaptation, which will be explained later in this Chapter.

The purpose of this chapter is to examine to what extent the international legal framework regulates access to information for climate adaptation and what are the desired legal consequences of such a legal framework. Understanding legal concept of access to information for climate adaptation from the perspective of the international legal framework is important before assessing its implementation in the form of domestic legislation and other measures because the international legal framework functioned as the benchmark for the latter. Therefore, the role of the international legal framework to accommodate access to information for enhancing climate adaptation can be measured.

This chapter encompasses four sections and a conclusion. The first section explains the interpretation of access to information for climate adaptation according to international climate change law. Here, the meaning of public access to information is assessed according to the context of climate change treaties and in light with the treaties' objective and purpose. The context also includes instruments related to climate change treaties, which concern access to information and/or climate adaptation. Reference to some treaties and instruments concerning human rights and environment are also taken into account because the issue of climate adaptation has a close link to human rights and environment and the concept of access to information stems from these legal fields as well.⁴⁰ They are sequentially explained in the second and third sections. The fourth section explains the mechanism to access information concerning climate adaptation based on the existing benchmarks.

A. Access to Information in International Climate Change Law

The UNFCCC is the first treaty which stipulates obligation concerning climate adaptation. It is also the first binding international legal instrument which explicitly obligates the implementation of public access to information.⁴¹ Paris Agreement, as the subsequent agreement on climate change, also stipulates obligation concerning climate

⁴⁰ Further discussed in Chapter II.

⁴¹ UNFCCC, (n 1), art.6.a.ii.

adaptation and public access to information. Paris Agreement indeed is the first environmental treaty which binds almost all countries'⁴² to adhere to a binding obligation on access to information. It opens an opportunity for mainstream access to information, especially when being incorporated in nationally determined contributions.⁴³ As Paris Agreement is the newest treaty on climate change, with respect to the retroactive doctrine, the focus of interpretation in this research is the provision in Paris Agreement.

Article 12 Paris Agreement obligates parties to cooperate in taking appropriate measures to enhance public access to information as well as education, training, public awareness, and public participation concerning climate change. This provision emphasizes the importance of these steps to 'enhancing actions under this Agreement', including actions for climate adaptation.⁴⁴ Grammatically, the term public access to information entails information which needs to be made accessible for the public. The subject holding such obligation is parties to Paris Agreement. However, it is not clear on how to implement it and what kind of information it refers.

For this research purposes, interpreting the context of Article 12 requires assessment to two regulatory links. The first is the link between public access to information and the goal 'enhancing actions under this Agreement' in light of the objective of the treaty and the second is the link to other mentioned features in Article 12 and the text as a whole.

The link between public access to information with the enhanced actions indicates that the success indicator of implementing public access to information depending on measurement to the enhanced climate change actions. It is in line with the preamble which affirms the importance of public access to information in conjunction with education, training, public awareness, and cooperation at all levels on the matters addressed in the Agreement. However, the meaning of enhancing actions is relative. One

⁴² Status at 4 April 2019: Parties 185, Signatories: 195. UN Treaty Collections, <https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-7-d&chapter=27&lang=en&clang=en> accessed 18 March 2019.

⁴³ Mainstreaming ACE into NDCs and National Adaptation Plans being discussed as well in the latest Action for Climate Workshop, SB48 in-session workshop, 1 May 2018, outcomes. See also: Delphine Misonne, 'Access to Information, the Hidden Human Rights Touch of the Paris Agreement?' in Jery Jendrośka and Magdalena Bar (eds.), *Procedural Environmental Rights: Principle X in Theory and Practice*, Intersentia – EELF Vol. 4: Cambridge, 2017 (Delphine Misonne), p.479-480.

⁴⁴ Paris Agreement, (n 2), art.7.

thing for sure is that the scope of action should include every action established in the Paris Agreement, including actions for adaptation.

The word ‘enhancing actions’ in Article 12 provision express the unequal position of the features in this article compare to other obligations/actions in the Paris Agreement. The provision indicates that public access to information is more of a supporting regulatory instrument to enhance other actions. The ultimate goal of implementing public access to information is not necessarily aimed to achieve the goal in Article 2 of the Agreement but designed to be satisfyingly enough when the actions in the Agreement were enhanced. Article 12 does not refer to the purpose of the Agreement explicitly as, for example, Article 3 on nationally determined contributions which expresses ‘...with the view to achieving the purpose of this Agreement as set out in Article 2.’ This means that public access to information is deemed successful when it can enhance the national adaptation plan.

However, based on Article 31 VCLT, contextual interpretation of a provision in the treaty must be in light with the object and purpose of the treaty. Hence, the term ‘enhancing’ should also be linked to Article 2. When we talked about the public access to information for enhancing climate adaptation, this should be conducted to ‘increase the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production’.⁴⁵ The goal is still rather vague with the choice of word ‘increase’. From the contextual interpretation, it is apparent that the Paris Agreement still leaves room for discretion for parties to determine the extent of ‘enhanced’ and ‘increased’.

For the second link, this part will limit the discussion to the relation between public access to information with Nationally Determined Contributions (NDCs), transparency, and features mentioned in Article 12.

NDCs is deemed as the key instrument for the implementation of Paris Agreement,⁴⁶ but the obligation to implement public access to information has stronger legal force (‘shall cooperate to enhance’) than the obligation to undertake NDCs (‘to undertake and

⁴⁵ *ibid*, art.2(1)(b).

⁴⁶ UNFCCC, ‘Nationally Determined Contributions (NDCs): The Paris Agreement and NDCs’ < <https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determined-contributions-ndcs> > accessed in 24 April 2019.

communicate)’. Despite the stronger word in Article 12, the Paris Agreement provides no further detail on what constitutes as public access to information as it does for NDCs. On the contrary, the scope of NDC is defined extensively in Article 4, 7, 9, 10, 11, and 13.⁴⁷ Nevertheless, NDCs can be one of the information which need to be made accessible according to Article 12 since parties ‘shall’ communicate successive NDCs that they intend to achieve.⁴⁸ Together with communication on NDCs, parties should also conduct adaptation communication.⁴⁹ Respectively, public access to information shall be conducted to enhance NDCs as the latter is part of the action within the Agreement.

Paris Agreement gives transparency framework a central role to play. If we look into the text, the term ‘providing’, ‘sharing’ and/or ‘communicating’ information appear in every substantive obligation.⁵⁰ Article 13 formulates the means of implementation for performing transparency and establish the framework to accommodate the flow of information among parties. In so far as transparency is about providing and sharing the information, there is no explicit link between this framework and public access to information. Furthermore, provisions concerning public access to information is less detail compared to the transparency framework.

The stipulation on public access to information is put in the same article with education, training, public awareness, and public participation.⁵¹ The label Action for Climate Empowerment (ACE) assigns for those instruments altogether.⁵² The function of public access to information, together with other elements of ACE is to enhance actions under the Paris Agreement and carrying out the commitment to ‘promote and cooperate in education, training and public awareness related to climate change and encourage the widest participation in this process, including that of non-governmental organizations’. The term ACE was established before the enactment of Paris Agreement. COP 24—after the enactment of the Paris Agreement—established the *draft* decision on ‘Ways of

⁴⁷ Paris Agreement, art.3.

⁴⁸ *ibid*, art.4(2);4(9).

⁴⁹ *ibid*, art.7(11).

⁵⁰ See for instance: *ibid*, art.4(8);7(7)(a);9(7);11;13.

⁵¹ UNFCCC, (n 1), art.6; *ibid*, art.12.

⁵² UNFCCC, “Improving the effectiveness of the Doha work programme on Article 6 of the Convention,” Decision 17/CP.22, FCCC/CP/2016/10/Add.2, 9th plenary meeting, 17 November 2016, (UNFCCC 2016), para.14; UNFCCC, ‘Ways of enhancing the implementation of education, training, public awareness, public participation and public access to information so as to enhance actions under the Paris Agreement’ Draft decision -/CMA.1 in FCCC/SBI/2018/9/Add.1 3 July 2018, (UNFCCC 2018), para. 2.

enhancing the implementation of education, training, public awareness, public participation and public access to information to enhance action under the Paris Agreement'.⁵³ The draft decision recalls the Doha Work Programme established in COP18⁵⁴ which mandated to 'sets out the scope of, and provides the basis for action on, activities related to Article 6 of the Convention'.⁵⁵

One of the scopes of the Doha Programme is to facilitate public access to data and information. The text of the establishment of Doha Programme indicates that the framework of access to information for climate change must be able to make public and other stakeholders understand, address, and respond to climate change. It also emphasizes that the operationalization of access to information should take into account technical factors such as quality of internet access, literacy, and language issues.⁵⁶ The mandate of the Doha Work Programme is limited to 'serve as a flexible framework for country-driven action'⁵⁷ rather than providing dictate guidance, which explains why the Work Programme does not establish top-down guidelines to implement ACE.

From the assessment above, the provision on public access to information in Paris Agreement alone could not explain on what constitutes as public access to information although clear that it is part of the obligation of conduct to reach the objective of the Paris Agreement. It forces us to look into the UNFCCC and Kyoto Protocol which fall within the scope of agreement relating to Paris Agreement and has a connection with the conclusion of the treaty.⁵⁸ In conjunction with the UNFCCC and Kyoto Protocol, the provision on public access to information in the Paris Agreement should be read as constitute the following elements:

- a. refers to access for a public audience;

⁵³ UNFCCC 2018, (n 52). The draft decision will be formally adopted at the next UN Climate Change Conference in Chile in December 2019. See: UNCC, 'Governments Agree to Strengthen Climate Education, Awareness and Public Engagement' 8 July 2019, <<https://unfccc.int/news/governments-agree-to-strengthen-climate-education-awareness-and-public-engagement>> accessed 12 July 2019.

⁵⁴ Doha Work Programme, (n 35).

⁵⁵ See: *ibid*, para.12; will be subject to review in 2020 in *ibid*, para.19.); progress dialogue in UNFCCC, 'Dialogues on Action for Climate Empowerment' <<https://unfccc.int/topics/education-youth/events-meetings/dialogues-on-action-for-climate-empowerment>> accessed 12 July 2019.

⁵⁶ Doha Work Programme, (n 35), Appendix para.19.

⁵⁷ *ibid*, Annex para.12, para. 14(a).

⁵⁸ Vienna Convention on the law of treaties, Vienna 23 May 1969, entered into force 27 January 1980, (VCLT), art.31(2)(a). It shall be noted that Indonesia is a party to the UNFCCC and Kyoto Protocol.

- b. the information is information on climate change and its effects;
- c. the obligation for parties is the obligation to facilitate, promote, and cooperate in taking appropriate measures;
- d. implemented primarily at the national level and as appropriate at sub-regional and regional levels, with respective capacities;
- e. designed to be applied cumulatively with education, training, public awareness, and public participation.

In the UNFCCC, the scope of information that needs to be publicly accessible is information on climate change and its effects. This information shall be promoted and facilitated at the national and, as appropriate, sub-regional, and regional levels. The possible weakness in the provisions is that the standard of implementation is subject to the national law and regulations and within each state's respective capacities. The provision on promoting and facilitating public access to information must not be read separately from the whole article 6(a), which means that all four points that are mention shall be read as one system of education, training, and public awareness. The implication of this drafting is that the publication of information shall be able to support:

- a. The development and implementation of educational and public awareness programs on climate change and its effects;
- b. Public participation in addressing climate change and its effects and developing adequate responses; and
- c. Training of scientific, technical and managerial personnel;

And *vice versa*. Furthermore, the Doha Work Programme emphasizes in its preamble 'the importance of this article for achieving the ultimate objective of the Convention and for the effective implementation of adaptation and mitigation actions.'⁵⁹

In 2016, UNESCO and UNFCCC launched the ACE Guidelines⁶⁰ which provide suggested steps to design the planning for implementation and monitoring the application of ACE. This Guideline put the objective of public access to information as 'make information freely available' to promote community engagement, creativity and

⁵⁹ Doha Work Programme, (n 35), preamble para.1.

⁶⁰ UNESCO and UNFCCC, *Action for Climate Empowerment: Guidelines for accelerating solutions through education, training and public awareness*, 2016 (ACE Guidelines).

knowledge in finding climate change solutions.⁶¹ Furthermore, it suggests states to consider prominent international frameworks in designing ACE policy plan, which includes, Sustainable Development Goals (SDGs), Aarhus Convention, and UNEP Bali Guidelines on Principle 10.⁶²

To conclude this section, it is apparent that Climate Change treaties treat public access to information as one of the obligations of conduct to help enhance climate adaptation goals. It is left to the state to determine and to choose the appropriate measures. The minimum guidance brings us to seek the subsequent agreement regarding the interpretation or the application⁶³ of public access to information, mainly within the range of international instruments on international environmental law and human rights law.

B. Access to Information in International Environmental Law

In the international environmental law realm, the concept of access to information was introduced⁶⁴ in Rio Declaration.⁶⁵ The term used in the Rio Declarations is ‘access to information concerning the environment’. The recognition of access to information in the Rio Declaration makes it one of the core principles on the context of environment and development. Historically, Rio Declarations concluded in the same year as UNFCCC.

Compare to UNFCCC, the concept of access to information in Principle 10 Rio Declaration is more unequivocal. First, it should be applied primarily at the national level, though the wider and narrower scope of area seems to be encouraged because the principle emphasizes on ‘accessible by each individual’ not limited to citizens.⁶⁶ Second, the obligation to provide the information is the public authorities that hold the information concerning the environment. Third, the information constitutes all information concerning the environment, including on hazardous materials and activities

⁶¹ *ibid*, p.3,p.14.

⁶² *ibid*, p.5.

⁶³ VCLT, art.31(3).

⁶⁴ David A. Wirth, *The Rio Declaration on Environment and Development: Two Steps Forward and One Back, or Vice Versa*, 29 Ga. L. Rev. 599, 1995, p.645-646.

⁶⁵ Rio Declaration, Principle 10.

⁶⁶ Compare to the subject addressed in the first sentence of the Principle 10 regarding public participation which use the term ‘all concerned citizens’.

in the individual's communities and the opportunity for them to participate in the decision-making process. Fourth, access to information should be appropriate so that it helps enable public participation and effective access to justice in environmental matters.⁶⁷ The word 'appropriate', however, leaves a room for interpretation.

Despite the non-binding nature, Principle 10 is a steppingstone for the implementation of access to information in environmental law fora. In 2010, UNEP established an important document called Bali Guidelines, which provides general guidelines to promote effective implementation of states' commitment to Principle 10 Rio Declaration. This Guideline shed light for interpreting the "appropriate" access to information both the substantive and formal requirements, such as provision on legal standing⁶⁸, procedural framework⁶⁹, criteria of information⁷⁰, and institutional framework⁷¹. Principle 10 is a central aspiration to further implementation of access to information in regional treaties and domestic laws.

Historically, the Rio Declaration and UNFCCC were the products of the Earth Summit in 1992. Linking the concept of public access to information on climate change matters to the concept in Rio Declaration might lead to a conclusion that at the time the two instruments were adopted, parties were not sure about the consequence and construction of access to information. However, parties generally agreed on its importance. There was no intention to contrast the access to information in the UNFCCC and Rio Declaration. Therefore, it is safe to say that the extended content of access to information under the Rio Declaration could be used as guidance for implementing access to information under the Climate Change treaties.

It is important to note that there is no international binding instrument stipulating access to information concerning environmental matters before the UNFCCC. The established guideline exists now is the subsequent instruments of the Rio Declaration, a non-binding instrument. There are two international binding instruments which address

⁶⁷ Principle 10 Rio Declaration establishes not only access to information but also public participation and access to effective remedy concerning environmental matters.

⁶⁸ UNEP, *Guidelines for the Development of National Legislation on Access to Information, Public Participation and Access to Justice in Environmental Matters*, Decision SS.XI/5, part A of 26 February 2010, (Bali Guidelines), G.1.

⁶⁹ *ibid*, G.1.

⁷⁰ *ibid*, G.1, G.2, G.4, G.6, G.8, G.10, G.11, G.23, G.24.

⁷¹ *ibid*, G.3, G.7, G.10.

specifically access to information on environmental matters, namely the Aarhus Convention and the Escazú Agreement, but those are regional treaties. It indicates that despite the agreement on the responsibility of states to provide access to information concerning environmental matters, states remain reluctant to agree upon the uniform mechanism, except for parties to Aarhus Convention and the future party to Escazú Agreement.

It is important also to note that the concept of access to information in Rio Declaration does not use the term 'right'. The no-right concept of access to information later recalled in the SDGs, one of the most important international non-binding legal instrument underpins international relations as well as most states' domestic development agenda. SDGs encourages parties to 'ensure public access to information and protect fundamental freedoms'.⁷² Access to information, however, not explicitly addressed in Goal 13 concerning action to combat climate change and its impacts.

C. Access to Information on Environmental Matters and its link to Human Rights Law

In its development, many discourses linking the access to information with freedom of expression under the human rights regime,⁷³ for instance, as stipulated in Article 19 ICCPR. The Special Rapporteur to the United Nations Economic and Social Culture in 1994 emphasized that access to information is a prerequisite to prevent human rights violation caused by environmental damage.⁷⁴ She restates the link between access to information on environmental matters with Article 19 of UDHR and Article 19 of ICCPR.⁷⁵ The Special Rapporteur on Human Rights and Environment, John Knox, recalled Ksentini's report. The Human Rights Council Resolution on Human Rights and the environment which adopting his report expressed the recognition on the freedom to seek, receive and impart information as a vital prerequisite to the protection of a clean, healthy, safe and sustainable environment.⁷⁶ Furthermore, the Framework principle emphasizes the

⁷² United Nations, *Transforming our world: the 2030 Agenda for Sustainable Development*, A/RES/70/1, 21 October 2015, Goal 16.10.

⁷³ United Nations Economic Commission for Europe (UNECE), *The Aarhus Convention: An Implementation Guide*, Second Edition, 2014, (Aarhus Implementation Guide), p.76.

⁷⁴ UNESCO, Ksentini, 2014, (n 14), para.203.

⁷⁵ *ibid*, para.205.

⁷⁶ UN Special Rapporteur on Human Rights and the Environment (John Knox), *Framework Principles on Human Rights and the Environment*, UN Human Rights Special Procedures: 2018, (Framework Principles on Human Rights and the Environment), principle 1, 7.

interdependency of human right and environment, hence including freedom of expression.

The General Comment to ICCPR No. 34 explicitly uses the term 'the right of access to information'. The General Comment prescribes that the obligation of state parties on ensuring right of access to public information encompasses obligation to: (1) proactively put public information in the public domain, (2) ensure easy, prompt, effective and practical access to such information, (3) enact necessary procedures to ensure the right to access to information, (4) ensure timely processing of information requests, (5) ensure reasonable cost for accessing the information, (6) provide reason in case of refusal and legal measure platform against such refusal.⁷⁷

Case law also supports the notion that access to environmental information as inherent to the right of freedom of expression. In 2006, the Inter American Court of Human Rights issued a landmark verdict for the Case of *Claude-Reyes et al. v. Chile*, emphasizing the existence of the right to access information in the stipulation on the freedom of thought and expression under Article 13 of the Inter-American Convention on Human Rights.⁷⁸ European Court of Human Rights also upholds the notion that access to information is hinged to the right to freedom of expression in the European Convention on Human Rights in *Társaság a Szabadságjogokért v. Hungary* and *Kenedi v. Hungary*.

The first binding treaty that formulates access to information as human rights is the Aarhus Convention.⁷⁹ It addresses specifically the access to information, public participation, and access to justice *concerning the environment*.⁸⁰ Although parties to Aarhus Convention are limited to countries within the UNECE⁸¹ region, this treaty has been widely recognized as the benchmark for realizing procedural rights, which include access to information.⁸² The proponent of access to information as procedural environmental rights usually premised their argument with the construction of the three

⁷⁷ UN International Covenant on Civil and Political Rights, *General comment No. 34 Article 19: Freedoms of opinion and expression*, CCPR/C/GC/34, 12 September 2011, (General Comment 34), para.19.

⁷⁸ *Claude-Reyes et al v. Chile* (IACtHR, 19 September 2006), para.77.

⁷⁹ Aarhus Convention, (n 29), art.3.6, 3.8.

⁸⁰ Emphasize added.

⁸¹ United Nations Economic Commission for Europe.

⁸² UNECE, "What people are saying about the Aarhus Convention", <<https://www.unece.org/fileadmin/DAM/env/pp/documents/statements.pdf>> accessed 25 April 2019.

pillars under the Aarhus Convention. The objective of Aarhus Convention affirms that guaranteeing access to information, together with public participation in decision-making and access to justice is prerequisite to protect 'the right of individual in present and future generations to live in an environment adequate to his or her health and well-being'.⁸³ Moreover, it contains innovative provisions which allow access to information in itself becoming an important legal instrument within environmental protection and management. Treaty like Aarhus Convention gives access to information a strong position which can be applied in all kinds of sectors as far as it concerns the environment.

The scope of access to information in the Aarhus Convention encompasses not only the mechanism to provide the information but also collection and dissemination of environmental information.⁸⁴ Furthermore, information on access to information needs to be promoted via education and public awareness.⁸⁵ It does not put education and public awareness on equal footing with access to information. Instead, it indicates that access to information needs education and public awareness.

Recently, Escazú Agreement was concluded⁸⁶ but not yet entered into force.⁸⁷ This agreement is open for signature only for the countries of Latin America and the Caribbean in Annex I of the agreement.⁸⁸ The concept used in this agreement is the public's right of access to environmental information, indicating the intention to treat it as a human right.⁸⁹ It formulates the scope of the right of access to information as entails: (a) requesting and receiving information, (b) being informed promptly whether the requested information is in possession or not of the competent authority receiving request, and (c) being informed of the right to challenge and appeal when information is not delivered, and of the requirement for exercising this right.⁹⁰

⁸³ Aarhus Convention, art.1.

⁸⁴ *ibid*, art.5

⁸⁵ *ibid*, art. 3.3.

⁸⁶ Escazú Agreement, (n 30), art. 1. This agreement is open for ratification and accession only for Latin America and the Caribbean countries.

⁸⁷ Per-22 April 2019.

⁸⁸ Escazú Agreement, art. 21.

⁸⁹ *ibid*, art.5, preamble para.4, art. 2(a)

⁹⁰ *ibid*, art.5.

According to the Aarhus Convention and Escazú Agreement, access to information encompasses an active duty to disseminate information and passive duty to give information upon request.⁹¹ The duty covers other features to disseminate information such as through transparency platform and information system. To what extent active and passive duty should entail is not described in the treaties which Indonesia become a party. In the Aarhus Convention, the active-duty entails, among others, ensuring the environmental information progressively available in electronic databases. It also entails developing mechanisms to ensure that sufficient product of information is made available to the public in a manner which enables consumers to make informed environmental choices.⁹² Based on the logic of the Aarhus Convention, education, public awareness and training (features of ACE) are part of access to information.

Recognizing access to information as human rights implied significant legal consequence. Based on this premise, it is possible to hold the state liable under human rights law for failing to fulfill the access to environmental information.⁹³ It could mean that state has an obligation to respect, protect and/or fulfill access to environmental information in conjunction with a positive obligation to attain the outcome of access to information, such as the right to life. Not only focusing on the right to life, but government also has human right obligation to ensure the availability of the system to accommodate access to information. The state, moreover, has to prevent violation on access to information in any form by any parties (including private party).

The Climate Change treaties, however, absent to use the term right nor indicate in the provision that public access to information is a right. It is either through the new development of a legal instrument, state legislation and/or case law that may invigorate the status of access to information on climate change matters as a human right. The significance of having the right to access to information on climate change matters is that the desired goal will go beyond enhancing climate adaptation. Instead, it entails the fulfillment of the right itself. No matter how successful climate adaptation, once access to information is not fulfilled, it can be an infringement to human rights obligation. Conversely, the fulfillment of the right to access information alone in the eye of climate

⁹¹ Svitlana Kravchenko, (n 9), p.622. See also: Active Duty in Aarhus Convention, art.5 and Escazú Agreement, art.5; Upon request in Aarhus Convention, art.4 and Escazú Agreement, art.6.

⁹² Aarhus Convention, art.5(3),5(8).

⁹³ UNHRC 2009, (n 11), para. 74; Mariya Gromilova and Nicola Jägers, (n 12), p.92; Michael Faure, (n 12), p.116.

change treaties will not necessarily lead to enhanced climate adaptation. It could be other things than enhanced climate adaptation or maybe beyond that. For instance, to fulfill the right to property, right to education, right to water, or merely to fulfill the freedom of expression.

D. The Mechanism to Access Information concerning Climate Adaptation

From the previous explanations, we can conclude that despite the different concept of access to information on climate change, we can use the guideline to implement access to information on environmental matters as established in Bali Guidelines, Aarhus Convention and Escazú Agreement as the benchmark to determine the mechanism to access information concerning climate adaptation.

The most important challenge for implementing access to information is to identify the necessary information. Because of the complex nature of information on climate change matters and the environment in general, it is difficult to dictate information in the regulation or any documents. Principle 10 Rio Declaration uses the phrase ‘including’ when indicating what constitutes as information to be made accessible, so do Bali Guidelines. Aarhus Convention in a glance seems to limit the scope of environmental information in Article 2.3, but the information mentioned in this provision can be interpreted widely.⁹⁴ It also obligates parties to provide information regarding the type and scope of environmental information held by the relevant public authorities⁹⁵ and establish and maintain publicly accessible lists, registers, or files.⁹⁶ Escazú Agreement safe itself by using the phrase ‘include, inter alia’ in Article 6.3. Escazú Agreement specifically addresses climate change-related information in the text that is ‘climate change sources aimed at building national capacities.’⁹⁷

Bali Guidelines, Aarhus Convention and Escazú Agreement call for specifying the conditions of refusal in the legislation. Aarhus Convention and Escazú Agreement went further by explicitly list criteria to decide if any particular information *may*⁹⁸ be made not

⁹⁴ This provision also use ‘including’ and ‘such as’.

⁹⁵ Aarhus Convention, (n 29), art.5(2)(a).

⁹⁶ *ibid*, art. 5(2)(b)(i).

⁹⁷ Escazú Agreement, (n 30), art.6(3)(g).

⁹⁸ Emphasize added.

accessible.⁹⁹ However, both treaties and Bali Guidelines emphasize that the grounds for exceptions must be interpreted restrictively taking into account the public interest in disclosure of information.¹⁰⁰ The Escazú Agreement further emphasizes that the burden of proof on determining the status of accessibility of particular information is on the competent authority.¹⁰¹ These frameworks indicate that all information is accessible unless proven otherwise, hence, a negative test.

Although the scope of information on climate adaptation is not stipulated, it is possible to use the scope of information under the Bali Guidelines, Aarhus Convention, and Escazú Convention as benchmarks to determine if specific information on climate adaptation is accessible or falls under the exceptions. The first thing to know is what kind of information can support climate adaptation enhancement. Only after knowing this, one can determine what information they need to request, and the public authority can start the test whether the information falls within one or more of the exceptions. Meanwhile, determining the scope of information which should be made accessible to enhance climate adaptation require an understanding of the scope of climate adaptation as well. It is important to note that deciding climate adaptation measures involve more complex multi-sectoral considerations compare to climate mitigation.¹⁰² The result of a particular adaptation project tends to be less foreseeable than that of mitigation. Thus, adaptation measures should be more flexible,¹⁰³ comprising both proactive and reactive responses¹⁰⁴ as well as short- and long-term actions.¹⁰⁵ Therefore, the information necessary to enhance climate adaptation can be very complex and more dynamic.

On the one hand, the negative test mechanism has some shortcomings, such as when the public authority does not have the requested information. It gives them a legitimate reason to refuse the request. Also, in countries where the public authority does not have

⁹⁹ Aarhus Convention, (n 29) art. 4(3),4(4); Escazú Agreement (n 30), art.5(6),5(7).

¹⁰⁰ Bali Guidelines, (n 68) G.3; Aarhus Convention, art.4(4); Escazú Agreement, art. 5(8).

¹⁰¹ Escazú Agreement, art. 5.8.

¹⁰² Robin Kundis Craig, "Stationarity is Dead"—*Long Live Transformation: Five Principles for Climate Change Adaptation Law*, Harvard Environmental Law Review, Vol.34, No.1, pp. 9-75, 2010, p.15.

¹⁰³ *ibid*, p.63-69.

¹⁰⁴ Margaux J. Hall, David C. Weiss, (n 4), p.321.

¹⁰⁵ IPCC, 2007: *Climate Change 2007: impacts, Adaptation and Vulnerability, Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 976pp, p.19; Robin Kundis Craig, (n 102), p.72.

sufficient capacity and/or knowledge regarding the function of access to information, they will likely use the refusal argument in non-restrictive manners. Therefore, the authority must be obligated to provide a list of information in the first hand.¹⁰⁶ However, the UNFCCC and Paris Agreement, as well as the Doha Work Programme, do not in any form provide the obligation nor encouragement to provide a list of information on climate change for the parties. On the positive side, this mechanism opens the opportunity for everyone to file a request beyond the already known scope. Thus, helping the public authority to prepare the requested information when it does not fall within the exemptions criteria, having in mind that refusal should be applied restrictively.

Bali Guidelines acknowledge the importance of ensuring 'access to a review procedure before a court of law or other independent and impartial body to challenge' the decision on refusal.¹⁰⁷ The Aarhus Convention and Escazú Agreement require parties to ensure the availability of mechanism to challenge the decision related to access to information in their respective domestic legislation, access to judicial and administrative mechanisms.¹⁰⁸ Escazú Agreement also requires parties to establish or designate monitoring compliance on the implementation of access to information domestically.¹⁰⁹

E. Conclusion

This chapter wanted to assess to what extent international law regulated access to information on climate adaptation. The discussion finds that public access to information is one of the obligations of conduct, which has a function to support the enhancement of other actions and obligations governed in Climate Change Treaties. Conducting public access to information on climate change matters is a binding and mandatory obligation for parties to Paris Agreement. The concept of public access to information under Climate Change treaties is in line with the concept of access to information on environmental matters as established in Rio Declaration. Although the latter is a non-binding instrument, it underlies subsequent guidance for implementing access to information in a more advanced manner compare to the subsequent instruments under the Climate Change

¹⁰⁶ Bali Guidelines (n 68), G.2; G.4; G.6; G.10; G.11; G.8;G.23; G.24. Aarhus Convention, art. 5(1)(a); 5(1)(b); 5(2)(b); 5(3); 5(4); 5(5); 5(6); 5(7); 5(8); 5(9). Escazú Agreement, art. 6(1); 6(2); 6(3); 6(4); 5(9); 6(7); 6(8); 6(9); 6(10).

¹⁰⁷ Bali Guidelines, (n 68), G.15.

¹⁰⁸ Aarhus Convention, (n 29), art.9; Escazú Agreement, (n 30), art.2(c), art.8(2)(a).

¹⁰⁹ Escazú Agreement, art.5(18).

treaties. Access to information is often associated with human right but to a different degree, namely as a procedural environmental right, ancillary right or fundamental right.

Climate change treaties provide no list of information on adaptation, nor guide on how to provide such information. However, combining the subsequent rounds of Paris Agreement and referring to Bali Guidelines, Aarhus Convention and Escazú Agreement can shed light to further determine the scope and accessibility features of public access to information on climate adaptation. It entails an active and passive duty of the government. The active-duty puts other features such as education and transparency within the scope of public access to information.

Chapter III

Access to Information Concerning Climate Adaptation According to Indonesian Law

There is no specific regulation on access to information concerning climate change in Indonesia. However, the right to access to information is guaranteed by the Constitution and regulated further mainly in two Acts: the Environmental Protection and Management Act (EPMA) and Public Information Disclosure Act (PIDA). While the former provides regulation on environmental matters and right to access to information as part of the ways to obtain the objective of environmental protection and management, the latter focuses on the frameworks of access to all kinds of public information.

This chapter looks into the national legal framework, including ratified multilateral legal instruments, governing access to information applicable for enhancing climate adaptation. As Indonesia is the party to most multilateral environment and human rights agreements, a different legal concept can apply simultaneously, sometimes conflicting. Therefore, this chapter seeks whether the concept of access to information in Indonesian law deemed as fundamental rights, procedural rights, ancillary rights, government's environmental obligation and/or governments' discretion. The main purpose of this chapter is to assess to what extent Indonesian law governs access to information for climate adaptation and whether there is regulatory loophole hindering the application of access to information from accommodating the enhancement of climate adaptation.

This chapter comprises four sections and a conclusion. The first section explains the concept of access to information according to the Indonesian Constitution and its implementing regulations. The second section determines the scope of information that is necessary to enhance climate adaptation according to national legislation. Furthermore, it compares the scope of information in national legislation with the Aarhus Convention, Escazú Agreement, and Bali Guidelines. The third section assesses the actors involved in the implementation of access to information on climate adaptation. The fourth section assesses the existing compliance and enforcement mechanism related to access to information and how it can be used to enforce access to information on climate adaptation.

A. The Concept of Access to Information on Climate Adaptation

The Constitution ensures in Chapter XA on Human Rights that ‘everyone shall be entitled to communicate and obtain information to develop their personality and social setting, and to find, obtain, have, keep, process, and give information with any means of channel available’.¹¹⁰ This particular provision, in conjunction with Article 28J regarding the respect to human rights underlies PIDA.¹¹¹ The preamble of PIDA further stated that ‘the right to obtain information is a human right, and transparency of public information is a significant characteristic of a democratic state...’¹¹² It is clear that Indonesian law acknowledges access to information as a human rights. It means that the state has obligation to respect, protect, and/or fulfil the right to access to information.

In the same Chapter XA on Human Rights of the Constitution, on Article 28H, enshrines right to sound and healthy environment. Article 28H underlies the establishment of EPMA.¹¹³ EPMA stipulates inviolable provision stating that ‘everyone has the right to sound and healthy environment as part of human rights.’¹¹⁴ The same article emphasizes the right to access information as part of the ways to obtain the right to sound and healthy environment.¹¹⁵ It indicates the right to environmental information as more of ancillary rights or procedural environmental rights rather than fundamental human rights. However, the stipulation in EPMA cannot deviate the State from bearing the obligation to respect, protect, and/or fulfill both the right to access to information and right to the environment because both have equal position in the Human Rights Chapter of the Constitution.

¹¹⁰ Undang-Undang Dasar Negara Kesatuan Republik Indonesia tahun 1945, Indonesian Constitution, art.28F. See unofficial translation in < https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---ilo_aids/documents/legaldocument/wcms_174556.pdf > accessed 12 July 2019.

¹¹¹ Indonesia, *Public Information Disclosure Act*, Act No. 14 year 2008, Undang-Undang Republik Indonesia Nomor 14 tahun 2008 tentang Keterbukaan Informasi Publik, see unofficial English translation in < <https://www.right2info.org/resources/publications/laws-1/Indonesia-Public-Information-Disclosure-Act-2008.doc/view> > accessed 31 July 2019, (PIDA) preamble.

¹¹² *ibid*, preamble consideration para. b.

¹¹³ *ibid*, preamble, in conjunction with Article 33 paragraph three and four which contains the principle of sustainability and environmental perception as part of the basis for national economy.

¹¹⁴ Indonesia, *Environmental Protection and Management Act*, Act No. 32 year 2009, Undang-Undang Republik Indonesia Nomor 32 Tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup, see unofficial English translation in < <http://extwprlegs1.fao.org/docs/pdf/ins97643.pdf> >, accessed 31 July 2019, (EPMA), art.65(1); The right to sound and healthy environment is also ensured in: Indonesia, *Human Rights Act*, Act No. 39 year 1999, Undang-Undang Republik Indonesia No. 39 tahun 1999 tentang Hak Asasi Manusia, see unofficial English translation in <<https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/55808/105633/F1716745068/IDN55808%20Eng.pdf>> accessed 31 July 2019, (HRA), art.9(3).

¹¹⁵ EPMA, art. 65(2).

Besides Article 65(2), EPMA provides no further provisions on access to information. Nonetheless, the elucidation of Article 65(2) EPMA explains the right to access to information on the environmental matters as follows:

“The right to environmental information constitutes a logic consequence of the right to participate in environmental management on the basis of the principle of transparency. The right to environmental information will enhance the value and effectiveness of participation in environmental management, besides opening opportunities for communities to actualize their rights to a proper and healthy environment. The environmental information as referred to in this paragraph may be in the form of data, information or other information related to environmental protection and management, which is opened for the public according to the characteristics and objectives thereof, such as environmental impact analysis documents, reports and documents of results of evaluation of environmental monitoring, either the monitoring of compliance or monitoring of change in the quality of environment and spatial plan.”

This explanation suggests that the right to environmental information is also the proliferation of the principle of transparency. This elucidation also gives examples of environmental data or information which should be made accessible. Aside from the mentioned provisions, specific reference to climate adaptation is mentioned elsewhere¹¹⁶ but not directly related to the right to access information.

Notwithstanding the lack of detail on the access to environmental information arrangement, there are other provisions in EPMA which related to the accessibility of environmental information. In the article’s numeric orders, the first is on the environmental information inventory in Article 6. This article requires the government to collect some information¹¹⁷ as the basis for establishing environmental planning. The second is on the obligation to disseminate information based on the principle of transparency and comprehensiveness while engaging communities in the process of conducting an environmental impact assessment.¹¹⁸ The third is on the warning system in case of environmental pollution and damage.¹¹⁹ The fourth is the provision on Integrated Environmental Information System (IES). Government at the national and local level shall establish IES which covers, at the minimum, state of the environment,

¹¹⁶ See section B para. 6.

¹¹⁷ EPMA, art. 6(2)a-f.

¹¹⁸ *ibid*, art.26.

¹¹⁹ *ibid*, art.52.

environmental disaster mapping and other environmental information.¹²⁰ The last one is the obligation imposed on the business entity to provide environmental information in an accurate, transparent, and prompt manner.¹²¹ These provisions designate some measures which fall within administrative and governance realms that can support the implementation of the right to access the environmental information and *vice versa*.

B. The Scope of Information and the Accessibility Features

As explained earlier, the guidance to determine the scope of information is stipulated in PIDA. PIDA constitutes technical regulation for implementing access to public information. It emphasizes that every public information is open and accessible unless proven otherwise. PIDA categorizes public information into three groups: periodic, immediate, and available at any time.¹²² The first two categories entail an active duty to disseminate information in an easily obtained manner for the people and using the simple language.¹²³ The third category is comparable with passive duty in the Aarhus Convention and Escazú Agreement¹²⁴, where the authorities are obligated to give the information upon request.

PIDA provides means of assessment for determining whether the information considered as periodic, immediate, and available at any time, or subject of exceptions. A piece of information is considered as periodic information when it is related to the activities of public authorities, financial report, and other information designated as periodic information according to other regulations. Information that should be made accessible immediately is the information which might threaten the life of the people and public order.¹²⁵ Information that should be made available any time is information listed in Article 11(1) PIDA and information that has been decided as open for the public based

¹²⁰ *ibid*, art.62.

¹²¹ *ibid*, art.68.

¹²² PIDA, (n 111), art.9,10,11.

¹²³ *ibid*, art.9(4),10(2).

¹²⁴ See Chapter II section B.

¹²⁵ PIDA, art.10(2).

on the mechanism of objection or settlement according to PIDA.¹²⁶ Article 17 lists the characteristics of information that exempted from the category of public information.

PIDA ceases to regulate the content of information except to the extent that the information perceives as public information. We should investigate sectoral regulation to discover accessible information in each sector. With regards to information concerning climate adaptation, this research first looks at legislation which regulates climate change-related issues, mainly EPMA, Paris Agreement Ratification Act, and UNFCCC Ratification Act. Afterward is the implementing regulation of those acts at the national and local level. It is worth to note that even though EPMA stipulates right to access to information, it ceases to dictate all environmental information that considered as public information. Thus, the mechanism of categorizing under PIDA should apply when determining environmental information (no *lex specialis* applies). The same logic goes for the Paris Agreement and UNFCCC.

The UNFCCC and Paris Agreement¹²⁷ mention some information related to climate adaptation, which has the characteristic of public information as defined in PIDA. The obligation to create and provide such information can automatically apply to the Indonesian government. According to Act No. 24 year 2000 concerning the International Agreement, the treaty concerning human rights and environment of which Indonesia become a party is equally binding and enforceable as a national act.¹²⁸ However, it still depends on the practicality of the norm in the treaty itself. When the norm is concrete and direct, such as asking the national focal point to file national communications, it requires only enlisting the program into the state's budget.

Below listed some of the information mentioned in Climate Change treaties and its status according to the characteristics in PIDA, namely periodic information (P), Immediate information (I), and available at any time information (A).¹²⁹

¹²⁶ *ibid*, art.11.

¹²⁷ See Chapter II section B.

¹²⁸ Indonesia, *Act concerning International Agreement*, Act No. 24 year 2000, Undang-Undang Republik Indonesia No. 24 tahun 2000 tentang Perjanjian Internasional, see unofficial translation in <<http://www.track.unodc.org/LegalLibrary/LegalResources/Indonesia/Laws/AML%20laws/Indonesia%20Law%20No.%2024%20Concerning%20Treaties%202000.pdf>>, accessed 31 July 2019, art. 10.d,15(2).

¹²⁹ The status is determined by the author based on the characteristics provided in PIDA. Status for each documents in this table is not inscribed in any regulations.

INFORMATION	Active		Passive
	P	I	A
Nationally determined contributions ¹³⁰	•	-	•
National adaptation plans ¹³¹	•	-	•
National communications ¹³²	•	-	•
Global stocktake about adaptation ¹³³	•	-	•
Climate change initiatives ¹³⁴	-	-	•
Climate change policies ¹³⁵	-	-	•
Climate change results of actions ¹³⁶	•	-	•
Monitoring and evaluation of adaptation plans, policies, programmes and actions ¹³⁷	•	-	•
National inventory report of anthropogenic emissions by sources and removals by sinks by GHGs ¹³⁸	•	-	•
Early warning system ¹³⁹	-	•	•
Information on emergency preparedness ¹⁴⁰	•	•	•
Events that may involve irreversible and permanent loss and damage and slow onset events ¹⁴¹	•	•	•
Comprehensive risk assessment and management ¹⁴²	-	-	•
Information on risk insurance facilities, climate risk pooling and other insurance solutions ¹⁴³	-	-	•
Information on non-economic losses ¹⁴⁴	-	-	•
Information on financial resources for adaptation (from any legitimate sources) ¹⁴⁵	-	-	•
Information on financial, technology transfer and capacity-building support needed and received by state ¹⁴⁶	-	-	•

¹³⁰ Paris Agreement, (n 2), art.7(11).

¹³¹ *ibid*, art. 7(11).

¹³² *ibid*.

¹³³ *ibid*, art.7(14).

¹³⁴ Doha Work Programme, annex para.19.

¹³⁵ *ibid*.

¹³⁶ *ibid*. **Could be in the form of report and any publication.**

¹³⁷ Paris Agreement, art.7(9)dm,7(14).

¹³⁸ Paris Agreement, art.13(7). Although this information is more relevant for mitigation action, they are also important for adaptation. See for instance: Keith H. Hirokawa and Jonathan Rosenbloom, 'Climate change adaptation and land use planning law' in Jonathan Verschuuren (ed.), (n 12), p.342.

¹³⁹ Paris Agreement, art.8(4)a.

¹⁴⁰ *ibid*, art.8(4)b.

¹⁴¹ *ibid*, art.8(4)c,8(4)d.

¹⁴² *ibid*, art.8(4)e.

¹⁴³ *ibid*, art.8(4)h.

¹⁴⁴ *ibid*, art.8(4)g.

¹⁴⁵ *ibid*, art.9.

¹⁴⁶ *ibid*, art.13(10).

From the list above, some information can be associated with provisions in EPMA, although not specifically address climate change. For instance, the provision concerning the early warning system, environmental policies, and inventory/stocktaking. Meanwhile, EPMA regulates obligation to establish climate adaptation and mitigation planning for national, provincial and district levels¹⁴⁷; incorporate climate adaptation vulnerability in every strategic impact assessment¹⁴⁸; and conducting mitigation and adaptation for protecting the atmosphere.¹⁴⁹ Because of this, the public could demand information on climate adaptation in national, provincial, and district planning and every strategic impact assessment. In addition, PIDA obliged a public authority to list public information that they produce, keep, manage, send, and/or receive.¹⁵⁰ Public authority here includes local government.

It is important to note that no information related to climate adaptation explicitly listed in the list of public information of Ministry of Environment and Forestry, but there are some open categories to which it can fit in, such as information on disaster and information on environmental damage.¹⁵¹ Ministry of Marine and Fisheries lists climate forecast and tidal prediction.¹⁵² The same goes for most sectoral acts, including act concerning sea, fisheries, spatial plan, geo-spatial information, disaster management, mineral and coal mining, tourism, forestry, and water and air conservation. The act on the management of coastal and small island constructed climate adaptation as one of the examples of ‘serious and wide impact’, a determining threshold prior issuing utilization license in small islands and changing conservation zone.¹⁵³ Act concerning plantation

¹⁴⁷ EPMA, (n 114), art. 19(4)d.

¹⁴⁸ *ibid*, art.16e.

¹⁴⁹ *ibid*, art. 57(4)(a).

¹⁵⁰ PIDA, (n 111), art.1(2),1(3).

¹⁵¹ Minister of Environment and Forestry Regulation concerning Public Information Service in Ministry of Environment and Forestry, Peraturan Menteri Lingkungan Hidup dan Kehutanan No. P.18/MENLHK/SETJEN/KUM.1/5/2018 tentang Pelayanan Informasi Publik di Lingkungan Kementerian Lingkungan Hidup dan Kehutanan.

¹⁵² Ministry of Maritime and Fisheries Public Informasion List <http://ppid.kkp.go.id/content/public_information> accessed 31 July 2019.

¹⁵³ Indonesia, *Plantation Act*, Act No. 39 year 2014, Undang-Undang Republik Indonesia No. 39 Tahun 2014 tentang Perkebunan, see unofficial English translation in <<http://extwprlegs1.fao.org/docs/pdf/ins21119.pdf>> accessed 6 August 2019, Art.1.27A jo. Art. 51(1)(a) and Art. 30(3).

obliged government to provide data and information system concerning climate forecast.¹⁵⁴

In so far as climate adaptation is mentioned in regulation, there are only two types of document that should incorporate information on climate adaptation according to the law and list of public information set by related government institutions: Strategic Impact Assessment¹⁵⁵ and Environmental Planning (in national, provincial and district level).¹⁵⁶ Nevertheless, the existing regulation fails to define what is the information that necessary for climate adaptation?

Adaptation is a very complex challenge that requires thorough knowledge and information on local vulnerabilities and potential impacts.¹⁵⁷ It is necessary to limit the identification to the intolerable risk exceeding adaptation limits in a particular area.¹⁵⁸ In the following table listed several kinds of information necessary for enhancing climate adaptation as identified from national legislation and local legislation, taking into account research and report by the international organization and other administrative documents. Only information that mentioned explicitly in binding legislation or treaty and/or restated in more than two different miscellaneous documents will be listed.¹⁵⁹

INFORMATION

Assessment on Climate Vulnerability and Risk¹⁶⁰

List of prioritized action for climate change adaptation which integrated in Spatial Planning and its subsequent planning, Long-Term Development Planning, Mid-term Development Planning; and other policies, planning and/or other programs which potentially impacted by climate change in national, provincial and district level¹⁶¹

¹⁵⁴ Indonesia, *Coastal and Small Island Management Act*, Act No. 27 year 2007 and its amendments, Undang-Undang Republik Indonesia No. 27 tahun 2007 tentang Pengelolaan Wilayah Pesisir dan Pulau-Pulau Kecil, beserta undang-undang perubahannya, Art. 6(1)(c).

¹⁵⁵ EPMA, (n 114), art.16(e).

¹⁵⁶ *ibid*, Art.10(f).

¹⁵⁷ IPCC 2014, (n 11), p.107.

¹⁵⁸ *ibid*, p.80.

¹⁵⁹ Document reviewed to create this list encompasses: IPCC report 2018, 2014, 2007, 2012; 13 acts; 4 minister regulations; and 2 administrative documents.

¹⁶⁰ Minister of Environment and Forestry Regulation concerning guidance to create climate change adaptation action, Peraturan Menteri Lingkungan Hidup dan Kehutanan No. P.33/Menlhk/Setjen/Kum.1/3/2016 tentang Pedoman Penyusunan Aksi Adaptasi Perubahan Iklim, art. 6.

¹⁶¹ *ibid*, art.9.

Climate change impact on infrastructures, populations, assets¹⁶², crop yields¹⁶³

Coastal Flooding¹⁶⁴

Freshwater stress¹⁶⁵

Knowledge regarding the positive impact of restoring natural coastal ecosystem to reduce the adverse impact of rising sea levels and intensifying storms by protecting coastal regions¹⁶⁶

Health risks caused by climate change¹⁶⁷

Means of health adaptation with the changing climate¹⁶⁸

Population and area mapping in health sector¹⁶⁹

Chapter IV will further discuss the availability of the information mentioned above.

The next thing to bear in mind after knowing what information is to be made accessible is how the information should be made accessible. There are some standards underlie the way to provide access to information.¹⁷⁰ The primary concern on accessibility is the outreach, meaning how to make the information understandable for the public.¹⁷¹ It is the prerequisite of ensuring that access to information can work to achieve the development objective, as in this research refers to enhancing climate adaptation.

¹⁶² Hoegh-Guldberg, O., D. Jacob, M. Taylor, M. Bindi, S. Brown, I. Camilloni, A. Diedhiou, R. Djalante, K.L. Ebi, F. Engelbrecht, J. Guiot, Y. Hijikata, S. Mehrota, A. Payne, S.I. Seneviratne, A. Thomas, R. Warren, and G. Zhou, 2018: Impacts of 1,5°C Global Warming on Natural and Human Systems. In: *Global Warming of 1,5°C. an IPCC Special Report on the impacts of global warming of 1,5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty* [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. In Press, (IPCC 2018 Chapter 3), p.181 (high confidence).

¹⁶³ IPCC 2014, (n 11), p.51 (high confidence), p.53.

¹⁶⁴ IPCC 2014, (n 11), p.42; IPCC 2018 Chapter 3, (n 162), p.181 (high confidence).

¹⁶⁵ IPCC 2018 Chapter 3, (n 162), p.181 (medium confidence).

¹⁶⁶ *ibid*, p.181 (medium confidence).

¹⁶⁷ Minister of Health Regulation concerning guidance for identifying risk health factor caused by climate change, Peraturan Menteri Kesehatan No. 35 tahun 2012 tentang Pedoman Identifikasi Faktor Risiko Kesehatan Akibat Perubahan Iklim.

¹⁶⁸ Minister of Health Regulation concerning health adaptation strategy against climate change impact, Peraturan Menteri Kesehatan No. 1018/MENKES/PER/V/2011 year 2011 tentang Strategi Adaptasi Sektor Kesehatan terhadap Dampak Perubahan Iklim, art. 3(a).

¹⁶⁹ *ibid*, art.3(b)

¹⁷⁰ Exhaustive list is available in Appendix I.

¹⁷¹ Doha Work Programme, (n 35), annex para.19.

PIDA emphasizes that public information must be delivered in an easily accessible and understandable language for the people.¹⁷² This quality is vital as Indonesia comprises of people speaking in hundreds of different languages, not all people can speak Bahasa Indonesia (Indonesian language) fluently. Accessing information is also problematic because of complex geographical conditions. Moreover, most environmental information is scientific information which not understandable for a layperson. Doha Work Programme provides more extensive guidance in this regard by including some qualities which need to be performed in order to achieve effective outreach. The qualities include take into account the quality of internet access, literacy, and language issues and use the culturally preferred method of program delivery in order to increase people's understanding of the climate change issue.¹⁷³ For further comparison, Escazú Agreement obligates parties to 'facilitate access to environmental information for persons or groups in vulnerable situations...'¹⁷⁴ ensure those groups (including indigenous peoples and ethnic groups) receive assistance in preparing their requests and obtain a response,¹⁷⁵ and endeavor to 'prepare alternative formats that are comprehensible for persons or groups in vulnerable situations'.¹⁷⁶

C. The Duty Bearers and Beneficiaries

In PIDA, the obligation to provide access to information assigned to every public agency.¹⁷⁷ According to the definition of Public Agency in PIDA, there are three types of Public Agency: (1) a state's institution (; (2) an organization funded entirely or partly by state budget and/or regional budget; (3) a non-governmental organization that part or all of its fund originates from the state budget and/or the regional budget, the contribution from the people and/or from overseas sources.¹⁷⁸

The scope of duty bearer in PIDA is closely similar to 'competent authority' in Escazú Agreement. Escazú Agreement defines 'competent authority' more widely by including

¹⁷² PIDA, (n 111), art.9(2), 10(2).

¹⁷³ Doha Work Programme, (n 35), annex para.2, para.19.

¹⁷⁴ Escazú Agreement, (n 30), art.6(6).

¹⁷⁵ *ibid*, art.5(4).

¹⁷⁶ *ibid*, art. 5(3).

¹⁷⁷ PIDA, (n 111), art.7.

¹⁷⁸ *ibid*, art.1.3.

private organizations: (a) ‘that receive public funds or benefits (directly or indirectly)’ or (b) ‘that perform public functions and services, but only with respect to public funds or benefits received or to the public functions and services performed.’¹⁷⁹ It can be a public-owned business entity and non-profit organizations. Besides, independent and autonomous bodies, organizations, or entities owned or controlled by the government also included in the definition.¹⁸⁰ To compare, Aarhus Convention extend the duty bearers of access to information to natural or legal persons that: (1) performing public administrative functions under national law, including specific duties, activities or services in relation to the environment¹⁸¹; and (2) having public responsibilities or functions, or providing public services, in relation to the environment under the control of government or those performing public administrative functions under national law.¹⁸² It also includes the institutions of any regional economic integration organization which is a party to this convention.¹⁸³

A private entity provided that they receive the state budget partly, which according to PIDA deem as public agency holding the duty to provide access to information. Questions arise as to whether this definition poses a limitation to achieve the objective of public access to information when the fully private funded entities hold the public information. Should an entirely private business entity provide information to the public regarding its adaptation plan? So far, there is no regulation to say it should.

There is living debate whether private entities which do not receive funding from the state nor received benefits from public funds can be held responsible for implementing access to information. Weeramantry argued that the obligation on the right to information not only applies to the government but also ‘all those who withhold information which an individual is entitled to receive’ including ‘corporations, quasi-governmental agencies or individuals’.¹⁸⁴ Although this notion is not in line with the international human rights perspective, non-state actors can be made *responsible* for giving access to such information provided that the domestic legislation said so. Thus, not

¹⁷⁹ Escazú Agreement, (n 30), art.2(b).

¹⁸⁰ *ibid*, art. 2.b.

¹⁸¹ Aarhus Convention, (n 29), art. 2(2)(b).

¹⁸² *ibid*, art.2(2)(c).

¹⁸³ *ibid*, art. 2(2)(d).

¹⁸⁴ Christopher Gregory Weeramantry, (n 38), p.111.

in the form of human rights enforcement *per se* but as the implementation of the state's human rights obligation. One of the examples is the responsibility of private entities (with or without public relation whatsoever) to report their emissions.¹⁸⁵

Bali Guidelines specifically address that states should ensure the competent public authority to collect regularly 'the information on environmental performance and compliance by operators of activities potentially affecting the environment'. It could mean that the operators have indirect responsibility to provide the information to the public via the government. Environmental reports and documents of results of evaluation to environmental monitoring are also mentioned in the elucidation of Article 65(2) EPMA as the sample of information which should be open for public. As a comparison, Aarhus convention obligates parties to encourage operators whose activities have a significant impact on the environment to inform the public regularly but in a voluntary manner such as via eco-labelling or eco-auditing.¹⁸⁶

However, there are some obligations for a private entity to provide information related to their activities, such as in the form of environmental impact assessment (EIA).¹⁸⁷ EIA arguably must cover assessment on the impact of such activities to climate adaptation and adaptation plan. Although adaptation is not specified, the scope of EIA entails assessment on the impact of activities, prediction on the width of impact, and environmental management and monitoring plan,¹⁸⁸ which arguably can include adaptation.

Part of the obligated process in conducting EIA is to disseminate the assessment results to the public, primarily potentially impacted communities, and involve the public in the assessment process based on a transparent and thorough manner before running the activities.¹⁸⁹ Therefore, EIA is a public document which should be made accessible to the public. It suggests an exception, where a non-public agency is required to provide public information. Nonetheless, if the public access to information considered as human rights, the debate about extending the human right obligation to business enterprises will

¹⁸⁵ Juliana Zuluaga Madrid, *Access to Environmental Information from Private Entities: A Rights-Based Approach*, RECIEL 26 (1) 2017, p.44.

¹⁸⁶ Aarhus Convention, (n 29), art. 7(6).

¹⁸⁷ EPMA, (n 114), art.26, explanation of art.65(2).

¹⁸⁸ *ibid*, art.25(a),(d),(f).

¹⁸⁹ *ibid*, art.26(2).

arise here as well.¹⁹⁰ To illustrate, when a private entity holds the obligation on public access to information, could they also hold the authority to decide a piece of information as not public? Also, if they have both active and passive duty to provide information, how to decide which data is more valid when data disparity between a private entity and public agency occur? Meanwhile, the adjudication system for public access to information disputes, as will be explained in the next section, have limited jurisdiction only to decide whether a piece of information is subject to exception, not to decide which information is more valid. The disparity of information can bring longing disputes and chaos, such as in the case of obscured mapping in Indonesia, which lead to tenure disputes.¹⁹¹

The beneficiaries, according to PIDA are limited to only Indonesian citizen and/or an Indonesian corporation. This limitation is arguably inconsistent with the Constitution¹⁹² EPMA¹⁹³ and HRA,¹⁹⁴ which refer to 'everyone'. In addition to the limitation, the applicant, when accessing the information must do so in good faith. Recently, head of the National Information Commission issued a decision concerning Vexatious Request, underlying the basis to refuse the request and blacklisting the requester.¹⁹⁵

To compare, the beneficiaries of access to information in Bali Guidelines, Aarhus Convention, and Escazú Agreement refer to any natural or legal persons without having to state reason or interest.¹⁹⁶ Aarhus Convention uses the term 'the public' and 'the public concerned', but only the former term used for all provisions regarding access to information. It shows how the subject that can request the information does not need to have any concern. Escazú Agreement adds the obligation for parties to provide special

¹⁹⁰ For reference: Steven R. Ratner, *Corporations and Human Rights: A Theory of Legal Responsibility*, 111 Yale Law Journal, 443, 2001.

¹⁹¹ Karl Mathiesen, 'Greenpeace reveals Indonesia's forest at risk as multiple companies claim rights to same land' *The Guardian* (Indonesia, 2 April 2016) <<https://www.theguardian.com/sustainable-business/2016/apr/02/greenpeace-palm-oil-logging-indonesia-overlapping-land-claims-greenpeace-forest-fires>> accessed 31 July 2019.

¹⁹² Indonesian Constitution, (n 110), art.28

¹⁹³ EPMA, (n 114), art.5(2).

¹⁹⁴ HRA, (n 114), art.14.

¹⁹⁵ The Decree of Chair of Central Information Commission concerning Procedure for Terminating the Public Information Dispute that is not carried out seriously and in good faith, (Vexatious Request), Keputusan Ketua Komisi Informasi Pusat No. 01/KEP/KIP/V/2018 tentang Prosedur Penghentian Proses Penyelesaian Sengketa Informasi Publik yang tidak dilakukan dengan sungguh-sungguh dan itikad baik.

¹⁹⁶ Bali Guidelines, (n 68), G.1; Aarhus Convention, (n 29), art.4(1)(a); Escazú Agreement, (n 30), art.5(2)(a).

facilitation and assistance for persons or groups in vulnerable situations, such as indigenous peoples and ethnic groups.¹⁹⁷

D. The Compliance and Enforcement Mechanism

PIDA establishes the Information Commission which, according to Article 24 PIDA, comprises Central Information Commission, Information Commission in province level and, if necessary, in regency level. The commissions have the authority to resolve public information disputes filed by information requester. The Information Commission also has the authority to set the general policy concerning public information services.¹⁹⁸ The mechanism of dispute resolution can be conducted through mediation and/or adjudication. A case can only be brought before the Information Commission after went through two steps: information request to a public agency and objection to the respond to the request. The verdict by the Information Commission is final and binding, but the parties to the dispute still can appeal to either the Administrative Court¹⁹⁹ or Civil Court.²⁰⁰ The case still can be a subject of cassation in Supreme Court as a last resort.

Although considered as part of human rights, the authority of human rights court does not include the dispute on the right to access information. The human rights court only deal with a violation of specific human rights violation, such as genocide, torture, and slavery.²⁰¹

E. Conclusion

This chapter employed assessment to the extent to which current national legislation has governed access to information concerning climate adaptation. It finds that there is no explicit provision on access to information on climate change matters in the national legislation, but since the climate adaptation is part of environmental matters, it falls within the scope of access to information as governed in EPMA. Indonesian Law constructed public access to information, be it as general public information as stipulated

¹⁹⁷ Escazú Agreement, art. 5(3), 5(4).

¹⁹⁸ PIDA, (n 111), art.26.

¹⁹⁹ When the defendant is a state's agency.

²⁰⁰When the defendant is not a state's agency, for instance, an NGO or State's business enterprises.

²⁰¹ HRA, (n 114), art.104 and its elucidation.

in PIDA and as information on environmental matters as stipulated EPMA, as a human right. Nevertheless, EPMA put access to information as ancillary to the right to sound and healthy environment.

PIDA is a particular act dedicated to governing public access to information which construed the effort to not only respect and protect but also fulfills the right to access public information. As reflected in PIDA, the actors and implementation system for access to information is well established. However, the established infrastructure and system to fulfill this right does not guarantee the ease of accessing information, mainly when the content of information is not defined nor created in the first hand. It is crucial, thus, to define the content of information on climate adaptation.

Overall, the assessment on the provision of access to information in national legislation is insufficient to determine the role it is intended to have related to the effort to enhance climate adaptation because of two reasons: (1) there is no implementing regulation specifically address climate adaptation; and/or (2) there is no list of information on climate adaptation yet in the implementing regulations. The assessment in section B in this chapter showed that most of the identified information related to climate adaptation are either not yet binding or too broad.

Chapter IV

Implementation of Access to Information Concerning Climate Adaptation in Nusa Penida

As elaborated in the previous chapters, the regulation governing access to information is mature enough, but the extent to which it accommodates climate adaptation remains vague. When the regulatory design is questionable, we may look into the application of the instrument to see if it worked to achieve the desired outcome, in this regard, whether the application of access to information is worked to achieve climate adaptation. However, the discourse on whether access to information thus far has met such objective is lacking.²⁰²

Is it true that the current design of access to information can indeed work? Whether the existence of access to information take part in enhancing climate adaptation? As climate adaptation is one of the examples of development outcome, effectiveness measurement is beyond the capacity of this research.²⁰³ This chapter does not attempt to assess the effectiveness *per se*. Instead, it aims to enrich modalities for further research on the effectiveness of access to information in enhancing climate adaptation. Therefore, it explains the implementation of access to information in Nusa Penida using the data obtained through qualitative legal research encompasses document analysis, in-depth interview, and observation.²⁰⁴ Firstly, documents from the off-line and online source were identified. A non-government website compiling past researches related to Nusa Penida and Spatial Planning is chosen as a primary document for analysis. Twenty-two websites were assessed with the characteristics of access to information. The websites were accessed in at least four different times²⁰⁵ to cover the possibility of changes in the website. Secondly, semi-structured interview with locals in Nusa Penida was conducted to discover their perception and experiences on accessing

²⁰² See introduction.

²⁰³ Victoria L. Lemieux and Stephanie E. Trapnell (2016) 'Public Access to Information for Development: A Guide to the Effective Implementation of Right to Information Laws', Directions in Development. Washington, DC: World Bank. doi: 10.1596/978-1-4648-0879-1. License: Creative Commons Attribution CC BY 3.0 IGO, Chapter I.

²⁰⁴ Lisa Webley, 'Qualitative Approaches to Empirical Legal Research' in Peter Cane and Herbert M. Kritzer (Ed.), *The Oxford Handbook of Empirical Legal Research*, 2012, DOI: 10.1093/oxfordhb/9780199542475.013.0039, p.3.

²⁰⁵ 25 March 2019, 18 May 2019, 18 June 2019, 20 July 2019.

information for enhancing adaptability with the changing environment.²⁰⁶ Third, the mechanism of access to information is exercised by requesting information on climate adaptation risk assessment. The request is filed to Information and Documentation Official of Bali Province, Klungkung Province, Environment and Forestry Agency of Bali Province, and Ministry of Environment and Forestry.

The discussion that follows is sub-divided into four sections and a conclusion. The first section of this chapter depicts the demands of climate adaptation measure. The next section explains the infrastructure of access to information applicable in Nusa Penida and whether the infrastructure has been used for implementing climate adaptation along with the explanation of the identified opportunities and challenges. This section comprises two parts, encompasses the implementation of active duty and the implementation of passive duty. The last section raises the issue of culture in Nusa Penida and how it associates with access to information on climate adaptation.

A. The Demands of Climate Adaptation in Nusa Penida

Nusa Penida Island is part of Klungkung Regency in Bali Province. Administratively, Nusa Penida Island and the other two islands, Nusa Ceningan and Nusa Lembongan, are part of the Nusa Penida sub-district. It is situated in the southeast of Bali Island. The area of the Nusa Penida Island is twenty-eight times smaller than Bali Island.²⁰⁷ This island lays in the west corner of Coral Triangle together with the other two islands. Compare to the other two islands, Nusa Penida is the most underdeveloped. The area has been designated as Marine Protected Area (MPA)²⁰⁸ and Bali Starling Sanctuary;²⁰⁹ the latter is protected by traditional law. The Nusa Penida MPA hosts 296 coral species and 576 reef species.²¹⁰ As an island dominated by karst, most of the island covered by infertile

²⁰⁶ See Appendix III.

²⁰⁷ Bali island is 542.756 ha, Nusa Penida island is 19.272 ha.

²⁰⁸ Ministry of Marine and Fisheries Decision concerning Waters Conservation Area Nusa Penida Klungkung Regency in Bali Province, Keputusan Menteri Kelautan dan Perikanan Nomor 24/Kepmen-KP/2014 tentang Kawasan Konservasi Perairan Nusa Penida Kabupaten Klungkung di Provinsi Bali.

²⁰⁹ A community protected haven and conservation breeding centre for IUCN-listed Critically-endangered Bali Starlings. See: Friends of the National Parks Foundation, "Bali Starling Conservation Project on Nusa Penida Island" <<https://www.fnpf.org/what-we-do/nusa-penida-bali/wildlife/bali-starling-conservation-project>> accessed 12 July 2019.

²¹⁰ Coral Triangle Center, 'Nusa Penida – A Tropical Marine Paradise' <<https://www.coraltrianglecenter.org/nusa-penida-mpa/>> accessed 15 July 2019.

soils dominated by weathered limestone.²¹¹ The dry season is relatively more prolonged in the island while the type of soil tends to absorb rain quickly, makes it prone to water scarcity.²¹²

In Nusa Penida, it is hard to distinguish nor evince whether the attribution of climate change to a particular environmental event exists or the latter is merely another circumstantial event.²¹³ The respondents are all aware of the threat of drought, longer dry season, and less rain intensity at least since the past two years. However, they do not bring up climate change as a trigger. They believe that the events, such as water scarcity and longer dry season, are something given or a life test. At some point of the interview they often give credit to development, which allows them to access basic needs from the market. Unfortunately, research concerning climate change impact in Nusa Penida is still rare, or at least not well-documented.²¹⁴ This research only managed to find one research focusing on climate change, arguing the causality between climate change impact in the form of sea-level rise and higher temperature with coral bleaching in Nusa Penida.²¹⁵

Meanwhile, the trace of development has increasingly influenced people's lifestyle. There are four examples to highlight here: the use of plastic, teak wood planting, and seaweed farming, and tourism.²¹⁶ Plastics entered Nusa Penida without the knowledge

²¹¹ Giambelli, Rodolfo A. *Working the Land Babad as Forest Clearing and the Analogy between Land and Human Fertility in Nusa Penida (Bali)*, Volkenkunde 155, 1999, No. 4, Leiden, 493-516, < <http://www.kitlv-journals.nl>>, accessed 2 December 2018, p.1.; Godi Dijkman, 'Nusa Penida, a tropical karst island (Helbig, 1941)' <<http://nusapenida.nl/index.php/nusapenida-media/precolonial-history/nusa-penida-a-tropical-karst-island-helbig-1941>> accessed 12 July 2019, quoting **Helbig, Karl** (1903-1991) - Nusa Penida, eine tropische Karstinsel; In: Mitteilungen der Geographischen Gesellschaft in Hamburg, Band 47, no.25 (1941), p.393-409; Godi Dijkman, 'Geology (Astiti/Dariusman, 2005)' <<http://nusapenida.nl/index.php/geology/geology-astiti-dariusman-2005>> accessed 12 July 2019, citing Astiti, Ni Komang Ayu and Abdillah Dariusman, 'Pemanfaatan Sumber Daya Alam untuk Mendukung Kegiatan Religi dari Manusia Prasejarah di Pulau Nusa Penida, Kabupaten Klungkung, Provinsi Bali' Laporan Penelitian Subbid. Laboratorium Artefak dan Ekofak, Bidang Arkeologi Sejarah dan Arkeometri; Jakarta 2005, pp. 43.

²¹² Godi Dijkman, "Nusa Penida, a tropical karst island" by Karl Helbig, "Nusa Penida, eine tropische Karstinsel", Hamburg-Blankensee, Mit 2, textfiguren und 2 Tafeln, Abb. 1-6, in Mitteilungen der Geographischen Gesellschaft in Hamburg, Band 47, 1941, Mitteilungen XI.VII, Koninklijk Instituut voor Taal, Land en Volkenkunde, 4-3-1988 (j-285-1/), p.393-409, translated version by Godi Dijkman <<http://www.nusapenida.nl/index.php/nusapenida-media/precolonial-history/nusa-penida-a-tropical-karst-island-helbig-1941>> accessed 15 July 2019.

²¹³ Godi Dijkman, "Climate (Giambelli, 1995)" <<http://nusapenida.nl/index.php/geology/climate-giambelli-1995>> quoting **Giambelli**, Rodolfo A. - Reciprocating with Ibu Pretiwi. Social organisations and the importance of plants, land and the ancestors in Nusa Penida, Department of Anthropology Research School of Pacific and Asian Studies The Australian National University. Canberra 1995, p.2-4.

²¹⁴ The author carefully search the information in Indonesian National Library, Tilburg University Worldcat, and list of research in Nusa Penida in <http://nusapenida.nl/>.

²¹⁵ D Susiloningtyas, T Handayani dan A N Amalia, *The Impact of Coral Reefs Destruction and Climate Change in Nusa Dua and Nusa Penida, Bali, Indonesia*, IOP Conf. Series: Earth and Environmental Science 145 (2018) 012054, doi: 10.1088/1755-1315/145/1/012054, p. 7.

²¹⁶ Observation, interview and literature review. The primary source for the latter is < <http://nusapenida.nl/>>.

on the appropriate waste treatment nor its dangerousness. We can see vast stacks of plastic wastes in many spots of Nusa Penida, which is very alarming. Another example is the invasion of teak wood, particularly in the eastern part of Nusa Penida, which replacing once agricultural land or forest to scattered teak trees.²¹⁷ The teak trees covers the area from the sun, preventing plant underneath to grow.

One of the most notable examples is the popularity of seaweed farming on the island. The arrival of seaweed farming was booming since the early 1980s. Seaweed farming used to be the primary source of income for some villages.²¹⁸ Now, seaweed farming has been abandoned because the cultivation area is getting more and more infertile. The three respondents and the parents of the young respondents were all invested in seaweed farming. Three respondents believe that the high volume of leaching chemicals from the boats is the primary threat to seaweed crop failure. One respondent who is now the owner of a bungalow, believe that the seaweed crop failure was the consequences of intensive utilization for years so that the area needs time for self-healing before it is fertile again. Both arguments could be scientifically valid, but this research could not ensure.²¹⁹

Since the past three years, tourism entered Nusa Penida and continued to overgrow. This development is triggered by the Spatial Plan of the Klungkung Regent in office. According to the testimony of the respondents, the current Regent put very much attention to the development in Nusa Penida, something the people have been longing to receive. The signs of tourism infrastructure are blooming in every part of the islands. Many homestays built on the island as many more tourists to Bali pay visit to Nusa Penida. More tourism infrastructures are under constructions. Some established close to the beaches, some far in highland. They continue to alter the landscape in many spots of the island.

Among the many consequences the tourism infrastructure poses is the increasing need for water. Access to water has always been an issue for Nusa Penida people. In the past, they have to go to the beach where they can access water. One respondent

²¹⁷ The author aware of the traditional law which only allow the use of certain area for agriculture in restricted manner, hence this information is premised on interview and observation without knowing whether the area where the teak wood planted were supposed to be protected area according to traditional law or not. For information concerning rituals and traditions concerning land utilization see *inter alia*: R. Giambelli, (n 211), *ibid*.

²¹⁸ See also: Saiful Marbun and Stuart Pearson, *Indonesian Blue Economy Policies 2012: Threats and opportunities in Nusa Penida*, <<https://www.researchgate.net/publication/280843813>> accessed 14 July 2019.

²¹⁹ Due to lack of scientific literature concerning climate change in Nusa Penida, (n 214).

remembered that he has to get the water from the beach twice a day although he lives in the highland. Nowadays, the governments' drinking water company reaches Nusa Penida. It helps people get better access to water, even though some respondents only get water twice a week.

Meanwhile, many people still depend on traditional livestock and agriculture for subsistence while earning little money to purchase some basic needs such as electricity, rice, and cooking oil. Three respondents opine that some people choose to maintain such lifestyle because they have reached the highest state of richness: the richness at heart, where they are not working for more than their subsistence need. Some people still plant corns and cassava during the planting season, but when the season is not supportive till causing the crop failure, they leave the planting and focus on the cattle. Corn and cassava were not the staple food anymore; only some older people still eat them as the main course sometimes. The most residences now eat rice which they bought from the market since they cannot plant rice themselves in Nusa Penida.

From the explanations above, we can conclude that the challenge for adaptation is not only dealing with the given geographical conditions but also the menace of unsustainable development in the island. People are striving to deal with the hardship of nature while adapting with the economic development intrusion brought by the increasing tourism. The short-sighted view will see economic development as one way to adapt because it brings better access to, among others, money, water, food, electricity, and education. In the long-term, the development can be counter-productive for adaptation. Nonetheless, it is safe to say that this island is prone to environmental threat, and climate change would make it worse. Water scarcity, drought, infertile soil, severe weather, and coral bleaching are among the challenges this island have been facing, although presumably not because of climate change as a single nor significant determinant factor.

With the situation explained earlier, we must see whether the implementation of access to information plays a role in enhancing climate adaptation in Nusa Penida. It brings us to the following three sections in this chapter.

B. Implementation of Passive Duty

As explained in Chapter III, every public institution is obliged to provide access to public information. They have to provide the information upon request, hence passive duty. They also have to provide a list of public information. Some information should be made available periodically, immediately and/or at any time.

The government of Bali Province established the access to information website called SIKI²²⁰, in the Indonesian language is an acronym to the information disclosure system in Bahasa (Indonesian language). SIKI provides a platform to file online information request, list of public information, and some downloadable public information. It also provides customer service and list of public information pages. However, information related to climate adaptation or other environmental matters does not exist in the list of information or downloadable public information.

During this research, a request to access information on Action Priority for Climate Adaptation and Assessment on Vulnerability and Risk of Climate Change filed through SIKI. The official responded within the time limit established by PIDA, that was in the 4th working days after the information request received. The respond, however, suggested to file the same request to another authority: Meteorology, Climate and Geophysics Agency (BMKG), provided that, according to the officer behind SIKI, BMKG is responsible for producing the requested information. The respond was inconsistent with the Ministry of Environment and Forestry Regulation Number P.33/Menlhk/Setjen/Kum.1/3/2016 which order the local government to integrate the information as requested in Provincial Spatial Planning, Provincial Long-Term Development Planning, and Provincial Short-Term Development Planning. These documents are not to be produced by BMKG but a joint product of executive and legislative government at the provincial level in the form of provincial government regulation.²²¹

The same request also filed to Environmental Agency of Bali Province and Klungkung Regency. Until this research is done, the latter gave no response at all. The former has not answered the request formally but gives information that the Agency established the document in 2018. The fact that the document was made but not ready to be published

²²⁰ See: The Government of Bali Province, Information Disclosure System, <<http://siki.baliprov.go.id/>>.

²²¹ Indonesia, Spatial Planning Act, Undang-Undang No. 26 tahun 2007 tentang Penataan Ruang, art.23(6), art.26(7), see unofficial translation <<http://extwprlegs1.fao.org/docs/pdf/ins163446.pdf>> accessed 31 July 2019.

showed the lack of effort to actively disseminate such information. The requested document is also not in the list of public information, indicating the flaws in the implementation of passive duty despite the good quality of SIKI.

As a last resort, the same request was filed to the Ministry of Environment and Forestry via electronic mail. The first respond received four days after the day of request, informed about the need for extra time to prepare the answer to the request. The second respond, issued 12 working days after the request, explained that the Bali Province is currently conducting a preliminary identification for Adaptation Planning, comprises food security, energy, health, housing, infrastructure, coastal and small islands, tourism and agriculture.²²² The responding letter states that the requested data is accessible through one of the ministry's site. However, the data couldn't be found on the site.²²³

From the interview and observation, this research finds that the people have not considered SIKI as leverage for a social movement. The respondents imply that information on the environment is not something they would ask from the government except when related to economic needs. They usually prefer hearing as a means to deliver a message or request to the government.²²⁴ SIKI announces that there is 45 information request filed through the system without description on the kind of data. Meanwhile, the Information Commission of Bali Province reported only five cases brought before the commission last year, two of which concerning the environment but none related to climate change nor Nusa Penida.

C. Implementation of Active Duty

The first-tier outcome of active duty is that people can understand the information thoroughly. It entails active dissemination and education which fit with local language and culture.²²⁵ The following assessment on active duty dwells through an assessment on local governments' spatial and development planning and assessment on national and local governments' website.

²²² Head of Information and Documentation Management Officer Ministry of Environment and Forestry, S.498/HUMAS/PPID/Hms.3/7/2019, 1 August 2019.

²²³ See Appendix II number 5. The author revisits the website in 6 August 2019.

²²⁴ Respondents' testimony.

²²⁵ Doha Work Programme, (n 35), Appendix para.19; PIDA, (n 111), art.9(4),10(2).

The administrative document reviewed consists of Spatial Planning of Bali Province and Klungkung Regency, Development Planning of Bali Province and Klungkung Regency. Based on MoEF Regulation P.33/20, the climate adaptation risk assessment should be integrated into these documents.²²⁶ Bali Province Development Plan incorporates climate adaptation challenges as one of the priority issues. Among the identified threats are water scarcity, extreme weather in a coastal and small island, and a decrease in agricultural productivity.²²⁷ The existence of climate change risk identification in the plan is one way of integrating climate vulnerability identification as mandated by the MoEF regulation. However, there is no concrete plan mentioned in the Development Plan to tackle such challenges. Meanwhile, in Bali Province's Spatial Plan, climate adaptation measure focuses in increasing agricultural productivity.²²⁸ No concrete planning for Nusa Penida island addressed in these two instruments.

The Spatial Planning of Klungkung Regency designates Nusa Penida as the Agri-business Area²²⁹, Minapolitan Area²³⁰, Bali cow nursery center,²³¹ and tourism²³². On the other hand, it also emphasizes the status of Nusa Penida as a marine protected area to preserve the ecosystem of mangrove, seagrass, coral reef, fisheries while developing marine tourist attraction simultaneously.²³³ Spatial Planning emphasizes the agriculture system which adaptive to climate change as one of the development strategies in Klungkung Regency.²³⁴ It is the only provision that mentions climate adaptation. No stipulation in the plan referred to climate change explicitly. However, some plans address strategy attributed to the adaptation efforts. For instance, the source of electricity in Nusa

²²⁶ MoEF, (n 160), art.2,4e,9,10.

²²⁷ Bali Province Regulation No. 3 year 2019 concerning Bali Province Middle-term Development Plan, Peraturan Daerah Provinsi Bali No. 3 tahun 2019 tentang Rencana Pembangunan Jangka Menengah Daerah Semesta Berencana Provinsi Bali tahun 2018-2023, Annex p.II-22, II-41, IV-20.

²²⁸ Bali Province Regulation No. 16 year 2009 concerning Bali Province Spatial Plan year 2009-2029, Peraturan Daerah Provinsi Bali No. 16 tahun 2009 tentang Rencana Tata Ruang Wilayah Provinsi Bali tahun 2009-2029, art.60(3).

²²⁹ Klungkung Regency Regulation No. 1 year 2013 concerning Klungkung Regency Spatial Plan year 2013-2033, Peraturan Daerah Kabupaten Klungkung No. 1 tahun 2013 tentang Rencana Tata Ruang Wilayah Kabupaten Klungkung tahun 2013-2033, art. 10.c.

²³⁰ Minapolitan is described as an area designated for the center of coastal production system and coastal and sea resources utilization related activity. *ibid*, art. 1.75, art.10(f).

²³¹ *ibid*, art.10(g).

²³² *ibid*, art.10(a).

²³³ *ibid*, art.12(b).

²³⁴ *ibid*, art.12(i).

Penida is a combination of diesel, water, and solar energy.²³⁵ The Spatial Planning identifies eight water springs in Nusa Penida,²³⁶ and allowing government's business entity to provide centralized water sources to help the people cope with water scarcity.²³⁷ The Planning also incorporates identification of disaster-prone area as well as the initial development plan for safety infrastructures.

In general, Spatial Planning gives sufficient necessary information concerning the development plan that related to climate adaptation in Nusa Penida. It opens the opportunity for the people to monitor the application of such plans using instruments of participation. Unfortunately, this research cannot find the evidence on the dissemination of the information related to climate adaptation in Spatial Planning. Three respondents explained that local government from time to time visited Nusa Penida and arranged forums for disseminating particular program planned in the area. However, the data from the forum is not available in writing, so this research cannot make a further conclusion in this matter.

Another way for enhancing information outreach can be obtained through the online platform. Here, the assessment of governments' websites was conducted to 17 (seventeen) national government websites and 5 (five) local government websites.²³⁸ The national government websites were chosen base on the list of websites mentioned in the Third National Communication to the UNFCCC secretariat as a platform to enhance climate change actions. The assessment highlight three things. First, from the total 22 individual websites, only three provide contents which consistent with the description and objective of the website, one of which dedicated primarily for climate change information. Consecutively, they are Fire Risk System, SADEWA, and SRIRAMA. However, the latter two websites were not designed for laypersons. Second, there is no link to any of the national websites in the local government's website. Third, local government websites are lack of information and poor. The main websites of Bali Province and Klungkung Regency government provide no information at all concerning government's

²³⁵ *ibid*, art. 25(2).

²³⁶ *ibid*, art.27(4).

²³⁷ *ibid*, art.28(4).

²³⁸ See Appendix II for the detail of website assessments.

activity,²³⁹ moreover activity related to climate adaptation. The website of Environmental Agency of Bali Province only provides information on the institutional profile, some activity news report, and link to SIKI.²⁴⁰ The website of Environmental Agency of Klungkung Regency is still underdeveloped.²⁴¹ From these overviews, we learn that the current quality of online information platforms is not sufficient to cover the information on climate adaptation.

D. Culturally Preferred Method

Considering the inadequate outreach of the implementation of passive and active duty concerning information on climate adaptation for the people in Nusa Penida, this section tries to bring up cultural perspectives which need to be taken into account when deciding the culturally preferred method for implementing access to information in Nusa Penida.

One of the most notable characteristics of Bali Province is that the people there are still adhering to customary law in their daily life (the customary law usually called '*awig awig*').²⁴² The implementation of customary law, however, does not undermine the positive law applied across Indonesia. The application of customary law reflected primarily on the *Tri Hita Karana*. As far as the conflict is resolvable through customary law to the extent that does not violate positive law, customary law usually prevails.

The basic principle of the life of Nusa Penida people, just like Balinese generally, is the principle of *Tri Hita Karana*. The principle is about maintaining harmony with the inseparable relationship with God(s), people, and nature. *Tri Hita Karana* is one of the fundamental principle underlying the spatial planning of Bali Province and Klungkung Regency. This principle refers to the Balinese principle of balance and harmony in the relationship between human and gods, human and human and human and the environment as the source of welfare, peace, and happiness for human life.²⁴³

²³⁹ <http://www.klungkungkab.go.id/> (moving pictures only), <http://www.baliprov.go.id/> (moving pictures and link to regency's websites only) accessed at least three times: 24 April 2019, 20 June 2019, 18 July 2019.

²⁴⁰ <<http://blh.baliprov.go.id/>> accessed at least three times: 24 April 2019, 20 June 2019, 18 July 2019.

²⁴¹ <<http://dlhp.klungkungkab.go.id/>> accessed at least three times: 24 April 2019, 20 June 2019, 18 July 2019.

²⁴² Tjokorda Istri Putra Astiti, Anak Agung Istri Ari Atu Dewi, and Michael Faure, *Tourism Development and Customary Land Law in Bali: the Case of the Tenganan Pagringsingan Village*, *Southwestern Journal of International Law*, 2013, p.2 Refers to V.E. Korn, *Het Adatrecht van Bali* (the Customary Law of Bali), 1932.

²⁴³ Klungkung Regency Spatial Plan, (n 229), art.1.6 and 2(a).

The respondents all believe in an inseparable connection and causality between human activities and natural consequences. The threshold for the human's action is 'balance,' be it balance in the human-human relationship and human-nature relationship in light with the God's aim. When the nature act unusually, they associated it with God's anger to human action. To calm God's anger and as a preventive measure, they have to conduct rituals. For instance, when the rain season comes late (a phenomenon they called *Ngunye*), they arrange special prayer or rituals.²⁴⁴ This belief taught them to ask for God's help whenever disaster occur. They also believe that neglecting tradition and ritual will lead to bad consequences, including environmental catastrophe.

Besides the religious belief, Balinese, in general, preserve cultural knowledge in art and philology. One respondent tells folklore which he relates with the poor environmental condition in Nusa Penida. The folklore is about the lapse of the former native King of Nusa Penida who believed as descendants of Gods. A King from Bali island defeated the King of Nusa Penida. The latter enchanted grasses (*dukut*) into a soldier that overthrow the King of Nusa Penida (*dalem sawang*). The King of Nusa Penida beheaded in his throne in *Puncak Mundi*. Before his death, he cursed the water springs in *Puncak Mundi* so that the water runs to the other side of the island, to *Peguyangan* in *Tembeling*. Some believe that the curse was intended to cause water scarcity in Nusa Penida as a challenge for whoever rules Nusa Penida. In the past, according to the folklore, Nusa Penida was fertile. The curse turns the island upside down so that the mainland now is covered in rocks rather than soil.

In another folklore, the King in Nusa Penida, called King Bungkut,²⁴⁵ is introduced as a fierce man with a bad attitude. Once he was defeated, he promised to spread disaster once every year in the area where his country formerly exists, the now Nusa Penida.²⁴⁶ The ashes of King Bungkut contained in one of Pura (Balinese house of worship) in Ped Village and locals still worshipping him until now to prevent his curse.

²⁴⁴ Godi Dijkman, "Tertiary karst (Helbig, 1941)" <<http://www.nusapenida.nl/index.php/geology/tertiary-karst-helbig-1941>> quoting Karl Helbig, "Nusa Penida, eine tropische Karstinsel" in *Mitteilungen der Geographischen Gesellschaft in Hamburg*, Band 47, no.25, 1941, p.393-409.

²⁴⁵ *ibid.*

²⁴⁶ Godi Dijkman, "Bungkut Play", <http://nusapenida.nl/index.php/culture/bungkut-play> quoting Spies, Walter & Beryl de Zoete – *Dance & Drama in Bali*, Periplus 1938/2002, p.301-303; Interview with Ida Bagus Putu Surya, and Ida Bagus Putu Ariana, (Surya's nephew), Kerambitan, June 2007.

From these stories, we can learn that Nusa Penida has been associated with an area cursed with the disadvantaged environmental condition. The respondents implied that they believe Nusa Penida people who stay in Nusa Penida island were the chosen ones who escaped natural selection. They are the ones who can strive to live there despite the given environmental adversity on the island. They believe that even though Nusa Penida people migrate to other places, they will come back if Gods wanted them to. The sign of being 'called' by God was delivered through omen, such as in the form of sudden economic difficulties when they are overseas. Therefore, no matter how difficult the situation in Nusa Penida, local people believe that some people are destined to stay. Those who stay should conduct all rituals which preserved across generation on the island. Even those who live overseas must go back some times to conduct rituals.

This belief could hamper the adaptation measure that demands migration or any measures that prevent them from worshipping gods. However, the older respondents opine that young people do not really understand the background and philosophy of the traditions. This research could not firmly confirm this notion, but it is worth to point this out as a matter of consideration.

Nusa Penida, not unlike other parts of Bali, still practicing traditional governance system.²⁴⁷ The island divided into 16 traditional villages (*Desa Adat*). Every *Desa Adat* has one head called *Bandesas*. *Bandesas* works together with *Prajuru*, other administrators. There are also institutions within *Desa Adat* which specialized for resolving cultural/*adat* conflict called *Kerta* and acting as an advisory body to *Bandesas* called *Sabha*. Every *Desa Adat* usually comprises of several smaller sub-village called *Banjar Adat*. They have their traditional law called *Awig-Awig*, which govern three aspects of Balinese life: the relation of the people with gods (*Parahyangan*), with society (*Pawongan*) and with the environment (*Palemahan*). *Palemahan* primarily refers to the ownership and utilization of land and resources it contains.

Two respondents explain the mechanism of filing a complaint or bring a case for resolution. The people can file any complaint or notion in stages, sequentially, through *Banjar*, *Desa Adat*, and *Majelis Alit*. The *Majelis Alit* sat on one district, encompasses some villages. In Nusa Penida, *Majelis Alit* is responsible for conflict resolution within the Nusa

²⁴⁷ Bali Province Regulation No. 4 year 2019 concerning Traditional/*Adat* Village in Bali, Peraturan Daerah Provinsi Bali No. 4 tahun 2019 tentang *Desa Adat* di Bali.

Penida District, comprises Nusa Penida island, Nusa Ceningan island, and Nusa Lembongan island. However, the respondents do not recall any conflict related to the environment except related to land ownership and negligence in worship.

Since 2019, *Desa Adat* now holds administrative authority delivered by the central, provincial, and local government which includes, among others, preserving *Palemahan* (the environment).²⁴⁸ In the past, the institution that conducting administrative authority was a separate institution from the traditional institution.²⁴⁹ The fusion of function to *Desa Adat* is relatively new, although the traditional institutions have preserved from generations to generations. Thus far, it is still not clear as to which authority within *Desa Adat* the obligation on access to information assigned. However, this structure definitely should be involved in the implementation of access to information and climate adaptation because of two reasons: (1) *Desa Adat* fulfil the criteria of public authority in PIDA;²⁵⁰ and (2) the system is culturally more accessible and acceptable for the people of Nusa Penida as they tend to adhere to *Awig-Awig*.

E. Conclusion

This chapter focuses on describing the implementation of access to information on climate adaptation in Nusa Penida. The empirical research finds that the system of access to information has either limited access (rely too much on online platform), not user-friendly or weak in quality of information. Meanwhile, Nusa Penida is vulnerable because of its disadvantage in the inland natural resources and access to development while at the same time prone to the intrusion of unsustainable development trend.

The implementation of access to information concerning climate adaptation in Nusa Penida thus far rely on the information request system, and information platforms built by the national and provincial government. Meanwhile, the information on climate adaptation in the administrative document is lacking. Any information on climate adaptation tends to be treated as another kind of environmental events. The issue of climate adaptation itself has not become a major concern in the spatial and development

²⁴⁸ *ibid*, art. 40.

²⁴⁹ *ibid*, art. 25.

²⁵⁰ PIDA, (n 111), art. 1.8.

plan in Nusa Penida. The only explicit provisions of which climate adaptation should apply concerns agricultural productivity, but the implementation of such measure was not detected during this field research.

These findings are not sufficient to depict the relationship between the established accesses to information, either through active or passive measures, with the effort to enhance climate adaptation. Nevertheless, Nusa Penida has a unique governance structure and strong cultural value that needs to be taken into account when implementing access to information and adaptation.

Chapter V

Conclusions

The central research question of this thesis was: *to what extent the current legal framework on access to information accommodated climate adaptation?* The research takes the case of Nusa Penida in Indonesia, employing assessment to international legal instruments and Indonesian regulations concerning access to information and climate adaptation and empirical research on the implementation of access to information in Nusa Penida.

The trigger of this research premises on preliminary findings on the unclear conception of access to information for enhancing climate adaptation compare to the right to access information despite the strong provision in Climate Change Treaties. Meanwhile, the evaluation of the role of access to information in enhancing climate adaptation is lacking.

In the second chapter, this research scrutinized provision concerning access to information in climate change treaties by focusing on its role in enhancing climate adaptation. It finds that the Paris Agreement designed public access to information as one of supporting instruments which have a role as one of the obligations of conduct to enhance other actions established in Paris Agreement, including climate adaptation. Besides, access to information in climate change treaties should be implemented in conjunction with other actions within Actions for Climate Empowerment (ACE), namely education, training, capacity building, and participation in the decision-making process. However, there is no clear indicator for the implementation of access to information which constitutes as successfully 'enhance' climate adaptation in the text of treaties nor their subsequent documents.

This construction is different from the concept of access to information as a 'right' in the Aarhus Convention and Escazú Agreement. However, there are debates whether access to information is entitled as a fundamental human right or merely ancillary rights or procedural rights. This debate is still relevant for parties to Paris Agreement, which are not a party to either Aarhus Convention or Escazú Agreement. The significance of the different construction is related to the legal consequences for states failing to implement

access to information and how to measure whether the state has failed: should human right enforcement be applied?

The guideline to implement access to information specifically for environmental matters have been established, albeit in a non-binding form through Bali Guidelines as the guideline to implement Principle 10 Rio Declaration. To date, Bali Guidelines, Aarhus Convention and Escazú Agreement can be used, and some indeed have been used as the benchmark for implementing access to information, despite the latter two were not legally binding for Indonesia. The discourses on the operationalization of the Paris Agreement have hinted parties to model those three instruments for establishing domestic legislation and designing mechanisms on access to information concerning climate change. The guidance in the three instruments constructing access to information as entails two duties: passive duty to prepare and share information upon request and active duty to disseminate information concerning environmental matters. Information pertaining to climate adaptation, unfortunately, has not been emphasized in the three instruments. However, the instruments give essential characteristics to help determine the necessary information which left to the national government to decide to take into account local distinctiveness. One of the essential characteristics is the quality of outreach, which implies consideration to, such as, local culture, language, internet access, and literacy. This inference brings to the next chapter, which discusses the implementation of access to information in Indonesia's national legislation.

In the third chapter, the national legislation pertaining to access to information and climate adaptation were assessed. Apparently, constitution of Indonesia and legislation construct access to information as a human right. The Environmental Protection and Management Act further emphasized that the right to access information is ancillary to the right to sound and healthy environment. There is no explicit reference to access to information on climate adaptation yet nor the hint to operationalize it, but there are obligations to integrate climate adaptation in environmental planning and strategic impact assessment. Meanwhile, Indonesia has a regulation that specifically addresses the operationalization of access to public information, namely Public Information Disclosure Act (PIDA). PIDA demands the implementation of the passive duty to give information upon request and active duty to disseminate information by categorizing information into three: periodically published, immediately informed and available at any time. It also

highlights the importance of making the information easily accessible in understandable language.

Using the technical regulation under PIDA, this chapter managed to identify some information which could be deemed essential for climate adaptation and determine the status of such information according to PIDA's categorization of information. Among others, the information refers to national adaptation plans, environmental planning, and strategic impact assessment. However, the content of information to be incorporated into those documents are not explained. This chapter identifies some technical information which mentioned in several regulations, administrative documents, and internationally acknowledged researches.

Furthermore, this chapter briefly highlights the duty bearers to provide access to information which find that even though public authority refers to only government, and institutions which receive state funding or other social funding, there is growing debate that private entity might be held responsible also to conduct passive and active duty as far as its social and environmental activities concerned. This chapter was concluded in describing the dispute mechanism concerning the information disclosure, which is a separate entity than institutions which authorized to resolve human rights conflict. The dispute concerning access to public information can be resolved via Public Information Commissions premises in every province and still can be appealed through the Civil Court or Administrative Court and cassation through Supreme Court as a last resort.

The established guidance and mechanism on implementing access to information in Indonesia cannot guarantee the effectiveness in achieving climate adaptation. As the regulations provide minimum guidance on what information is necessary for climate adaptation, this research proceeds further to see the implementation of access to information on climate adaptation in Nusa Penida.

The fourth chapter attempted to describe various aspects which depict the traces of implementation of access to information concerning climate adaptation in Nusa Penida which derived from the combination of literature review, observation, semi-structured and in-depth interview, and information request simulation. The first part of this chapter depicts the demands of climate adaptation as vulnerable because of the scarcity of inland natural resources and the intrusion of unsustainable development. Access to information system established by national and local government have not been used as a means for

dealing with climate adaptation. Tremendous efforts have been put to establish online platforms to increase outreach, but apparently, the quality of information and the accessibility of the websites were poor.

In addition, this chapter highlights the cultural structure in Nusa Penida, which perceived as both modality and challenge for implementing access to information to enhance climate adaptation. The first is that the belief on the inseparable connection between a human-nature-god relationship which reflected not only in private social life but also in the governance structure. On the one hand, it poses a challenge if adaptation measures require significant changes to any of the belief—such as preventing the people from conducting rituals and asking them to leave the island. On the other hand, the belief which has been realized in the current governance structure called *Desa Adat* and its regulation called *Awig-Awig* have potential to strengthen access to information.

Finally, the finding in this research underlines that the regulation from international law and national law provide quite detail guideline to implement access to information on climate adaptation except for the guideline on what constitutes as information on climate adaptation itself. The correlation between the implementation of access to information and enhanced climate adaptation, as depicted in the case of Nusa Penida, do not exist yet. Therefore, measuring the effectiveness of access to information for enhancing climate adaptation requires a more in-depth empirical research, which we suggest as the subject for further research that can contribute for designing future regulatory improvement for making access to information work to enhance climate adaptation.

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Appendix I

COMPARISON BETWEEN THE THREE BENCHMARKS OF LEGISLATION CONCERNING ACCESS TO INFORMATION ON ENVIRONMENTAL MATTERS

NO.	CHARACTERISTICS	BALI	AARHUS	ESCAZÚ	NOTES
<i>LEGAL STANDING</i>					
1.	Natural or legal person	G.1	2.4	2(d)	
2.	No special interest needed (without an interest having to be stated)	G.1	4(1)(a)	5(2)(a)	
<i>PROCEDURAL FRAMEWORK</i>					
3.	Prompt information to the applicant whether the requested information is in possession or not of the competent authority receiving the request and inform applicant of the public authority to which it believes it is possible to apply for information requested or transfer the request to that authority and inform the applicant accordingly	G.1	4(5)	5(2)(b); 5(15)	Bali use general term: "timely"
4.	Condition of request refusal	G.3	4(3); 4(4)	5(6)	
5.	Prompt information on refusal	-	4(7)	5(12)	
6.	Refusal must be in writing when the request is in writing or the applicant so requests and includes reasons for the refusal	-	4(7)	5(5)	
7.	The reasons for refusal or exceptions must be interpreted restrictively	G.3	4(4)	5(8)	
8.	When applying the public interest test, the competent authorities shall weigh the interest of withholding the information against the public benefit of disclosing it	G.3	4(4)	5(9)	
9.	The burden of proof on refusal is on the authority	-	-	5(8)	

NO.	CHARACTERISTICS	BALI	AARHUS	ESCAZÚ	NOTES
10.	Being informed of the right to challenge and appeal when information is not delivered, and of the requirements for exercising this right	-	4.7	5(2)(c); 5(3); 5(5)	
11.	The expense for accessing the information should be affordable	G.1	4(8)	5(17)	
12.	The length of time of the process should be measurable	G.1	4(2)	5(12); 5(13); 5(14)	
13.	The access to information is to be processed upon request	G.1	4(1)	5(2)	Passive duty
14.	Format as requested by the applicant if available	-	4(1)(b)	5(11)	
15.	Disseminate immediately all information which could enable the public to take measures to prevent or mitigate harm, in the event of any imminent threat	G.6	5(1)(c)	6(5)	
16.	At no cost, if needed, any charge must within reasonable amount	G.1	4(8)	5(17)	
17.	When the requested information does not exist or has not yet been generated, the applicant shall be so informed, with explanation, within certain periods	-	-	5(16)	

OBJECT CRITERIA

18.	The information concerned is environmental information which held by public authorities	G.1	4(1)	5(2)	
19.	Environmental information is that of within the public domain	G.2	2(3)	2(c)	Aarhus and Escazú do not mention public domain
20.	Mention some information that need to be disseminated	G.2; G.4; G.6; G.10; G.11; G.8;	5(1)(a); 5(1)(b); 5(2)(b); 5(3); 5(4); 5(5); 5(6);	6(1); 6(2); 6(3); 6(4); 5(9); 6(7); 6(8); 6(9); 6(10)	

NO.	CHARACTERISTICS	BALI	AARHUS	ESCAZÚ	NOTES
		G.23; G.24	5(7); 5(8); 5(9)		
21.	Possibility to allow partial information to be accessed, ensure that if information exempted from disclosure can be separated, the other information still be made accessible	-	4(6)	5(10)	
22.	Information held by public authorities only	G.1	2(2)	2(b)	Aarhus and Escazú define public authority in broader terms
INSTITUTIONAL FRAMEWORK					
23.	Special facilitation and assistance to vulnerable groups, in the various languages used in the country, and prepare alternative formats	G.1	-	5(3); 5(4); 6(6)	Bali uses general term: 'effective'
24.	Provide some categories for exceptions/refusals	-	4(3); 4(4)	5(6); 5(8)	Escazú asks parties that the reasons of refusal shall be legally established in advance and be clearly defined and regulated, taking into account

NO.	CHARACTERISTICS	BALI	AARHUS	ESCAZÚ	NOTES
					public interest
25.	Competent public authority regularly collect and update relevant environmental information, including information on environmental performance and compliance by operators of activities potentially affecting the environment	G.4	5(6)	6(1); 6(2); 6(12)	
26.	Shall encourage operators whose activities have a significant impact on the environment to inform the public regularly of the environmental impact of their activities and products/ social and environmental performance	G.4	5(6)	6(13)	
27.	Provide means for and encourage effective capacity-building, both among public authorities and the public, to facilitate effective access to environmental information	G.7	5(2)	10	
28.	Establish or designate one or more impartial entities or institutions with autonomy and independence to promote transparency in access to environmental information, to oversee compliance with rules and monitor, report on and guarantee the right of access to information. Consider including or strengthening, as appropriate, sanctioning powers within the scope of the responsibilities of the aforementioned entities or institutions.	-	-	5(18)	

Appendix II

WEBSITES CONTAINING ENVIRONMENTAL INFORMATION

A : Accessible for public
 B : The current content is in line with the profile description in the website
 C : User friendly (understandable by the researchers' point of view)
 D : Availability of data in Nusa Penida

No.	Website	A			B			C			D		
		Yes	Partly	No	Yes	Partly	No	Yes	Partly	No	Yes	Partly	No
Websites run by LAPAN													
1.	Satellite Disaster Early Warning System (SADEWA) ²⁵¹	✓	-	-	-	✓ ²⁵²	-	-	✓	-	-	✓ ²⁵³	-
2.	System for Disaster Mitigation (SIMBA) ²⁵⁴	-	✓	-	-	✓	-	-	-	✓	NA		
3.	System Information on Climate Change (SRIRAMA) ²⁵⁵	✓	-	-	✓	-	-	✓	-	-	✓	-	-
Websites run by Ministry of Environment and Forestry													

²⁵¹ <http://sadewa.sains.lapan.go.id>

²⁵² Last update in May 2019.

²⁵³ The detail is not clear.

²⁵⁴ <http://pusfatja.lapan.go.id/simba/> ; <http://satulayanan.lapan.go.id/detail/19>

²⁵⁵ <http://satulayanan.lapan.go.id/detail/40> ; <https://srirama.sains.lapan.go.id/srirama#!/>

No.	Website	A			B			C			D		
		Yes	Partly	No	Yes	Partly	No	Yes	Partly	No	Yes	Partly	No
4.	Fire Risk System ²⁵⁶	✓	-	-	✓	-	-	✓	-	-	-	✓	-
5.	Vulnerability Index Information System (SIDIK) ²⁵⁷	-	✓	-	-	-	✓	-	-	✓	-	-	✓
6.	Climate Village Programme ²⁵⁸	-	✓	-	-	-	✓	-	-	✓	-	-	✓
7.	National Greenhouse Gasses Inventory System (SIGN-SMART) ²⁵⁹	-	✓	-	-	✓	-	-	✓	-	-	-	✓
8.	National Forest Monitoring (NFMS-Simontana) ²⁶⁰	-	-	✓	NA			NA			NA		
9.	Safeguards Information System for REDD+ (SIS-REDD+) ²⁶¹	-	-	✓	NA			NA			NA		
10.	Information on climate change adaptation and mitigation plans and programs (RAN GRK/API) ²⁶²	-	-	✓	NA			NA			NA		
Website run by Ministry of Plantation													

²⁵⁶ <http://kebakaranhutan.or.id>

²⁵⁷ <http://sidik.menlhk.go.id>

²⁵⁸ <http://proklam.menlhk.go.id>

²⁵⁹ <http://signsmart.menlhk.go.id/v2.1/>

²⁶⁰ http://webgis.menlhk.go.id:8080/nfms_simontana/home/

²⁶¹ <http://sisredd.dephut.go.id/56ed/>

²⁶² <http://sekretariat-ranapi.org> and <http://www.sekretariat-rangrk.org>

No.	Website	A			B			C			D		
		Yes	Partly	No	Yes	Partly	No	Yes	Partly	No	Yes	Partly	No
11.	Information supporting planting decision that minimise climate risks (KATAM) ²⁶³	-	-	✓	NA			NA			NA		
Website run by Ministry of Marine and Fisheries													
12.	System to monitor fishing zone areas	-	-	✓	NA			NA			NA		
13.	The Research and Development Centre for Marine and Coastal Resources (P3SDLP) of the MoMAF	-	-	✓	NA			NA			NA		
14.	Information on marine and fisheries (SIDATIK) ²⁶⁴	✓	-	-	-	-	✓ ²⁶⁵	-	✓	-	-	-	✓
Website run by Meteorology, Climatology and Geophysics Agency													
15.	Climate data and standardised climate change information ²⁶⁶	-	✓	-	-	✓	-	-	✓	-	NA		
16.	Indonesian Ocean Forecasting System ²⁶⁷	✓	-	-	✓	-	-	✓	-	-	-	✓	-
Website run by Ministry of health													
17.	Early warning system for monitoring dengue, malaria,	-	-	✓	NA			NA			NA		

²⁶³ <http://katam.litbang.pertanian.go.id>

²⁶⁴ <http://sidatik.kkp.go.id/>

²⁶⁵ Data still not available.

²⁶⁶ <http://ccis.klimat.bmkg.go.id> ; [http://cews.bmkg.go.id/Sistem Observasi/Stasiun Klimatologi.bmkg](http://cews.bmkg.go.id/Sistem_Observasi/Stasiun_Klimatologi.bmkg)

²⁶⁷ <http://maritim.bmkg.go.id>

No.	Website	A			B			C			D		
		Yes	Partly	No	Yes	Partly	No	Yes	Partly	No	Yes	Partly	No
	diarrhea, pneumonia (EWARS system)												

Appendix III

The field research was conducted from 23 June until 17 July 2019, comprises interview, observation, document analysis, and information request simulation. The response to the information requests received afterward no later than 6 August 2019 through e-mail and websites.

Interview questions for local people in Ped Village, Nusa Penida:

1. How do you describe climate change? Do you experience the impact of climate change in Nusa Penida?
2. Is there any unusual climate behavior and its impact that influence your life in the past 3 (three) years (since 2015 El Nino)? If yes, please explain. What do you think caused the unusual climate behavior?
3. Have someone or institution ever warn you about the impact of climate change (or other environmental threat) to your life? If yes, how the information was delivered?
4. If the unusual climate behavior occurs, do you ask someone/institution's help (directly or online communication)? If yes, explain how. If not, why?
5. Do you know about the right to access environmental information? If yes, have you ever use your right to access environmental information (explain)?
6. Is there any folklore or any kind of local wisdom or local practices related to the environment or disaster that you remember? If yes, please explain.

The respondents are all native and residence of Nusa Penida. They are a former head of the traditional village (*Bendesa*) who works as a high school teacher, a homestay owner, two teenagers (high school graduate), and a peasant. The interview was conducted in a semi-structured manner.

All interview records are on file with the author. All recordings were based on prior informed consent.