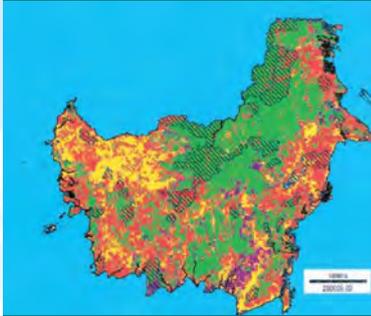




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International Law of Sustainable Development: Legal Aspects of Environmental Security on the Indonesian Island of Kalimantan

Prototype EnviroSecurity Assessments

Kalimantan, Indonesia
Part 2: Legal Analysis

Mirjam van Harmelen, Matthijs S. van Leeuwen and Tanja de Vette
Commissioned by Bronkhorst International Law Services for the IES

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Prototype EnviroSecurity Assessments

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Anna Paulownastraat 103, 2518 BC The Hague, The Netherlands

Tel +31 70 365 2299 • Fax +31 70 365 1948 • info@envirosecurity.org • www.envirosecurity.org

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Project Team

Project Manager: **Wouter J. Veening**, IES • Senior Consultant: **Leendert Jonker**, IES • Administrator / Editor: **Ronald A. Kingham**, IES • Researcher: **Jeanna Hyde Hecker**, EnviroSense • Legal Advisor: **Serge Bronkhorst**, BILS • Scientific Advisor: **Niels Wielaard**, SarVision • Cartographer: **Philippe Rekacewicz**, UNEP GRID-Arendal • Research Assistants: **Sjoerd de Gijzel**, **Eric van de Giessen**, **Frederik J.W. van Oudenhoven**

Project Partners

This project is coordinated by the **Institute for Environmental Security** with the following partners:
Borneo Orangutan Survival Foundation (BOS), Indonesia
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Legal Analysis by

**Mirjam van Harmelen, Matthijs S. van Leeuwen and Tanja de Vette
Amsterdam International Law Clinic**

Supervised by

Prof. P.A. Nollkaemper

**Commissioned by Bronkhorst International Law Services
for the Institute for Environmental Security**

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INTRODUCTION

This report is written at the request of Bronkhorst International Law Services (BILS). BILS co-operates with the Institute for Environmental Security (IES) on the project 'Prototype Envirosecurity Assessments', meant to inform governments, multinationals, international organisations etc. about, *inter alia*, the international legal aspects of deforestation on the Indonesian island of Kalimantan.

Deforestation poses a threat to the local, regional and global habitat of humans and animals. Intensive (illegal) logging operations cause erosion and ongoing forest fires cause environmental threats because of the enormous emission of greenhouse gases. The majority of the problem is caused by the palm oil industry, for which immense fires are used to clear the land for their commercial plantations. Those fires rage uncontrollably and destroy large parts of the forest, which has the side effect of forming smoke haze. This threatens the health of local communities, the inhabitants of neighbouring countries and poses a threat to global climate security because of the emission of greenhouse gases. For example, the great forest fires of 1997/1998 emitted carbon dioxide at a volume that was roughly equal to that of the whole of Western Europe in the same period. Also, five million hectares of land were destroyed and the financial damage amounted to billions of US dollars.¹

Besides that, the smoke haze is destructive for the global environment and the health of indigenous peoples, the inhabitants of Indonesia and those of neighbouring countries. It has an impact on economic production – manufacturing and agricultural, transport, tourism etc. - while haze-caused accidents (because of the effect on light and visibility) result in loss of lives. Because of this, transport is also severely disrupted by haze. Closures of airports and cancellation of flights are common in the region. Economic losses from such disruptions, as well as aircraft and maritime accidents are compounded by steep declines in tourist arrivals.²

¹ J. Westrich (intern IES), *Environmental Security in the Kalimantan provinces of Indonesia – An overview arranged for the Institute for Environmental Security in The Hague*, summer 2004, p. 3 [hereinafter Westrich].

² Website of the RHAP (Regional Haze Action Plan of the ASEAN), *Co-ordination and Support Unit (CSU)*, <<http://www.haze-online.or.id/help/firehaze.php>>.

Special attention must be paid to the tropical peat bogs at Kalimantan. Normally these are - because of their high water content - impervious to the fires in the forests that grow upon it. Problems arise when a peat bog is situated near a logging or agricultural operation; this situation often disrupts the whole water table and results in the destruction of that fragile ecosystem as the moisture is drained and the soil dries. These dried-up peat bogs are very susceptible to forest fires, which has a very intense influence on the environment: the burning soil releases much more carbon dioxide than the trees.³ Again an example from the fires of 1997-1998: the burning peat then released almost 2.6 billion tons of carbon dioxide in the atmosphere. That accounted for forty percent of the total, world-wide emission from burning fossil fuels that year and was the prime cause of the biggest annual increase in atmospheric CO₂-levels ever measured, with records starting more than forty years ago.⁴

The logging industry has exploited the forests of Kalimantan at an unsustainable rate for almost a century now. Between 1985 and 1997, Indonesia has yearly lost more than 1,5 million hectares of forested land, which is almost three times the amount of forest that the Indonesian government has indicated can be logged sustainably.⁵ In 2001 it was estimated that only twenty million hectares of quality forest remained. Still, yearly more than 1.3 million hectares of forest disappears because of illegal logging, clearing the ground for agriculture and forest fires. The World Bank foresees that, without taking drastic actions, the natural forests of Sumatra will already have disappeared in 2005, followed by the forests at Kalimantan and Irian Jaya.⁶

The local, regional and global effects of the deforestation are immense. The land use rights of local and indigenous communities are not acknowledged and it often comes into conflict between the members of those communities and people from other parts of Indonesia who arrive at Kalimantan to work on the logging plantations. As mentioned above, some logging operations can disrupt the water table of peat bogs. Because of erosion, mudslides and floods can occur, which not only has a disastrous effect on the natural habitat, but also further endangers local communities. Also, the biodiversity is affected. For example, the already

³ Westrich, *supra* note 1, p. 6.

⁴ New Scientist, *Indonesian wildfires spark global warming fears*, 2 November 2002, <<http://www.newscientist.com/news/news.jsp?id=ns99993024>>.

⁵ EIA and Telepak Indonesia, *Timber Trafficking: Illegal Logging in Indonesia, South East Asia and International Consumption of Illegally Sourced Timber* (2001), 11 [hereinafter *Timber Trafficking*], <<http://www.salvonet.com/eia/cgi/reports/report-files/media26-1.pdf>>.

⁶ Stichting Probos, i.o.v. Ver. van Ned. Houtondernemingen, *Landeninformatie Bos en Hout, Indonesië* (2004), p. 5, <<http://www.vvnh.nl/pdf/INDONESIE.pdf>>.

endangered orangutan could be extinct within a decade as a result of the destruction of their forest habitat.⁷

In sum, the effects of deforestation at Kalimantan, due to forest fires and illegal logging, are:⁸

- At the local level:
 - disruption of local communities and their way of life by large-scale logging and oil palm operations
 - pollution of air, water, and food sources from smog and by-products of oil palm/logging industries
 - ethnic conflict fomented by influx of immigrants and migrant workers; sometimes results in violence and internally displaced peoples
 - conflict between indigenous and local communities and logging/oil palm industries over land rights
 - destruction of local environment results in landslides, drought, erosion, flooding, and fires, which harms local communities and the landscape
 - legitimate (and sustainable) logging operations unable to remain competitive in illegal environment
 - demand from abroad and from domestic timber processing industries fuels unsustainable logging and illegal practices
- At the regional level:
 - haze from forest fires causes damage to human health, economy (tourism, agriculture, travel, aviation, shipping), and environment (acid rain, poor air quality, poorer visibility)
- At the global level:
 - climate change caused by carbon emissions
 - loss of biodiversity
 - wildlife preserves (global trust) being threatened
 - plant and animal species endemic to the region threatened with extinction (i.e. orangutan)

⁷ Timber Trafficking, *supra* note 5, pp. 3 and 5.

⁸ Westrich, *supra* note 1, p. 7.

The EnviroSecurity Assessment

According to the IES, an EnviroSecurity Assessment is:

‘a proposed methodology providing decision makers in government, the private sector and NGOs with an array of practical decision tools, strategic maps and initial policy recommendations in the areas of science, diplomacy, international law, finance, and education for the subsequent development, finance and implementation of multi-year EnviroSecurity Action Plans that seek to enhance global environmental, economic and human security’.⁹

This report will focus on the legal aspects of the EnviroSecurity Assessment. The aim of this report is to indicate how both (international) environmental and human rights law can be directly applied to the current situation at Kalimantan, in order to contribute to a sustainable development of its resources, while considering interests of stakeholders on local, regional and global level. The aim is to enhance the environmental security in the region, that is, to guarantee security for both the environment and humans.

In order to do so, we will assess the major environmental security issues at Kalimantan using currently binding international law as well as indicated developments and soft law. It must be stated that the list of issues is non-exhaustive. In the case of environmental rights a simple ‘application’ of certain norms does not result in a conclusion like ‘breach of international law’ or that the ‘international norm is enforceable as hard law before domestic courts’. The assessment is merely a modest attempt to indicate those international legal norms as well as developments and soft law that can serve as part of a solution, or at least of giving an insight of the versatile legal aspects to be dealt with. These legal aspects should be seen in the much broader environmental security assessment and thus as a possible extra guarantee for environmental security. Conclusions drawn from this analysis could serve as an indication for policymakers on what existing or additional international law to ratify, implement and/or enforce. The developments and soft law are a good indication of trends in contemporary international law, especially in sustainable development law.

⁹ For more detailed information and Prototype envirosecurity assessments see: <<http://www.envirosecurity.net/index.php>>, last visited March 2005.

Setup of assessment

This report discusses the following research question:

“Which international obligations are presently binding on the Republic of Indonesia, and which additional international legal instruments could Indonesia ratify, implement and enforce, to guarantee environmental security/sustainable development of its forest resources to different stakeholders on a local, regional/transboundary and global level?”

The structure of the report will be as follows.

Chapter 1, **General Principles on Sustainable Development**, will discuss the main concept in the research question: sustainable development. The concept of sustainable development comprises international economic, environmental and human rights law, which is incorporated in many contemporary international political and legal instruments. The history and principles of sustainable development law will be used to describe the interconnectedness of all the different interests at stake, i.e. economic/social development and environmental protection. Sustainable development will, in theory, enhance global environmental, economic and human security, and sustainable development law can serve as a means to achieve this security.

In chapter 2, **International environmental law**, a search will be undertaken for international legal instruments in the field of environmental law that the Republic of Indonesia could adopt, implement and enforce to guarantee sustainable development of the tropical forests at Kalimantan. The chapter commences with a general discussion of the environmental law aspect of sustainable development, followed by an overview of the legal instruments applicable on the major environmental security issues at Kalimantan. The discussed issues are the damaging effect of haze on health, environment, economy, loss of biodiversity – forests and wetlands, possible extinction of plant and animal species, destruction of the environment of neighboring countries and climate change caused by carbon emissions.

Since the number of applicable treaties is substantial, attention is paid to three of the most important treaties pertaining to the deforestation-issue on Kalimantan: the Convention on Biological Diversity, the Kyoto Protocol to the United Nations Framework Convention on Climate Change, and the ASEAN Agreement on Transboundary Haze. A general introduction to these treaties will be provided before the discussion of the environmental security issues.

The Biodiversity Convention will be assessed on loss of biodiversity – forests and wetlands, possible extinction of plant and animal species, destruction of the environment of neighboring countries, the ASEAN Agreement on the damaging effect of haze on health, economy and environment and the Kyoto Protocol on climate change caused by carbon emissions.

Finally, to give a complete overview, the weak aspects of the treaties will be highlighted. The chapter will finish with a short conclusion of the findings.

The third chapter, **International human rights law**, addresses the current Indonesian situation in the field of international human rights law. On the regional/transboundary and global level the research will focus on what standards are presently applicable for Indonesia, what existing legal standards can be adopted and which developments and soft law-principles can be helpful to guarantee sustainable development. The relevance of this chapter lies in the fact that environmental harms adversely affects various individual and community rights such as the rights to life, health, water, food, work, culture, development, information and participation.

In the final chapter, **Conclusion and Recommendations**, the findings will be summarised. The concept of sustainable development is an umbrella principle that is distinguishable from rights in a technical sense, but nevertheless a very important and dynamic concept in contemporary approaches to balance global, regional and local interests. The analysis first indicates the legal aspects of the environmental security issues. It then describes what international environmental and human rights law can be applied or should be applicable in order to contribute to a balanced and integrated solution to the current situation at Kalimantan, and thus to a sustainable use and development of its natural resources.

The report also contains two appendixes:

Appendixes A-1 and A-2, the Table Envirosecurity Assessment, provide a quick overview of the findings from chapter 2 and 3. Appendix B provides incentives for ratifying, implementing and enforcing international legal instruments, an overview of UNCHR treaties and status for Indonesia and a list of additional environmental law instruments pertaining to the same subject matter. As stated above, since many treaties apply to the deforestation-issue at Kalimantan, three main treaties were chosen for discussion in chapter 2. Other instruments

that can provide helpful incentives for the Indonesian government to guarantee sustainable development of the forests, will be addressed in brief.

CHAPTER 1: GENERAL PRINCIPLES OF SUSTAINABLE DEVELOPMENT

1. INTRODUCTION

During the emergence of the environmental movement and particularly during the Stockholm Conference, the attitude of many states was that economic development and environmental protection exclude each other and even are in conflict with one another. This attitude prevailed until quite recently and even today, some states hold such beliefs.¹⁰

The key strengths of the concept of sustainable development are, in fact, its explicit suggestion that economic development and environmental protection are mutually reinforcing and its aim to provide a workable solution to the traditional conflict between the two.¹¹ Considering the fact that sustainable development is particularly important for developing countries that are struggling with quickly increasing resources and weak economies, the purpose of leading international organisations (e.g. UN, World Bank) is to find innovative sustainable ways to help and encourage countries to pursue sustainable development.¹²

The modern history of international environmental law knows three main milestones: the Stockholm Declaration, the Report of the Brundtland Commission (also known as the World Commission on Environment and Development, WCED), and the Rio Declaration. These three central documents all refer to either sustainable development or its components.¹³ While the Stockholm Declaration makes no specific reference to it, several of its principles refer to its components.¹⁴ The report of the Brundtland Commission, on the other hand, places the concept of sustainable development in the centre of interest. With the Brundtland Commission a change took place. Instead of focusing on developmental needs and

¹⁰ S. Atapattu, *Sustainable development, myth or reality?: a survey of sustainable development under international law and Sri Lankan law*, Geo. Int'l Envtl. L. Rev. (2001) [hereinafter *Atapattu*].

¹¹ See Atapattu, *supra* note 10.

¹² *Id.*

¹³ Atapattu, *supra* note 10, fn 2: However, none of these documents are binding on states, although some of the provisions now reflect customary international law. Principle 21 (sovereignty and responsibility over national natural resources) of the Stockholm Declaration, which is found in a slightly amended form in the Rio Declaration, is a good example of a provision that has achieved normative status through subsequent state practice.

¹⁴ Atapattu, *supra* note 10, fn. 3: For example, Principles 1, 2, 8, and 9 of the Stockholm Declaration all embody components of sustainable development. It is generally thought that the World Conservation Report of 1980 prepared by the IUCN contained the first reference to sustainable development in modern literature.

environmental concerns in terms of environment versus development, more attention was paid to something that would successfully combine environmental action with developmental needs in policies, strategies and programs.¹⁵ The report *Our Common Future* includes the most authoritative definition of the concept:

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”¹⁶

According to the Brundtland Report this definition contains two key concepts: first, the concept of ‘needs’, in particular the essential needs of the world’s poor to which overriding priority should be given, and secondly, the idea of limitations imposed, by the state of technology and social organisation on, the environment’s ability to meet present and future needs.¹⁷ Natural resources should not be consumed by a small number of industrialised, developed societies. Besides access to natural resources, people from all over the world need equal chance to produce and consume these natural resources in a way that can fulfil their needs.¹⁸

Although the definition emphasizes one of the concepts most important components, which is the centrality of inter-generational equity, different authors find it ironic that this definition, coined as a solution to the world's environmental problems, makes no reference to environmental protection at all.¹⁹

In 1992 the Rio Declaration on Environment and Development (UNCED), modelled on the Stockholm Declaration of 1972 and regarded as the leading international authority on sustainable development, responded to a request of the UN General Assembly to halt and reverse the effects of environmental degradation “in the context of increased national and

¹⁵ Symposium, *The Road From Johannesburg*, 15 Geo. Int'l Env'tl. L. Rev. 809 (2003).

¹⁶ Report of the World Commission on Environment and Development (the Brundtland Report), *Our Common Future* (1987), p. 43 [hereinafter *The Brundtland Report*].

¹⁷ Id. See also P. Sands, *Principles of International Environmental Law* (2003), p. 253 [hereinafter *Sands, International Environmental Law*].

¹⁸ See N.J. Schrijver & E. Hey, *Volkenrecht en Duurzame Ontwikkeling, Preadviezen, Mededelingen van de Nederlandse Vereniging voor Internationaal Recht* (2003), p. 6 [hereinafter *Schrijver or Hey*].

¹⁹ See Atapattu. See also P. Birnie & A. Boyle, *International Law & the Environment* (2002), p. 89 [hereinafter *Birnie & Boyle*]. According to Birnie and Boyle the definition is inadequate, incomplete and begs elaboration, although they admit the definition does emphasize the centrality of inter-generational equity to the concept of sustainable development.

international efforts to promote sustainable and environmentally sound development in all countries".²⁰ While the Brundtland Commission is considered to be the architect of the modern concept of sustainable development, the Rio Declaration takes the concept one step further by embodying it in a document adopted by consensus, albeit non-binding.²¹ Like the Stockholm Declaration the Rio Declaration neither contains any definition of sustainable development. Instead, it embodies it explicitly in several of its 27 principles, since the concept seems to underscore the whole Declaration.²² The latter also embodies the precautionary principle and the environmental impact assessment procedure, both important tools for achieving sustainable development.²³

Building upon the framework of the Brundtland Report, the Rio Conference negotiations were held between more than 178 governments and over 50 inter-governmental organizations. Agreements and conventions were created on critical issues such as climate change, biodiversity and deforestation which led to the outcome of two multilateral treaties open up for signing: the Framework Convention on Climate Change and the Biodiversity Convention. Besides this, non-binding Forest Principles were adopted by participating states, as well as the - earlier mentioned - also non-binding but very important Rio Declaration, containing 27 Principles on Environment and Development and a so-called Agenda 21. The latter was meant as a blueprint for sustainable development. Agenda 21 is the most comprehensive plan of action yet developed for what would be required from States and international organisations on a global scale to reconcile environmental and developmental objectives.²⁴ As a policy scheme to battle environment and development issues for the coming decades, it specifically called for 'a balanced and comprehensive state of international law in the field of sustainable development (...) giving special attention to the

²⁰ UNGA Res./44/228 (1989), para. 3, available at <http://www.environment.fgov.be/Root/tasks/atmosphere/klim/pub/int/unga/44-228_en.htm> . See also Agenda 21, the U.N. Programme of Action From Rio, UN Doc. DPI/1344 (1993) [hereinafter Agenda 21], available at <<http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21toc.htm>>. And see Press Summary (Introduction), p. 1, at <http://www.un.org/esa/sustdev/documents/agenda21/english/A21_press_summary.pdf>.

²¹ See Atapattu, *supra* note 10.

²² U.N. Conference on Environment and Development (UNCED), Rio de Janeiro (1992), 31 I.L.M. 874, [hereinafter *Rio Declaration*]. For example, Principle 4 of the Rio Declaration on Environment and Development provides that "[i]n order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it."

²³ The Rio Declaration also embodies procedural rights, such as access to information, public participation, and access to remedies. See P. Malanczuk, *Sustainable Development: Some Critical Thoughts in the Light of the Rio Conference*, Sustainable Development and Good Governance (1995), p. 23, who argues that the Rio Declaration embodies only a precautionary approach not the precautionary principle.

²⁴ See U.N. Department of Economic and Social Affairs, Division for Sustainable Development, at <<http://www.un.org/esa/sustdev/documents/agenda21/index.htm>>, (last visited Febr. 15, 2005).

delicate balance between environmental and development concerns'.²⁵ It reflects recognition that the path to sustainable development requires concerted effort by a wide variety of actors, including government, industry, and citizens.

The UNCED in Rio de Janeiro led to an increasingly growing corpus of environmental law; a large number of treaties, emerging law-principles and environmental legal decisions. On the other hand, Schrijver notes that it seems as though international development law has stagnated and poverty-combat and Third World development, as set up by the UN after World War II, are withering.²⁶ Indeed, it is difficult, if not impossible, to separate development from the consumption of the environment. Destruction of the environment may be an inevitable consequence of development. Hence it does not automatically follow that sustainable development primarily deals with environmental protections. Lowe notes:

“not all aspects of the law relating to sustainable development are necessarily relevant to the protection of the environment, nor do all aspects of international environmental law concern sustainable development.”²⁷

Sustainable development also touches upon issues of human rights, animal rights, general international law and last, but not least, the right to development. As Sands states:

“This body of international law (...) comprises those principles and rules which are derived, principally, from the *lex specialis* of prior and emerging international law in three fields of international cooperation: economic development, the environment and human rights. Historically, these three subjects have for the most part followed independent paths, and it is only with the advent of the concept of sustainable development (...) that they will increasingly be treated in an integrated and interdependent manner.”²⁸

²⁵ Agenda 21, *supra* note 20, chapter 39, para. 1 sub a.

²⁶ See Schrijver, *supra* note 18, p. 16.

²⁷ V. Lowe, *Sustainable Development and Unsustainable Arguments*, in Boyle & Freestone (eds.): *International Law and Sustainable Development: past achievements and future challenges* (1999), p. 24 [hereinafter *Lowe, Unsustainable Arguments*]. See also Birnie & Boyle, *supra* note 19, chapter 1, on the difference between international environmental law and the law of sustainable development.

²⁸ P. Sands, *Sustainable Development and International Law* (1995), p. 53 [hereinafter *Sands, Sustainable Development*].

Thus a tendency towards an over-emphasising on environmental law does not balance the integral approach of environmental protection with development and respect for human rights.²⁹

Discussion of the economic field lies outside the scope of this report. However, chapters 2 and 3 the environmental and human rights aspect will respectively be discussed.

2. GENERAL PRINCIPLES OF SUSTAINABLE DEVELOPMENT AND THEIR LEGAL STATUS

Although much has been written about sustainable development, there is still a need to discuss the relevance of this concept both under international law and national laws, as the term has attracted both negative and positive comments in literature. Some environmentalists view the concept with suspicion because they believe that sustainable development is anthropocentric in nature and detracts attention from the debate on environmental protection.³⁰ Furthermore, the general principle of sustainable development has been criticised often unfairly without a proper understanding of its main mission, which is to integrate environmental protection, economic development and human rights.³¹ Present environmental and poverty issues show that there is a current need to give structure and find innovative ways in the solution of these global problems. For this reason it seems necessary to demystify the concept of sustainable development, and overcome the impact of its negative features in order to incorporate the concept's positive features into our decision-making process.³²

Growing numbers of international treaties, particularly in the fields of international trade and environmental law do address sustainable developmental goals and instruments.³³

²⁹ Likewise, despite the 'package deal consensus character' of the 1992 Rio Declaration, Freestone signals, "a system of international environmental law has emerged, rather than simply more international law rules about the environment", see A. Boyle & D. Freestone (eds.), *International Law and Sustainable Development: Past achievements and future challenges*, , pp. 3 and 5[hereinafter *Boyle & Freestone*].

³⁰ See Sands, *International Environmental Law*, *supra* note 17, p. 293. According to Sands this 'approach [is] based on the view that environmental protection is primarily justified as a means of protecting humans rather than as an end in itself'. See Birnie & Boyle, *supra* note 19, pp. 256-257. For discussion of anthropocentric as opposed to 'ecocentric', see also Birnie & Boyle, p. 258. This ecocentric approach is taken by *inter alia* the Draft Principles on Human Rights and the Environment.

³¹ See Atapattu, *supra* note 10, p. 268.

³² *Id.*

³³ See Sands, *International Environmental Law*, *supra* note 17, p. 252. See further U.N. Framework Convention on Climate Change (UNFCCC), New York (1992), 31 I.L.M. 849 [hereinafter *Climate Change Convention*],

International legal decisions and principles are beginning to recognise these goals and instruments explicitly,³⁴ as they are increasingly being invoked before national courts and tribunals around the world.³⁵ Moreover, national and regional sustainability plans have been developed and a wide variety of groups—ranging from corporations and municipal governments to international organisations such as the World Bank—have adopted the concept.³⁶ However, these initiatives have not fully augmented our understanding of what sustainable development law means and it seems as though everyone has given it their own particular interpretation. Furthermore, the status of the concept, in particular its alleged legal status as a principle of customary law, is discussed by various legal scholars and the debate goes on. Several questions need to be answered. What does sustainable development law mean and whether it really is the solution to our environmental problems? What is sustainable development law exactly: is it a tool or a policy? And what is its legal status: is it a concept or a legal principle having normative effect? These are the questions that this paragraph addresses.

2.1 The meaning and legal status of sustainable development

There is near universal agreement on international sustainable development law (hereinafter: ISDL) as the appropriate framework for environmental and development decision-making. Though stimulated by the popularity of the concept, international legal scholars continue to debate its legal and normative status and other operational problems relating to sustainable

<http://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf> and <<http://unfccc.int/resource/docs/convkp/kpeng.pdf>>, last visited March 2005. U.N. Convention on Biological Diversity, Rio de Janeiro (1992), 31 I.L.M. 818, arts. 8 & 10 [hereinafter *Biodiversity Convention*].

³⁴ See *Case Concerning the Gabèikovo-Nagymaros Project (Hungary/Slovakia)* (1997), ICJ Rep. 7, incl. Separate Opinion of Vice President Weeramantry [hereinafter *Gabcikovo-Nagymaros*], <http://www.icj-cij.org/icjwww/idocket/ihs/ihsjudgement/ihs_ijudgment_970925_frame.htm>. See also *Advisory Opinion on the Legality of the Use by a State of Nuclear Weapons in Armed Conflict* (1996), ICJ Rep. 226, at 438. And *United States Import Prohibition of Certain Shrimp and Shrimp Products* (1999), WTO Doc. WT/DS58/AB/R (WTO Appellate Body Report).

³⁵ An innovative domestic court decision on intergenerational equity, which is a component of sustainable development, is the Philippine Supreme Court Case, *Minors Oposa v. Secretary of the Department of Environment and Natural Resources* (1993), 33 I.L.M. 173 (1994), [hereinafter *Minors Oposa Case*]. The case addressed intergenerational equity in the context of state management of public forest land. See further *Bulankulama v. The Secretary, Ministry of Industrial Development* (2000), 7 (2) South Asian Envrtl. L. Rep. 1 (Sri Lankan Supreme Court) and *Shehla Zia and others v. WAPDA* (1992), Case No 15-K (Pakistan Supreme Court).

³⁶ All investment projects proposed for World Bank consideration must be screened for their potential environmental impacts: see World Bank, *Operational Policy 4.01 on Environmental Assessment* (1999, revised 2004), under 8 (Environmental Screening), <<http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf/0/9367A2A9D9DAEED38525672C007D0972?OpenDocument>>.

development.³⁷ In this respect several arguments have been revealed in literature. Many scholars argue that sustainable development is too vague a concept and too ambiguous in meaning for it to have normative status.³⁸ While others are of the view that sustainable development has acquired a place in the international law lexicon, and therefore the relevant question is not whether sustainable development is law, but rather how to apply it in specific practical situations.³⁹ The relevant question is whether ISDL include anything more than, according to the majority opinion in the International Court of Justice (ICJ) in the *Gabcikovo-Naagymaros Case*, ‘look[ing] afresh’ at the environmental impact of projects.⁴⁰ Does the international legal field hold enough evidence as to consider the concept of sustainable development being sufficiently substantive at this time to be regarded as having a ‘norm-creating character’?⁴¹ Do its underlying principles articulate an international customary legal obligation of which the violation could give rise to a legal remedy in the same way as, for instance, the principle of state responsibility? In order to articulate the meaning of ‘international sustainable development law’, it is necessary to consider both its normative content and its alleged status as a customary principle of international law.

In Principle 27 of the Rio Declaration it was explicitly agreed to call for ‘the further development of international law in the field of sustainable development’. In this regard the important question is how international law is dealing with the matter. Sustainable development law is incorporated in a system of norms and rules that according to ruling doctrines cannot be considered to be true international law.⁴² A major part of sustainable development law has been developed by so-called *soft law*. Hey signals a tendency of using soft law instruments especially for decision-making procedures regarding MEA based institutional structures which she thinks institutionalises the inequality of developed and

³⁷ See Lowe, *Unsustainable Arguments*, *supra* note 27, p. 23.

³⁸ A.B.M. Marong, *From Rio to Johannesburg: Reflections on the Role of International Legal Norms in Sustainable Development*, 21 *Geo. Int’L Envrtl. L. Rev.* (2003) 57 [hereinafter *Marong*]. See also Sands, *Principles*, *supra* note 28, p. 255. See also Birnie & Boyle, *supra* note 19, p. 122.

³⁹ Marong, *supra* note 38, p. 57. See also P.A. Nollkaemper, *De Kracht van het Onbepaalde: de Rechter en het Beginsel van Duurzame Ontwikkeling*, 4 *Milieu en Recht* (2000) 88-90 [hereinafter *Nollkaemper, De Kracht van het Onbepaalde*].

⁴⁰ *Gabcikovo-Nagymaros*, *supra* note 34, para. 140.

⁴¹ See P. Sands, *International Law in the Field of Sustainable Development: Emerging Legal Principles*, in W. Lang (ed.), *Sustainable Development and International Law* (1994), p. 53 [hereinafter *Sands, Emerging Legal Principles*].

⁴² See Hey, *supra* note 18, p. 150.

developing states in particular.⁴³ In her view developed states do hide behind the smokescreen resulting from the distinction made between rules of *hard* and *soft law* ‘when demands for compliance are made’.⁴⁴

As a rapidly developing, though controversial, source of international law, the term *soft law* itself is misleading. Technically and strictly speaking it is not law at all, facing the fact that it cannot be enforced through legal mechanisms. It is precisely because of this lack of effectiveness of enforcement that ISDL has often been criticised as inspirational law or "soft" law. In practice, *soft law* refers to a great variety of instruments: declarations of principles, codes of practice, recommendations, guidelines, standards, charters, resolutions, etc. Although all these kinds of documents are not legally binding and consequently lack legal status, they hold a strong obligation for states and international organisations that their provisions will be respected and followed by the international community.⁴⁵ In Bothe’s (1980) opinion:

“A non-legal commitment is (...) often much easier for a state to accept than a legal one. In all probability, here lies the reason why states do not reject resolutions the terms of which they would by no means accept as a treaty. This presents both an opportunity and a danger. As resolutions also give rise to expectations, they trigger a certain pressure for compliance that is often, as has been shown, effective in the long run. They influence practice, and practice influences law.”⁴⁶

Yet, the relevance of *soft law* must not be underestimated, due to the very fact that the evolution of customary international law can be accelerated by the inclusion of principles in *soft law* agreements and in non-governmental declarations and resolutions. Because of the growing number and influence of such documents, it is not inconceivable that such principles

⁴³ An important element regarding the implementation of sustainable development law constitutes MEAs (Multilateral Environmental Agreements), like for instance the Climate Change Convention and the Biodiversity Convention.

⁴⁴ Nevertheless, Chinkin points out that drawing a formal distinction between hard and soft law obligations is less important than understanding the processes at work within the law-making environment and the products that flow from it, C. Chinkin, *Normative Development in the International Legal System*, in Shelton (red.), *Commitment and Compliance, The Role of Non-Binding Norms in the International Legal System* (2000), pp. 23 and 25. See Hey, *supra* note 18, p. 151.

⁴⁵ See the website of the International Development Research Centre, <http://web.idrc.ca/en/ev-30130-201-1-DO_TOPIC.html> [hereinafter *Int'l Devlpmt Research Centre*].

⁴⁶ M. Bothe (ed.), *Trends in Environmental Policy and Law* (1980), p. 392.

could become part of international law in the near future, even if they are not included in conventions.⁴⁷

Some authors consider the reference to the concept of sustainable development in treaties as evidence of the concept's translation as a *legal principle* into the more binding status of *customary law*.⁴⁸ From Sands' book 'Principles of International Environmental Law' the following statement can be read:

“There can be little doubt that the concept of ‘sustainable development’ has entered the corpus of international customary law, requiring different streams of international law to be treated in an integrated manner. (...) By invoking the concept of sustainable development, the ICJ indicates that the term has a legal function and both a procedural/temporal aspect (obliging the parties to ‘look afresh’ at the environmental consequences of the operation of the plant) and a substantive aspect (the obligation of result to ensure that a ‘satisfactory volume of water’ be released from the by-pass canal into the main river and its original side arms). [However] the ICJ does not provide further detail as to the practical consequences, although some assistance may be obtained from the Separate Opinion of Judge Weeramantry (...).”⁴⁹

In his essay ‘Unsustainable Arguments’, Lowe dismantles the argument of progressive authors like Sands who follow Judge Weeramantry's Separate Opinion and consider the concept of sustainable development as having customary law status. He concludes:

“It is suggested in the Gabčíkovo judgment that the references to the concept of sustainable development in multilateral treaties and so on are evidence of the concept's translation into customary international law. But what is the value of that evidence? One of the most noticeable characteristics of the examples cited in Gabčíkovo is that they do not include any instances of the actual application of the principle of sustainable development in order to reach a binding determination that states have acted unlawfully. There is no instance of reliance upon the concept itself as a rule of law binding upon states and constraining their conduct.”⁵⁰

⁴⁷ See Int'l Devlpmt. Research Centre, *supra* note 45.

⁴⁸ See Sands, *Emerging Legal Principles*, *supra* note 41, p. 56.

⁴⁹ Sands, *International Environmental Law*, *supra* note 17, pp. 254-255.

⁵⁰ Lowe, *Unsustainable Arguments*, *supra* note 27, p. 23.

In his essay ‘Unsustainable Arguments’ Lowe points out that the concept of sustainable development lacks normative content, which is incompatible with it having a ‘norm-creating character’ and precludes it becoming a *primary rule of law*.⁵¹ The gist of Lowe’s argument is that the concept of sustainable development is not a binding norm of international law in the sense of the ‘normative logic’ of traditional international law as reflected in Article 38(1) of the Statute of the ICJ, but that there is a sense in which the concept of sustainable development exemplifies another species of normativity which is of great potential value in the handling of concepts of international environmental law.⁵² Lowe finds that sustainable development can properly claim a normative status as an element of the process of judicial reasoning:

“Norms may function primarily as rules for decision, of concern to judicial tribunals, rather than as rules of conduct. (...) It is in the area of these norms that I believe the search for the normative force of the concept of sustainable development should be sought. Sustainable development can properly claim a normative status as an element of the process of judicial reasoning. It is a meta-principle, acting upon other legal rules and principles--a legal concept exercising a kind of interstitial normativity, pushing and pulling the boundaries of true primary norms when they threaten to overlap or conflict with each other.”⁵³

Thus, sustainable development is not simply a principle of international law itself. Rather, it has been argued convincingly that sustainable development is a normative concept operating in the interstices between primary norms when they overlap or conflict, such as the right to development, or the duty to protect the environment.⁵⁴ New developments in law (e.g., principles of international environmental law such as the principle of sustainable development) do not articulate new general principles, but rather function as “interstitial norms”.⁵⁵ Once they have been articulated, such interstitial norms operate as *modifying norms*, bearing upon the primary norms that surround them. This means that where two

⁵¹ Lowe, *Unsustainable Arguments*, *supra* note 27, pp. 24-25.

⁵² *Id.*, p. 21.

⁵³ *Id.*, p. 31.

⁵⁴ See Lowe, *Politics of Law-Making*, in Byers (ed.), *The Role of Law in International Politics* (2000), pp. 213, 216 and 217 [hereinafter *Lowe, Politics of Law-Making*]. See also Nollkaemper, *De Kracht van het Onbepaalde*, *supra* note 39, pp. 88-90.

⁵⁵ Lowe, *Politics of Law-Making*, *supra* note 54, p. 213.

primary norms come into conflict, such as the norm of economic development and the norm of environmental protection, the principle of sustainable development, as an interstitial norm, can serve to clarify how these two norms are to be balanced in a particular case.

These *modifying norms* can be considered *legal concepts* that do not depend upon state practice or *opinion iuris* for their status, in the way *primary legal norms* do.⁵⁶ Although in the context of judicial dispute settlement, a legal concept such as sustainable development can plainly affect the outcome of other cases. Especially the application of the concept by the ICJ will inevitably influence the further development of the law, as these decisions under Article 38(1)(d) of the ICJ Statute are regarded as having persuasive authority as statements of the law.⁵⁷

2.2 International sustainable development law in progress

Progress on implementing sustainable development law in national legislation has been slow. Therefore efforts have been made by the International Law Association (ILA), to identify and support implementation of general substantive and procedural principles of international law for sustainable development. According to the ILA, the adoption of various principles, the so-called ‘umbrella approach’, holds the potential to further development and strengthens the concept of sustainable development.⁵⁸ While their expression is often found in soft-law instruments, such substantive and procedural principles reflect a body of applicable norms. Compliance with these norms should in their view contribute to the unfolding process of sustainable development.⁵⁹

Based on prior work by the U.N. Commission for Sustainable Development and other bodies, the ILA Committee on the Legal Aspects of Sustainable Development elaborated a set of “Principles of International Law for Sustainable Development”, which are meant as a useful starting point for further implementation on the international level. These principles are the following: (1) the duty of States to ensure sustainable use of natural resources; (2) equity and the eradication of poverty; (3) common but differentiated obligations; (4) precautionary

⁵⁶ Lowe, *Politics of Law-Making*, *supra* note 54, p. 217. See also Nollkaemper, *supra* note 39, pp. 88-90.

⁵⁷ See Lowe, *Unsustainable Arguments*, *supra* note 27, pp. 33-34.

⁵⁸ For recent judicial treatment of the challenges of integrating environment and development, see *Gabèikovo-Nagymaros*, *supra* note 34, para. 90.

⁵⁹ See M. Decleris, *The Law of Sustainable Development: General Principles, A Report for the European Commission* (2000), p. 14.

approach to human health, natural resources, and ecosystems; (5) public participation and access to information and justice; (6) good governance; and (7) integration and interrelationship, particularly in relation to human rights and social, economic, and environmental objectives. These proposed principles, taken together, provide considerable guidance for jurists seeking ways to balance conflicting or overlapping social, environmental and economic obligations.⁶⁰ The ILA definition of sustainable development should be seen in the same regard, as a tool for further development of the concept, though not being regarded as law:

“the right of all human beings to an adequate living standard on the basis of their active, free and meaningful participation in development and in the fair distribution of benefits resulting there from”.⁶¹

Much remains to be done, however. In Johannesburg, world leaders emphasized the need to facilitate the implementation of Agenda 21 and the outcomes of the WSSD “through the regional commissions and other regional and sub-regional institutions and bodies.”⁶² International sustainable development law is still in a process of further definition in many contexts.⁶³ Lowe recognises the potentiality of sustainable development as a tool of great power in the hands of decision-makers.

“It is a corollary of the view advanced here that the decision-makers need not wait on state practice and opinion iuris to develop the concept of sustainable development in the way that a primary rule of international law would be developed. They may take the initiative and develop the concept themselves.”⁶⁴

⁶⁰ See ILA Res.3/2002, *New Delhi Declaration on Principles of International Law Relating to Sustainable Development*, 2 Int'l Env'tl. Agreements: Politics, Law and Econ. (2002) 211 [hereinafter *ILA, New Delhi Declaration*], available at <<http://www.cisd.org/pdf/ILAdclaration.pdf>>. See also N. Schrijver & F. Weiss (eds.), *Report of the Expert Group on Identification of Principles of International Law for Sustainable Development*, ILA (1995) 105.

⁶¹ *ILA, New Delhi Declaration*, *supra* note 60, p. 211.

⁶² Report of the World Summit on Sustainable Development (WSSD), U.N. Dep't Econ. & Social Affairs, Division Sustainable Dev., para. 158, U.N. Doc. A/ CONF.199/20 (2002), revised by U.N. Doc. A/CONF.199/20/Corr. 1 (2003) [hereinafter *WSSD Report*], at <http://www.unon.org/css/doc/unep_gcsc/gcss_viii/bg/wssd/r_wssd_e.pdf>. Chapter 39 of Agenda 21 deals with international legal instruments and mechanisms and is concerned with assisting states in promoting sustainable development at national and international levels through enhancing the effectiveness of such instruments and mechanisms.

⁶³ U.N. Env'tl. Programme (UNEP), *Strengthening Environmental Governance & Law for Global Sustainable Development*, Cartagena (2002), at <<http://www.cisd.org/pdf/brief4.pdf>>, under 5.

⁶⁴ Lowe, *Unsustainable Arguments*, *supra* note 27, p. 37.

2.3 Inter- and intra-generational equity; sustainable use and integration of environmental protection and economic development

Several authors fear that the multifarious nuances to the concept of sustainable development obstruct the implementation of sustainable development in both international and national law. They rather put effort in establishing and defining its components, than looking for a precise definition of the concept.⁶⁵

These authors unpack the concept of sustainable development in terms of various principles, preferring a so-called “umbrella approach”, in which sustainable development is understood more broadly as encompassing a variety of different concepts. In terms of the content of sustainable development, there are various principles that have been put forward.

In his Separate Opinion Judge Weeramantry refers to components of the concept:

“The components of the principle come from well-established areas of international law — human rights, State responsibility, environmental law, economic and industrial law, equity, territorial sovereignty, abuse of rights, good neighbourliness — to mention a few.”⁶⁶

He also identifies:

‘such far-reaching principles as the principle of trusteeship of earth resources, the principle of inter-generational rights, and the principle that development and environmental conservation must go hand in hand’.⁶⁷

A first analysis indicates that the components of sustainable development can be categorized into substantive and procedural elements.⁶⁸ According to Sands, the first category comprises the legal elements that seem to be inherent in the concept of sustainable development and that

⁶⁵ Although it is not even clear to Lowe that the components of sustainable development can be phrased in normative terms, see Lowe, *Unsustainable Arguments*, *supra* note 27, pp. 26-30.

⁶⁶ Separate Opinion of Judge Weeramantry in *Gabcikovo-Nagymaros*, *supra* note 34, under “A.. *The Concept of Sustainable Development – (c) Sustainable Development as a Principle of International Law*”.

⁶⁷ *Id.*, under “A.. *The Concept of Sustainable Development - (f)Traditional Principles that can assist in the Development of Modern Environmental Law*”.

⁶⁸ Boyle & Freestone, *supra* note 29, p. 8.

point to the limits that must be placed on the use of natural resources.⁶⁹ These principles are the *intra and inter-generational rights* (the application of equity between states and equity between the needs of future and present generations), *the principle of sustainable use* (the non-exhaustion of renewable natural resources) and the *principle of integration* (integration of environment and development).⁷⁰ The second category includes all procedural elements like the right to information, the right to participate in the decision-making process (public participation), the EIA (Environmental Impact Assessment) process, and the right to effective remedies.⁷¹

However, slightly deviating from the distinction made above is Sands' view in which the second category contains separate environmental principles that do exist parallel to the principle of sustainable development, namely: *sovereignty over natural resources* and *the responsibility to avoid environmental harm, the preventive and precautionary principles, environmental impact assessments, the polluter-pays-principle* and *the principle of common but differentiated responsibility*. These last principles are presented as though they are intended to provide assistance in achieving, and aim at the realization of sustainable development as an overarching objective.

In his book 'Principles of International Environmental Law', Sands argues that 'four recurring elements appear to comprise the core legal elements of the concept of 'sustainable development', as reflected in international agreements'.⁷² The enumerations of elements by other legal scholars have been similar, closely related or overlapping. They all may be traced to earlier international instruments.⁷³ This section identifies these four general principles as having particular relevance in the field of sustainable development and explains their specific function.⁷⁴

⁶⁹ See Sands, *Emerging Legal Principles*, *supra* note 41, p. 58. See also Sands, *International Environmental Law*, *supra* note 17, p. 253.

⁷⁰ See Sands, *International Environmental Law*, *supra* note 17, p. 253.

⁷¹ See Atapattu, *supra* note 10. The EIA (Environmental Impact Assessments) process, is an essential tool to achieve sustainable development. The EIA process is, in turn, linked to participatory rights and the right of access to information, because EIA documents are often public documents, which enable the public to participate in the decision-making process. However, an EIA's success depends on a variety of factors, including de-politicization of the process.

⁷² Sands, *International Environmental Law*, *supra* note 17, p. 253.

⁷³ F.L.Morrison & R.Wolfrum, *International, Regional and National Environmental Law* (2000), p. 21 [hereinafter *Morrison & Wolfrum*].

⁷⁴ Sands, *International Environmental Law*, *supra* note 17, p. 253. See also Boyle & Freestone, *supra* note 29, pp. 8-9. See also Birnie & Boyle, *supra* note 19, p. 86.

1. The need to preserve natural resources for the benefit of future generations (*the principle of inter-generational equity*);
2. the aim of exploiting natural resources in a manner which is ‘sustainable’, or ‘prudent’, or ‘rational’, or ‘wise’, or ‘appropriate’ (*the principle of sustainable use*);
3. the ‘equitable’ use of natural resources, which implies that use by one state must take account of the needs of other states (*the principle of equitable use, or intra-generational equity*); and
4. the need to ensure that environmental considerations are integrated into economic and other development plans, programmes and projects, and that development needs are taken into account in applying environmental objectives (*the principle of integration*)⁷⁵

According to Sands, these core legal principles are closely related and often used in combination (and frequently interchangeably), which suggests that they do not yet have a well-established, or agreed, legal definition or status.⁷⁶ Other core principles of sustainable development include the precautionary approach, public participation, common but differentiated responsibility and the polluter-pays principle.⁷⁷

To begin with, *inter-generational equity* deals with the relationship between one generation and the next. The *inter-generational* principle composes the substantive elements of sustainable development by focusing on both preservation and conservation of natural resources in the future.⁷⁸ It requires each generation to use and develop its natural and cultural heritage in such a manner that it can be passed on to future generations in no worse condition than it was received.⁷⁹ The Brundtland Report emphasises in its analysis of the concept of sustainable development the centrality of *inter-generational equity* and various international declarations indicate the importance now attached in international policy to the protection of the environment for the benefit of future generations.⁸⁰ According to Lowe the principle of

⁷⁵ Sands, *International Environmental Law*, *supra* note 17, p. 253.

⁷⁶ *Id.*, p. 254.

⁷⁷ ILA New Delhi Declaration, *supra* note 60. For examples of variance between lists of principles, compare the ILA principles and those of authors such as Boyle & Freestone, *supra* note 29.

⁷⁸ In the same way *intra-generational equity* does for the present.

⁷⁹ See, *inter alia*, Goa Guidelines on Intergenerational Equity adopted by the Advisory Committee to the U.N. Univ. Project on "International Law, Common Patrimony and Intergenerational Equity", Goa (1988), 18 E.P.L. 190, available at <http://www.i-c-e-l.org/english/EPLP31EN_rev2.pdf>.

⁸⁰ See Birnie & Boyle, *supra* note 19, pp. 89-90. See the Rio Declaration, *supra* note 22, principle 3. Climate Change Convention, *supra* note 33, art. 3(1) and re-iterated in the 1993 Vienna Declaration on Human Rights. And also reflected in the avoidance of irreversible harm as seen in the Biodiversity Convention, *supra* note 33. It

inter-generational equity is in normative terms (that is the aspect of prescriptions stipulating what states must do) a chimera. It is hard to see what legal content *inter-generational equity* could have, as equity is by definition a technique for ameliorating in the name of justice the impact of legal rules upon the existing legal rights and duties of legal persons.⁸¹ Lowe argues:

“By definition, most ‘other’ generations could not appear to secure the enforcement of their own rights, even if ‘generations’ had locus standi in international law. It is not the right of a future generation, but the duty of some members of the present generation that is being enforced at the instance of other members of the present generation.”⁸²

Boyle and Freestone explain that *inter-generational equity* provides an essential reference point within which future impacts and concerns must be considered and taken into account by present generations, as well as a process by which stronger generational rights and other concerns can be addressed.⁸³ However, as an element of sustainable development it is unclear what precise legal consequences might flow from the principle of *inter-generational equity*.⁸⁴ It cannot stipulate a right of a future generation, but only a duty of members of the present generation to aim for an optimal balance between this generation and its successors that is being enforced at the instance of other members of the present generation.⁸⁵ Lowe refers to the *Minors Oposa* case before the Philippine Supreme Court, where it appeared as if the idea of *inter-generational equity* had been taken at face value:⁸⁶

“While such a duty may well be imposed under municipal law, it could not be applied by a tribunal as apart of a rational conservation programme under international law. To take forest logging as an example, plainly international law cannot forbid all logging. If inter-generational equity is approached on a global basis, why should state A be made the subject of a ban on further logging when an equal number of trees could be saved by imposing a similar ban on any other state? Such distributive choices can be

has however, a longer pedigree, having been expressly or implicitly referred to in many of the early environmental treaties, including the 1946 International Whaling Convention, the 1968 African Nature Convention, and the 1972 Stockholm Declaration.

⁸¹ Lowe, *Unsustainable Arguments*, *supra* note 27, p. 27.

⁸² *Id.*

⁸³ Boyle & Freestone, *supra* note 29, p. 14.

⁸⁴ Morrison & Wolfrum, *supra* note 73, p. 22.

⁸⁵ Lowe, *Unsustainable Arguments*, *supra* note 27, p. 27.

⁸⁶ See *Minors Oposa Case*, *supra* note 35.

made by a legitimate central sovereign government in a single state. The authority to make such choices is an element of the legitimacy of the government. But international law lacks institutions and mechanisms with the authority and ability to make rational choices of this kind.”⁸⁷

The second element of sustainable development, the *principle of sustainable use* concerns the exploitation of specific natural resources rather than their preservation for future generations.⁸⁸ Support for sustainable use or management as a legal term is found, *inter alia*, in the 1985 ASEAN Agreement. It was one of the first treaties to require parties to adopt a standard of ‘sustainable utilisation of harvested natural resources (...) with a view to attaining the goal of sustainable development’.⁸⁹

Often treaties and other international legal instruments support the principle of sustainable use by the use of terms that are closely related. ‘Rational’, ‘wise’, ‘sound’ and ‘appropriate’ use are commonly used without definition. Although the meaning of each term will depend upon its application in each instrument, they are an indication of the recognition of limits placed by international law on the rate of use or manner of exploitation of natural resources.⁹⁰ Regarding the legal status of these terms in international law, Sands states the following:

“These standards cannot have an absolute meaning. Rather, their interpretation is, or should be, implemented by states acting co-operatively, or by decisions of international organisations, or, ultimately, by international judicial bodies in the event that a dispute arises.”⁹¹

Thirdly, *intra-generational equity* deals with inequity between states within the present economic system. Both in the Brundtland Report and Agenda 21 there is no doubt that redressing the imbalance in wealth between the needs of the poor are important policy components of sustainable development. The Rio Declaration does not refer by name to any concept of intra-generational equity, but several of its substantive provisions, and of the

⁸⁷ Lowe, *Unsustainable Arguments*, *supra* note 27, p. 28.

⁸⁸ See Sands, *International Environmental Law*, *supra* note 17, p. 257.

⁸⁹ 1985 ASEAN Agreement on the Conservation of Nature and Natural Resources, Kuala Lumpur (1985), 28 I.L.M. 1303 (1989), art. 1(1); art. 9 on the protection of air quality, and art. 12(1) in respect of land use, which is to be based ‘as far as possible on the ecological capacity of the land’.

⁹⁰ Sands, *International Environmental Law*, *supra* note 17, p. 261.

⁹¹ *Id.*

Climate Change and Biological Diversity Conventions, imply that intra-generational concerns are now an element in the contemporary development of sustainable development law. Apart from Principle 5 of the Rio Declaration, which calls for co-operation to eradicate poverty, intra-generational equity is served mainly by a recognition of the special needs of developing countries in the form of financial assistance, capacity-building, and the principle of common but differentiated responsibility.⁹²

The principle of equity is a well-established general principle of international law; its application to an *intra-generational* context is more novel, however. Therefore Boyle and Freestone conclude it cannot easily be argued that *equity* in this form is ‘already part of the fabric of international law’ or has any applicability outside the limited context of the Rio instruments in which it has so far been employed.⁹³ Vaughan Lowe points out that it seems impossible to create criteria that can be applied to adjust the equities and to hold the proper balance between environmental protection and development, among states at very different stages of development and with different natural resources. He declares *intra-generational equity* has severe limitations as a norm for adjudication.⁹⁴

Ultimately, the *principle of integration* is considered to be the cornerstone of modern international environmental law, providing the idea that development and environmental protection must be reconciled, which is clearly central to the concept of sustainable development.⁹⁵ Principle 4 of the Rio Declaration provides that “[i]n order to achieve sustainable development, *environmental protection* shall constitute an *integral part* of the *development process* and cannot be considered in isolation from it.” The principle requires environmental considerations to be integrated into economic and other development plans, programmes and projects, and development needs to be taken into account in applying environmental objectives. Many commentators believe that in contrast sustainable development places too heavy an emphasis on economic development and that the Rio

⁹² See Boyle & Freestone, *supra* note 29, p. 15.

⁹³ *Id.*

⁹⁴ Lowe, *Unsustainable Arguments*, *supra* note 27, p. 29.

⁹⁵ See Lowe, *Unsustainable Arguments*, *supra* note 27, p. 26. See also Atapattu, *supra* note 10. International environmental law has an interesting history and its evolution can be compartmentalised into three different stages: during stage I, the Stockholm Declaration was adopted amidst the reluctance of developing countries that felt that environmental protection was a luxury they could ill afford; during stage II, polarisation between developing and developed countries over development versus environmental protection led to the appointment of the World Commission on Environment and Development; which, in turn, led to stage III, during which sustainable development was born. Thus, the emphasis at different stages of evolution has been on different issues.

Declaration has diluted the delicate compromises achieved during the Stockholm Conference in 1972.⁹⁶ On the other hand, it seems evident that there is an urgent need for developing countries to achieve economic development as many environmental problems are caused by poverty and underdevelopment itself. Therefore both the Stockholm Declaration and Rio Declaration recognise the link between poverty and environmental degradation.⁹⁷ Atapattu emphasises the important question how such development is achieved. And although developing countries are cautious with this concept, he thinks sustainable development seems to provide the answer.

The *principle of integration* does not take away the fact that economic development does cause environmental problems. As experience has shown, many environmental problems have arisen in the name of development, not to mention the environmental problems that have resulted from the over-consumption of resources occurring in many developed countries. Thus, the *integration principle* is as much about reducing population growth as about changing consumption and production patterns. Since the late 1980s steady changes have taken place, including the development of environmental jurisprudence, the establishment of an Environment Department at the World Bank, together with the adoption of environmental assessments and other procedures; the convergence of trade with environment within the GATT and the decision to place environmental language into the preamble of the World Trade Organization (WTO).⁹⁸

According to Lowe, the *principle of integration* stipulates no more than the existence of two legal principles, the *right or liberty of development* and the *duty of environmental protection*, and there is certainly no reason for 'reconciliation' between these two principles. Cases in which conflicting arguments involve those two principles will have to be judged by tribunals.⁹⁹

Although not legally binding, an actual or potential role for principles in relation to sustainable development lies in facilitating the interpretation of treaty obligations. These interpretations can be made not just by international tribunals faced with a convention-related

⁹⁶ Atapattu, *supra* note 10, p. 272.

⁹⁷ See *id.*

⁹⁸ See Sands, *Emerging Legal Principles*, *supra* note 41, p. 61.

⁹⁹ Lowe, *Unsustainable Arguments*, *supra* note 27, p. 26.

issue, but also by the states that are party to the Conventions, associated convention secretariats, as well as by non-governmental organisations.¹⁰⁰

3. CONCLUSION

International law recognises a principle (or concept) of 'sustainable development'.¹⁰¹ Moreover, considerable consensus exists on its component parts, i.e. the general principles of sustainable development, by which the term 'sustainable development' has been given more direction and coherence. In the light of the concept an overall trend can be recognised towards regulation and many national governments identify areas in need of reform. As one author puts it, the principles of sustainable development perform a "guidance function", and "it is by invoking these principles in domestic and international legal regimes and decision-making processes that law could contribute to the realization of sustainable development."¹⁰²

The scope of these core principles might be too broad to pinpoint specific legal obligations. Nevertheless, they impose a respective political obligation when they set the framework for the exploitation or use of components of the environment including natural resources.¹⁰³ Natural resources are to be used rationally as highlighted by the *principle of sustainable use*. In a generation or two, many of the resources we value - such as coal and copper - may have faded into worthlessness, though in the case of rainforests this seems to be different. The unique and sensitive ecological character of the Kalimantan rainforest requires categorisation as a non-renewable resource as destruction of a rainforest may cause the loss of currently unknown medicines and these forests evolve not over decades but over centuries. Moreover, the rest of the world also feels the impact of deforestation through biodiversity loss and through damage to the rainforest's oxygen-producing and carbon-absorbing functions, which are of vital importance for the entire planet. Therefore it is necessary to apply all techniques that make best use of the specific resource.

¹⁰⁰ See H. Mann, *Comment on the Paper by P. Sands*, in W. Lang (ed.), *Sustainable Development and International Law*, p. 70.

¹⁰¹ Sands, *International Environmental Law*, *supra* note 17, p. 267. See also Nollkaemper, *De Kracht van het Onbepaalde*, *supra* note 39, pp. 88.

¹⁰² Marong, *supra* note 38, p. 57.

¹⁰³ Morrison & Wolfrum, *supra* note 73, p. 23. See also Nollkaemper, *De Kracht van het Onbepaalde*, *supra* note 39, p. 89.

According to the third core element of sustainable development, i.e. the *principle of intra-generational equity*, developed countries shall provide new and additional financial resources to enable developing countries to meet the incremental costs for implementing their environmental commitments. The respective principle indicates that environmental commitments have to be adjusted to reflect the capabilities of states concerned. This does not mean that a developing country may withdraw if a developed country violates its obligations.¹⁰⁴ Marong comes to the conclusion that States have to respect certain limits in favour of the environment and at the same time have to recognise the negative effects of poverty, lack of education and lack of business sophistication upon the environment:

“ (...) it is clear that States, international organizations, NGOs, and academics recognize that processes of economic growth must respect limits set by environmental sustainability, and that certain essential interests of international society deserve protection both through international cooperation and individual state action. All States and people have an interest in preserving the global environment because the environment provides important life-support services and is the source of all natural resources for development. At the same time, all States have an interest in fighting conditions of poverty in developing countries and elsewhere, because poor people are more likely to over-exploit their environmental resources to the detriment of everyone else. The significance of the concept of sustainable development lies in its recognition of these global interdependencies.”¹⁰⁵

In the legislative, judicial and administrative context Marong sees the concept of sustainable development as a framework concept that could be normative in the context of practical reasoning, that is, as a guide to deliberation, discourse or decision-making. This perspective also allows him to make the further argument that the legal notion of sustainable development implies a legitimate expectation, derived from international discourse since 1972, that States and other actors should conduct their affairs in a manner consistent with the pursuit of economic development, social development and environmental protection as equal objectives.¹⁰⁶ Although:

¹⁰⁴ See Morrison & Wolfrum, *supra* note 73, p. 27.

¹⁰⁵ Marong, *supra* note 38, p. 57.

¹⁰⁶ Id.

“The legitimate expectation argument does not require sustainable development norms to be binding international law. Rather, it envisages that it is both possible and legitimate for some norms to only be at the pre-legal stage of development yet provide moral suasion for particular types of behaviour or serve as steps towards development of substantive legal norms.”¹⁰⁷

There is no agreement over the extent to which sustainable development is law. For some, sustainable development principles are legally binding norms - part of international customary law.¹⁰⁸ Proponents of this view point out, amongst others, that sustainable development was adopted as a universal value at the Rio Summit in 1992, which was reaffirmed in 2002 at the World Summit on Sustainable Development in Johannesburg.¹⁰⁹ For other writers, sustainable development has little or no legal content; meaning nothing more than a worthwhile aspiration. Somewhere in the middle of these perspectives is the view that sustainable development is "soft law."¹¹⁰ The latter meaning just that the principle of sustainable development is an umbrella principle that is distinguishable from rights in a technical sense, i.e. from the universal values of human dignity.¹¹¹ In that same sense Marong and other legal scholars fell short of concluding that the concept had become a principle of international law, but nevertheless categorised it as "an established objective of the international community and a concept with some degree of normative status in international law."¹¹² Whatever its legal status may be, governments are coming more and more under serious pressure to address sustainable development issues, specifically during their negotiations of trade law.¹¹³ In the end, it seems safe to conclude that evidence exists of a political obligation of states to ensure sustainable development.

¹⁰⁷ Id.

¹⁰⁸ See Sands, *International Environmental Law*, *supra* note 17, p. 254.

¹⁰⁹ See the Rio Declaration, *supra* note 22. See the U.N. World Summit on Sustainable Development (WSSD), Johannesburg (2002), A/CONF.199/L.1, *Plan of Implementation for the World Summit on Sustainable Development*, <http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIToc.htm> , last visited April 2005. And see the WSSD Report, *supra* note 62. See also Agenda 21: The United Nations Programme of Action From Rio, UN Doc. DPI/1344 (1993), available at <<http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21toc.htm>>.

¹¹⁰ See C.P.M. Waters, *Who Should Regulate the Baku-Tbilisi-Ceyhan Pipeline?*, *Geo. Int'l Env'tl. L. Rev.* (2004) p. 409.

¹¹¹ See P. Alston, *Core Labour Standards*, *European Journal of International Law* June (2004), p. 479. See also Nollkaemper, *De Kracht van het Onbepaalde*, *supra* note 39, p. 89.

¹¹² Marong, *supra* note 38, p. 57.

¹¹³ M-C. Cordonier Segger, *Sustainable Development in the Negotiation of the FTAA*, *Fordham International Law Journal* February (2004), p. 1131.

Focusing on the recent situation on the Indonesian island of Kalimantan, one of Indonesian's ongoing challenges remains addressing the threats to its important and delicate ecosystems. There is strong evidence that the actual way in which Indonesia focuses on economic development cannot co-exist with a commitment to preserving and protecting Indonesia's land resources. In an effort to address the specific competing issues of economic development and land resource protection on Kalimantan, chapter 2 of this report defines key terms and identifies causes of deforestation.

CHAPTER 2: INTERNATIONAL ENVIRONMENTAL LAW

The aim of this chapter is to search for useful international legal instruments in the field of environmental law the Republic of Indonesia could adopt, implement and enforce to guarantee sustainable development of the tropical forests at Kalimantan. In order to do so, this chapter will commence with a general discussion of the environmental law aspect of sustainable development. Then, the report will give an overview of the legal instruments applicable on the major environmental security issues at Kalimantan.

Since the number of treaties that apply is substantial, this report will focus on three of the most important treaties pertaining to the deforestation-issue at Kalimantan: the Convention on Biological Diversity, the Kyoto Protocol to the United Nations Framework Convention on Climate Change, and the ASEAN Agreement on Transboundary Haze. A general introduction of these treaties will be provided in advance of discussion of the environmental security issues. At the end of this chapter, to give a complete overview, the weak aspects of these treaties will be highlighted. This part of the report will conclude with a short conclusion of the findings.

1. GENERAL: THE ENVIRONMENTAL LAW ASPECT OF SUSTAINABLE DEVELOPMENT

Why this report focuses on sustainable development as a tool for the prevention of deforestation at Kalimantan, can not be illustrated better than by the following statement from Simon Tay:

“[S]ustainable development as a normative goal may be the only acceptable response to the fires. A greater emphasis on conservation has not proved acceptable to Indonesia (...), give[n] [the] widespread poverty and current low levels of income.”¹¹⁴

As seen in the previous chapter, sustainable development comprises those principles and rules which are derived, principally, of the *lex specialis* of prior and emerging international law in

¹¹⁴ S.S.C. Tay, *Southeast Asian Fires: The Challenge for international environmental law and sustainable development*, *Geo. Int’L Envrtl. L. Rev.*, Winter 1999, p. 266 [hereinafter *Tay, Southeast Asian Fires*].

three fields of international co-operation: economic development, the environment and human rights. The chapter analyses how several authors define the concept of sustainable development in terms of various principles, preferring a so-called “umbrella approach”, in which sustainable development is understood more broadly as encompassing a variety of different concepts. The four ‘recurring elements’ that, according to Philippe Sands ‘appear to comprise the legal elements of the concept of ‘sustainable development’, as reflected in international agreements’¹¹⁵ are discussed in paragraph 1.2. Here, we will focus on the seven principles of international law, which Sands states have emerged as having particular relevance in the field of sustainable development.¹¹⁶

Among these, the following principles are drawn from the environmental field: a) Principle 21 (Stockholm Declaration) and Principle 2 (Rio Declaration): sovereignty over natural resources and the responsibility not to cause environmental harm, b) the principle of good neighbourliness and international co-operation, c) the principle of common but differentiated responsibility, d) the principle of preventive action, e) the precautionary principle and f) the polluter-pays principle. In this paragraph, a general description and explanation of the principles relevant to the deforestation-problem at Kalimantan will be given. Since most authors see Stockholm-principle 21 and Rio-principle 2 as a reflection of the principle of good neighbourliness,¹¹⁷ discussion of the Stockholm- and Rio-principles will be incorporated in the discussion, the principle of good neighbourliness and international co-operation.

As can be seen in the following paragraphs, these principles have become an important part of international environmental law because of their incorporation in environmental treaties. According to Simon Tay, environmental law and institutions have failed to prevent or adequately respond to the Southeast Asian forest fires in the past, but:

“[T]he principles of international environmental law are, however, the only source for a possible remedy.”¹¹⁸

¹¹⁵ Sands, *International Environmental Law*, *supra* note 17, p. 253.

¹¹⁶ See Sands, *Emerging Legal Principles*, *supra* note 41, p. 62.

¹¹⁷ i.a. Birnie & Boyle, *supra* note 19, pp. 104 and 111. And Morrison & Wolfrum, *supra* note 73, p. 28.

¹¹⁸ Tay, *Southeast Asian Fires*, *supra* note 114, p. 242.

1.1 The principle of good neighbourliness and international co-operation

In international law, states are not allowed to conduct or permit activities within their territories, or in common spaces, without regard for the rights of other states or for the protection of the environment.¹¹⁹ This point is referred to as ‘the principle(s) of good neighbourliness’ or *sic utere tuo, ut alienum non laedes*. According to Sands, the principle of good neighbourliness has been integrated into sustainable development.¹²⁰ Birnie and Boyle note that two propositions which are used widely in state practice, judicial decisions, the pronouncements of international organisations and the work of the International Law Commission can be regarded as customary international law, or in certain aspects as general principles of law. These propositions are:

“(T)hat states have a duty to prevent, reduce, and control pollution and environmental harm, a duty to co-operate in mitigating environmental risks and emergencies, through notification, consultation, and in appropriate cases, environmental impact assessment.”

These elements of the law on transboundary harm have been codified and developed significantly in the Rio Declaration and the policy of avoiding irreversible harm underlies a number of global environmental treaties, as will be discussed below.¹²¹

1.1.1 The duty to prevent, reduce and control transboundary environmental harm

The codification and development of the first mentioned element of the law on transboundary harm has also advanced significantly in the work of the International Law Commission and in the jurisprudence of the ICJ.¹²² An example of the latter is the *Gabcikovo-case*. The ICJ declares in paragraph 53 “the great significance that it attaches to respect for the environment, not only for States but also for the whole of mankind.” The same paragraph is referring to the 1980 Yearbook of the International Law Commission in which, among others, can be found that “(i)t is primarily in the last two decades that safeguarding the ecological balance has come to be considered an ‘essential interest’ of all States.”¹²³ But, the proposition to prohibit transfrontier damage has emerged in jurisprudence long before 1992, examples are the 1941

¹¹⁹ Birnie & Boyle, *supra* note 19, p. 104.

¹²⁰ See Sands, *Emerging Legal Principles*, *supra* note 41, p. 63.

¹²¹ Birnie & Boyle, *supra* note 19, pp. 105 and 90.

¹²² Birnie & Boyle, *supra* note 19, p. 105.

¹²³ *Gabcikovo-Nagymaros*, *supra* note 34, para. 53.

*Trail Smelter Case*¹²⁴, the 1957 *Lac Lanoux Case*¹²⁵, the 1969 *Gut Dam Case*¹²⁶ and the *Corfu Channel Case* in 1949, in which the ICJ stated that every State has an obligation ‘not to allow knowingly its territory to be used for acts contrary to the rights of other states’.¹²⁷

Stockholm-principle 21 and Rio Principle 2 are very significant provisions, both pertaining to the prohibition of environmental harm. Principle 21 of the 1972 Stockholm Declaration states:

‘States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.’

Principle 2 of the Rio Declaration has more or less the same wording, with one minor change:

‘States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.’

The principle contains two fundamental, but opposing objectives. Sands remarks that:

“(…) the two elements combine to establish what can be taken as the basic obligation underlying international environmental law and the source of its further development and elaboration in rules of greater specificity”.¹²⁸

¹²⁴ *Trail Smelter Case (U.S. v. Can.)*, 3 R.I.A.A. 1905, 1911, 1938 (1941), available at <<http://www.jura.uni-muenchen.de/einrichtungen/ls/simma/tel/case8.htm>> (summary).

¹²⁵ *Lac Lanoux Case (Spain v. Fr.)*, 12 R.I.A.A. 281 (1963) reprinted at 53 A.J.I.L. 156 (1959) and 24 ILR 101 (1957) [hereinafter *Lake Lanoux*].

¹²⁶ *The Gut Dam Case (U.S. v. Can.)*, 8 ILM 118 (1969), reprinted in Vol. I, Int’l Envrtl. Law Reports 386 (C. Robb, ed., Cambridge University Press; UK, 1999).

¹²⁷ Morrison & Wolfrum, *supra* note 73, p. 28 <http://www.icj-cij.org/icjwww/icasess/icc/icc_ijudgment/iCC_ijudgment_19490409.pdf>.

¹²⁸ See Sands, *Emerging Legal Principles*, *supra* note 41, p. 62.

He also states that:

“(t)he support given to Principle 21 (and now to Principle 2) by states and other members of the international community over the last twenty years establishes a compelling basis for the view that it now reflects a general rule of customary law.”¹²⁹

As discussed later, this principle is fully incorporated in the Biodiversity Convention (here Stockholm-principle 21, without the supplement ‘and developmental’ as in Rio-principle 2) and into the Preamble of the Climate Change Convention and it also appears in case law.

Even though judgements of the ICJ are only binding on the parties in the case, they do provide authoritative guidance on the state of the law at the time they were decided. The judgements affirm, among others, that a legal obligation to prevent transboundary harm does exist.¹³⁰

According to Birnie and Boyle it is beyond serious argument that states are required by international law to take adequate steps to control and regulate sources of global environmental pollution or transboundary harm within their territory or subject to their jurisdiction. Support for this can be found, *inter alia*, in arbitral and judicial decisions, in a wide range of global and regional treaties and in the Stockholm and Rio Declarations.¹³¹ This obligation of harm prevention can be considered as customary law and can therefore be applied to the Indonesian government.

The obligation is relevant to the situation at Kalimantan, because it signals at a minimum that the rights of the Republic of Indonesia in the exercise of permanent sovereignty are not unlimited.¹³² International law does not allow states to conduct or permit activities within their territories, without regard for the rights of other states or for the protection of the environment.¹³³ This indicates that if the Indonesian government will not take (sufficient) measurements to prevent and stop the forest fires at Kalimantan, it can be held accountable by

¹²⁹ See Sands, *Emerging Legal Principles*, *supra* note 41, p. 62.

¹³⁰ Birnie & Boyle, *supra* note 19, p. 108.

¹³¹ *Id.*, p. 109.

¹³² See Sands, *Emerging Legal Principles*, *supra* note 41, p. 63.

¹³³ See Birnie & Boyle, *supra* note 19, p. 104.

other countries like its neighbour Malaysia, which also suffers from haze caused by the forest fires.

1.1.2 *The duty to co-operate*

Principle 24 of the 1972 Stockholm Declaration states:

‘International matters concerning the protection and improvement of the environment should be handled in a co-operative spirit by all countries, big and small, on an equal footing. Co-operation through multilateral or bilateral arrangements or other appropriate means is essential to effectively control, prevent, reduce and eliminate adverse environmental effects resulting from activities conducted in all spheres, in such a way that due account is taken of the sovereignty and interests of all States.’

The commitment to co-operation between states is in Sands’ opinion “reflected in the large body of treaties and other international acts that now have environmental and other objectives related to sustainable development.”¹³⁴ This obligation to co-operate can be found in almost all international environmental treaties (global, bilateral and regional). The principle of co-operation is said to extend not only to prior accidents, but also to planned activities. According to Stoll, the principle generally requires states to give information and be prepared for consultations with other states. The information should include all data relevant to assessing and confronting significant transboundary damages, whether they are actual or potential.¹³⁵

Usually, the principle is stated in general terms, but as will be described further on in this paragraph, the general obligation can also include certain specific commitments. These specific commitments include rules relating to environmental impact assessments, the development of techniques to ensure that neighbouring states receive necessary information (information exchange, consultation and notification), the provision of emergency information and the transboundary enforcement of environmental standards.¹³⁶

¹³⁴ Sands, *Emerging Legal Principles*, *supra* note 41, p. 63.

¹³⁵ P-T. Stoll, *Transboundary Pollution*, in Wolfrum & Morrison (eds.), *supra* note 73, p. 188.

¹³⁶ Sands, *Emerging Legal Principles*, *supra* note 41, p. 63.

Birnie and Boyle consider the principle ‘to co-operate with each other in mitigating transboundary environmental risks’ as a natural counterpart of the concept of equitable utilisation of a shared resource. They claim that, even though the concept of ‘shared natural resources’ and the legal implications of the term have proved controversial,

“(...) the basic proposition that states must co-operate in avoiding adverse effects on their neighbours through a system of impact assessment, notification, consultation and negotiation appears generally to be endorsed by the relevant jurisprudence, the declarations of international bodies, and the work of the ILC.”

They believe it also enjoys some support in state practice, based on the above already mentioned *Lac Lanoux arbitration-case* and the *Nuclear Test Cases*.¹³⁷

Since Birnie and Boyle state that an obligation for states to co-operate with each other in mitigating transboundary environmental risks is widely acknowledged, this obligation can also be considered to have consequences for Indonesia. The government can be held accountable if they refuse to co-operate in trying to prevent and stop the Kalimantan forest-fires. Because the obligation to notify and consult is considered to be customary law, the Indonesian government has to take these obligations into account relating to the Kalimantan-situation.¹³⁸

The UN General Assembly noted about Rio-Principle 24 that it required the exchange of information ‘in a spirit of good neighbourliness’.¹³⁹ Agreement on more detailed rules could not be reached at that time, but Birnie and Boyle identify the broad contours of ‘good neighbourliness’ in subsequent legal developments. In various fields (for example marine pollution and industrial accidents) bilateral, regional or global treaties have called for some measures of prior notification and consultation. Birnie and Boyle mention that

¹³⁷ Birnie & Boyle, *supra* note 19, p. 126. In the *Lac Lanoux arbitration*, France wanted to divert a watercourse, which was shared with Spain. The Court noted that conflicting interests must be reconciled by negotiation and mutual concession, although this did not indicate that France could only act with Spain’s consent: the rights of Spain were procedural only. But the obligation to negotiate is a real one, not a mere formality. In the *Nuclear test Cases* France was in conflict with Australia and New Zealand about nuclear tests in the Pacific Ocean. France had stated that it would not perform any more tests, and therefore the ICJ dismissed the case since it decided there wasn’t any object anymore. See *Lake Lanoux*, *supra* note 125. And see *Nuclear Test Cases (New Zealand vs. France)*, ICJ Rep. 253 (1974).

¹³⁸ Birnie & Boyle, *supra* note 19, p. 126.

¹³⁹ UNGA Res. 2995 (XXVII) (1972).

“(al)though some writers have doubted whether it is possible to generalise customary procedural rules for transboundary environmental risk from the treaties, case law and limited state practice in these various fields, a strong provision was included in the Rio Declaration.”¹⁴⁰

Principle 19 declares:

‘States shall provide prior and timely notification and relevant information to potentially affected States on activities that may have a significant adverse transboundary environmental effect and shall consult with those States at an early stage and in good faith.’

According to Birnie and Boyle, “(t)his provision fully reflects the precedents referred to here”. Moreover, even if notification and consultation in cases of transboundary risk may not yet be independent customary rules, non-compliance with them is likely to be strong evidence of a failure to act diligently in protecting other states from harm under Rio Principle 2.¹⁴¹ Furthermore, once notified, a state which raises no objection may well find itself stopped from future protest; there are thus significant legal benefits to be gained from following the requirements of Principle 19.¹⁴²

International practice and environmental strategies of (regional) organisations like UNEP or the IUCN have lend further support to the requirement of transboundary co-operation in cases of significant environmental risk. Important in this context is the ILC’s Draft Convention on Prevention of Transboundary Harm.¹⁴³ The Draft articles 9-13 address the procedural obligations of states in cases where there is risk of significant transboundary harm. Article 2a defines this term as follows:

¹⁴⁰ Birnie & Boyle, *supra* note 19, p. 127.

¹⁴¹ ‘States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.’

¹⁴² Birnie & Boyle, *supra* note 19, p. 127.

¹⁴³ ILC, *Draft Articles on Prevention of Transboundary Harm from Hazardous Activities (with commentary)*, Report of the ILC, 53rd Session, 56 (10)UN GAOR 370-436, UN Doc. A/56/10 (2001) [hereinafter ILC Draft Articles], available at: <<http://www.un.org/law/ilc/texts/prevention/preventionfra.htm>>, last visited at March 2005.

‘Risk of causing significant transboundary harm includes risks taking the form of a high probability of causing significant transboundary harm and a low probability of causing disastrous transboundary harm;

Birnie and Boyle emphasise that identical procedural obligations will not apply to every case of environmental risk. First, the risk must be significant, which “(...) implies both a degree of probability and a threshold of seriousness of harm, although the risk does not have to be ultra-hazardous in character.”¹⁴⁴ Second, much will depend on the circumstances of the case (see ILC-article 10).

Considering the consequences and circumstances of the Kalimantan-situation, the government of Indonesia is likely to be obliged to take these procedural obligations into account. As is described in the Introduction of this report, the forest fires at Kalimantan definitely cause a significant environmental risk at a national, regional and global level because of the haze that causes damage to the environment (acid rain, poor air quality, poorer visibility), climate change caused by carbon emissions and has serious effects on human health. Based on the ILC Draft Articles, Indonesia should be obligated to consult on preventive measures (article 9), exchange information (article 12) and inform the public that is likely to be affected (article 13).

1.2 The principle of common but differentiated responsibility

The Rio Conference marked a distinctive revolution in the scope of international environmental law, since for the first time a framework of global environment responsibilities has been set out instead of responsibilities that are merely regional or transboundary in character or which relate to common spaces. The concept of ‘common concern’ is used to designate those issues of global responsibility.¹⁴⁵

¹⁴⁴ Birnie & Boyle, *supra* note 19, p. 128.

¹⁴⁵ Birnie & Boyle, *supra* note 19, p. 97-99.

Wolfrum describes the significance of the concept as follows:

“Common concern’ thus means that the preservation of biological diversity has ceased to be the internal affair of a single state and has become the concern of all those acting in trust for future generations.”¹⁴⁶

Birnie and Boyle believe that the main impact of this concept is that it gives states a legitimate interest in resources of global significance, but at the same time a common responsibility to assist in the sustainable development of those resources. They give an extensive explanation of why this global responsibility is different from existing transboundary environmental law.¹⁴⁷

- the respective global environmental responsibilities may have an *erga omnes* character, owed to the international community as a whole instead of just to the other injured states;
- they are differentiated in various ways between developed and developing states and contain strong elements of equitable balancing (the principle of common but differentiated responsibility, which will be discussed further on in this paragraph);
- the commitment to a precautionary approach is already relevant to many aspects of environmental law, but is particularly relevant in matters of global concern (see further paragraph 1.4).

The element of common concern is, according to many authors, inextricably bound with the principle of differentiated responsibilities. Sands states that:

“(t)he principle of common but differentiated responsibilities has developed out of the broader principle of equity in general international law, together with the recognition that the special needs of developing countries must be taken into account in the development, application and interpretation of rules of international environmental law.”¹⁴⁸

¹⁴⁶ Morrison & Wolfrum, *supra* note 73, p. 362.

¹⁴⁷ Birnie & Boyle, *supra* note 19, p. 98-104.

¹⁴⁸ Sands, *Emerging Legal Principles*, *supra* note 41, pp. 62-63.

Principle 7 of the Rio Declaration describes ‘common but differentiated responsibility’ as follows:

‘States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command.’

Birnie and Boyle state:

“Common but differentiated responsibility can (...) be seen to define an explicit equitable balance between developed and developing states in at least two senses: its sets lesser standards for developing states and it makes the performance of those standards dependent on the provision of solidarity assistance by developed states.”¹⁴⁹

Higher standards are set for developed states based on the fact that they have contributed most to problems pertaining to the ozone layer, climate change and the decrease of biodiversity and because of their greater (financial) ability to take necessary measures. This principle is incorporated in the Climate Change Convention (art. 4), but the concept of global, but differentiated responsibilities can also be found in the Biodiversity Convention. Even though Rio-principle 7 cannot be considered to be a principle of customary international law, it has legal significance. It provides an equitable basis for co-operation between developed and developing states, “(...) on which the latter are entitled to rely in the negotiation of new law to address global environmental concerns.”¹⁵⁰ Birnie and Boyle emphasise that this principle is not intended to give developing countries a license to do what they want without concerning the (environmental) consequences:

¹⁴⁹ Birnie & Boyle, *supra* note 19, p. 101.

¹⁵⁰ *Id.*, p. 103.

“It was never intended to be a justification for allowing developing states to dump pollution on each other.”¹⁵¹

Wolfrum divides the principle in four distinguishable elements.¹⁵² The first element is that the responsibility concerning the world climate is a common one, which means that all States have an obligation in the preservation of the climate. This co-operation is not only a necessity but also an obligation (see 1.1.2), given the nature of the threat to the world climate. The second element is that the preservation of the world climate not only exists for present benefit, but for the benefit of future generations. Thirdly, the obligation may be a differentiated one. According to Wolfrum, this means that “(...) the different capabilities of technological or economic nature may be taken into consideration when the obligations concerning the protection of the environment are specified.” On the basis of Rio-principle 7 he indicates, that the elements that hereby have to be considered are the different stages of development and the contributions of certain states to harming the climate or components of the world environment.

The Republic of Indonesia can benefit from this principle, since the country is considered to be a developing country and thus profits from the differentiated standards in treaties. A discussion of specific examples will follow in paragraph 2. On the other hand, a disadvantage for Indonesia can be that the forest fires at Kalimantan significantly harm ‘components of the world environment’, which could indicate that the country does have a great responsibility under international (environmental) law, despite the fact that it can be considered as a developing country.

According to Wolfrum's fourth element, developed states shall provide new and additional financial resources to enable developing countries to meet the incremental costs for implementing their commitments. Developed states are considered to be able to contribute more to the common cause than developing countries. This financial obligation has been highlighted in the Convention on Biological Diversity and will thus be discussed more extensively in paragraph 2, where the most important articles of this Convention will be applied on the envirosecurity issues at Kalimantan.

¹⁵¹ Id., p. 104.

¹⁵² Morrison & Wolfrum, *supra* note 73, pp. 26-27.

1.3 The principle of preventive action

According to Sands, this principle contains “(...) the obligation to prevent damage to the environment, or to otherwise reduce, limit or mitigate such damage (...)”.¹⁵³ It is closely related to Stockholm-Principle 21 and Rio-Principle 2, but Sands finds that it comes up as an end in itself because it arises by operation of the obligation to minimise environmental damage (and to protect the environment):

“The preventive principle requires action to be taken at an early stage and, if possible, before damage has actually occurred.”¹⁵⁴

He finds that it is indirectly endorsed in Rio Principle 11, which contains the phrase: ‘States shall enact effective environmental legislation.’¹⁵⁵

This principle has special significance for the situation at Kalimantan, since the lack of strict, national legislation seems to be a major cause for the ongoing forest-fires.¹⁵⁶ Though discussion of the domestic legal situation lies outside of the scope of this report, it is important to emphasise that there lies an obligation under international (environmental) law upon the government of the Republic of Indonesia to prevent, reduce, limit or mitigate the damage forest-fires cause, in which national legislation has to play an important part.

1.4 The precautionary principle

As stated in Principle 15 of the Rio Declaration:

‘In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or

¹⁵³ Sands, *Emerging Legal Principles*, *supra* note 41, p. 65.

¹⁵⁴ *Id.*

¹⁵⁵ See *Rio Declaration*, *supra* note 22, Art. 11: ‘States shall enact effective environmental legislation. Environmental standards, management objectives and priorities should reflect the environmental and developmental context to which they apply. Standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries.’

¹⁵⁶ See Westrich, *supra* note 1.

irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.’

Birnie and Boyle state that in this formulation, the principle helps to identify whether a legally significant risk exists by addressing the role of scientific uncertainty.¹⁵⁷ They also see the importance of the principle in determining whether a risk requires a response.¹⁵⁸ According to Sands,

“(T)he principle is intended to provide guidance to states and the international community in the development of specific measures of international law and policy in the face of scientific uncertainty.”¹⁵⁹

Wolfrum finds that:

“(I)t requires that the decisions are made with caution and that counter-actions or the cessation of potentially harmful activities are not postponed solely for the reason that there is no scientific proof that that the possible environmental harm or degradation will materialise.”¹⁶⁰

In literature, the question whether the precautionary principle can be seen as a part of international customary law, rises regularly. Birnie and Boyle consider that on the one hand, the principle is formulated in obligatory terms in the Rio Declaration, that it is very widely endorsed by states, that it has been applied or adopted by a growing number of international organisations and treaty bodies, both as a matter of policy and in legally binding treaty articles. On the other hand, the ICJ did not refer to the principle in the *Gabcikovo-case* (only Judge Weeramantry used the term in his dissenting opinion). The WTO Appellate Body concluded in the *Beef Hormones Case* that it found the legal status of the precautionary principle in general international law uncertain¹⁶¹ and the International Tribunal for the Law

¹⁵⁷ See Birnie & Boyle, *supra* note 19, p. 119.

¹⁵⁸ See *id.*, p. 120. The authors comment that the principle can not determine what that response should be.

¹⁵⁹ Sands, *Emerging Legal Principles*, *supra* note 41, p. 65.

¹⁶⁰ Morrison & Wolfrum, *supra* note 73, p. 14.

¹⁶¹ WTO Appellate Body Report, *EC Measures Concerning Meat and Meat Products*, WT/DS26/AB/R; WT/DS48/AB/R (1998), paras. 120-5.

of the Sea had no view on the precautionary principle or approach in general international law in the *Southern Bluefin Tuna (Provisional measures) Cases*.¹⁶²

Also, the precautionary approach is not universally applied: the European Union considers it to be a principle of Customary Law, the US denied that it had any legal status at all and states have been very selective in adopting the principle in treaties. For example, it can be found in the Biodiversity and Climate Change Conventions, but not in the 1994 Nuclear Safety Convention.¹⁶³ Besides these uncertainties, Birnie and Boyle feel that the use of the principle by (inter)national courts, by international organisations and in treaties shows that it

“(...) does have a legally important core on which there is international consensus - that in performing their obligations of environmental protection and sustainable use of natural resources states cannot rely on scientific uncertainty to justify inaction when there is enough evidence to establish the possibility of a risk of serious harm, even there is as yet no proof of harm. In this sense the precautionary principle is a principle of international law on which decision makers and courts may rely in the same way that they may be influenced by the principle of sustainable development.”¹⁶⁴

Applied to the situation at Kalimantan, this principle can potentially play a role if the Indonesian government declares that there is no full scientific certainty that the forest-fires will create serious or irreversible damage to the environment. Since this is not the case, discussion of this principle, which has generated significant disagreements amongst authorities in international environmental law will remain general and short.

1.5 The polluter-pays principle

According to this principle, the costs of pollution should be borne by the person(s) responsible for causing the pollution and the consequential costs. Although Sands remarks that the precise meaning of the principle remains open to interpretation, it has attracted broad support and relates closely to the development of rules of civil and state liability for environmental damage. He sees the practical significance of the principle

¹⁶² *Southern Bluefin Tuna Cases (Provisional measures) (New Zealand and Australia v. Japan)*, ITLOS Nos. 3 & 4 (1999), paras. 77-9.

¹⁶³ Birnie & Boyle, *supra* note 19, pp. 118-119.

¹⁶⁴ Birnie & Boyle, *supra* note 19, p. 120.

“(…) in its allocation of economic obligations in relation to environmentally damaging activities, particularly in relation to liability, the use of economic instruments, and the application of rules relating to competition and subsidy.”

He also remarks that it is doubtful whether it has achieved the status of a generally applicable rule of customary international law. Birnie and Boyle feel that, given the wording of Principle 16 of the Rio Declaration, it can't be said that the polluter pays-principle is intended to be legally binding:¹⁶⁵

“National authorities should endeavour to promote the internalisation of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.”

Wolfrum also comments on the wording, according to him the principle mirrors the view that the principle might be applicable at the national level, but not in economic international relations since it might ameliorate competitive advantages in international trade.¹⁶⁶ Birnie and Boyle comment that:

“The most that can be said is that states, inter-governmental regulatory institutions, and courts can and should take account of the principle in the development of environmental law and policy, but they are in no sense bound by international law to make ‘polluters pay’.”¹⁶⁷

The Permanent Court of Arbitration issued a critical judgement on the precautionary principle in the case between France and The Netherlands concerning the Protocol to the Convention of December 3, 1976 on the Protection of the Rhine against Pollution by Chlorides.¹⁶⁸ In this case, The Netherlands contested, *inter alia*, the manner in which France calculated its expenditures in terms of the quantities of chlorides, and argued that France's interpretation of

¹⁶⁵ See Birnie & Boyle, *supra* note 19, p. 92.

¹⁶⁶ See Morrison & Wolfrum, *supra* note 73, pp.18-19.

¹⁶⁷ Birnie & Boyle, *supra* note 19, p. 93.

¹⁶⁸ *Rhine Chlorides (France v. Netherlands)*, available at : <<http://www.pca-cpa.org/ENGLISH/RPC/#Netherlands/France>>.

the Protocol was in violation of Article 31 of the Vienna Convention and that the precautionary principle should be taken into account.¹⁶⁹ Summarised, the Tribunal concluded that even though the members recognised the importance of the principle in conventional law, the Tribunal did not think that the precautionary principle forms part of international general law.¹⁷⁰

Still, considering the broad support for this principle, it can also be useful in the case of Kalimantan since it provides a good incentive for the Indonesian government to prevent and stop the forest fires. Based on the polluter-pays-principle, Indonesia can be held accountable for the financial damage that is caused by the fires. This damage probably amounts to millions of dollars, a price that the country will not be able to pay.

2. LEGAL INSTRUMENTS APPLICABLE ON THE ENVIRONMENTAL SECURITY ISSUES AT KALIMANTAN

This paragraph will focus on the effects of environmental degradation and possible remedies as provided for in environmental law instruments. So far we have discussed the environmental law aspect of sustainable development. This paragraph analyses the legal instruments applicable to some of the major environmental security issues at Kalimantan.

¹⁶⁹ The Additional Protocol of September 25, 1991 (“the Protocol”) provides that in French territory, measures shall be taken including reducing chloride waste and temporarily stockpiling of chlorides on land as soon as the concentration of salts on the German-Dutch border exceeds 200mg/l. It also provides that measures are to be taken on Dutch territory, in the Polder of Wieringermeer, in order to reduce chloride waste in the waters of the IJsselmeer by wastes in the sea of Wadden. According to the Protocol, the measures are to be financed according to the following percentages: 30% by Germany, 30% by France, 34% by the Netherlands and 6% by Switzerland. See website of the American Society of International law, <<http://www.asil.org/ilib/ilib0718.htm>>, last visited April 2005.

¹⁷⁰ ‘Le Tribunal note que les Pays-Bas, à l’appui de leur demande, ont fait référence au principe du <<polluer payeur>>. Le Tribunal observe que ce principe figure dans certains instruments internationaux, tant bilatéraux que multilatéraux, et se situe à des niveaux d’effectivité variables. Sans nier son importance en droit conventionnel, le Tribunal ne pense pas que ce principe fasse partie du droit international général. Le principe <<polluer payeur>> n’apparaît nulle part dans la Convention ou le Protocole. Ce dernier adopte d’ailleurs une autre solution. Les Pays-Bas reconnaissant au demeurant que le Protocole déroge au principe du <<polluer payeur>>. Il en résulte que ce principe est dénué de pertinence pour l’interprétation du point 4.2.1’ - Sentence Arbitrale du 12 Mars 2004, Affaire concernant l’apurement des comptes entre le royaume des Pays-Bas et la République Française en application du Protocole du 25 Septembre 1991 additionnel à la Convention relative à la protection du Rhin contre la pollution par les chlorures du 3 Décembre 1976, point 104 at p. 41 at <<http://www.pca-cpa.org/ENGLISH/RPC/PBF/Sentence%20I.pdf>>, last visited at March 2005.

A list of these issues was provided in the Introduction, in this paragraph, some of these will be highlighted: the damaging effect of haze on health, economy and environment (local and regional) (subparagraph 2.1), loss of biodiversity – forests and wetlands (2.2), possible extinction of plant and animal species (2.3), destruction of the environment of neighbouring countries (2.4) and climate change caused by carbon emissions (2.5).

As stated above in the introduction to this chapter, the number of treaties that apply is substantial. In this paragraph, we will focus on the Convention of Biological Diversity, the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the ASEAN Agreement on Transboundary Haze Pollution. The Biodiversity Convention (CBD) will prove to be helpful pertaining to loss of biodiversity – forests and wetlands, possible extinction of plant and animal species and the destruction of the environment of neighbouring countries. The ASEAN Agreement provides incentives for the damaging effect of haze on health, economy and environment (local and regional) and the Kyoto Protocol in the case of climate change caused by carbon emissions. Finally, to complete the discussion, the weak aspects of these instruments will be highlighted, after which the conclusion of the chapter will follow. In the Appendix to this report, an overview of other applicable environmental law treaties, soft law and developments will be provided.

First, a general introduction of the main applicable treaties will follow.

The **Convention on Biological Diversity** (CBD) was concluded in June 1992 and entered into force on 29 December 1993, after thirty countries ratified it. The Republic of Indonesia was one of the first countries to sign, namely on June the 5th. Indonesia, which is one of the ten countries with the richest biodiversity – also known as megadiversity country, ratified it on 23 August 1994.¹⁷¹ The CBD objectives are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources.¹⁷² Article 2 of the CBD defines biological diversity as

‘the variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of

¹⁷¹ See the Biodiversity Convention, *supra* note 33. And see the National Biodiversity and Action Plan, p. 8, available at www.biodiv.org/world/reports.aspx?type=all&alpha=I.

¹⁷² See the Biodiversity Convention, *supra* note 33, Art. 1.

which they are part; this includes diversity within species, between species and of ecosystems’.

The Secretariat of the CBD distinguishes three aspects of biodiversity:

- The wide variety of plants, animals and micro-organisms. So far, about 1.75 million species have been identified, mostly small creatures as insects. Scientists reckon that there are actually about 13 million species, though estimates range from three to a hundred million;
- It also includes genetic differences within each species – for example, between varieties of crops and breeds of livestock;
- Another aspect of biodiversity is the variety of ecosystems such as those that occur in deserts, **forests**, wetlands, mountains, lakes, rivers and agricultural landscapes. In each ecosystem, living creatures, including humans, form a community, interacting with one another and with the air, water and soil around them.¹⁷³

The Conference of the Parties (COP, the governing body of the Biodiversity Convention that advances implementation of the Convention through the decisions it takes at its periodic meetings) has repeatedly expressed the importance of forests for biodiversity. An example of this can be found in decision II/9, taken on the seventh meeting (COP 7) which was held at Kuala Lumpur (Malaysia) in February 2004.

‘The maintenance of forest ecosystems is crucial to the conservation of biological diversity well beyond their boundaries, and for the key role they play in global climate dynamics and bio-geochemical cycles. Forests provide ecological services and, at the same time, livelihoods or jobs for hundreds of millions of people worldwide.’¹⁷⁴

In literature on the topic, this has been formulated as follows:

“Forests provide the most diverse sets of habitats for plants, animals and micro-organisms, holding the vast majority of the world’s terrestrial species. Consequently,

¹⁷³ See: Secretariat of the Convention on Biological Diversity, *Sustaining Life on Earth – How the Convention on Biological Diversity promotes nature and well-being* (2000), p. 2, <<http://www.biodiv.org/doc/publications/cbd-sustain-en.pdf>>.

¹⁷⁴ Decisions from meetings of the Conference of the Parties of the Biodiversity Convention [hereinafter *Biodiversity Parties*], *supra* note 33, *Decision II/9*, <<http://www.biodiv.org/decisions/?dec=II/9>> .

the maintenance of forest ecosystems is crucial to the conservation of biological diversity and degradation of forests has a dramatic impact on biodiversity.”¹⁷⁵

The Kyoto Protocol to the United Nations Framework Convention on Climate Change

The UNFCCC¹⁷⁶ entered into force on 16th of February 2005.¹⁷⁷ According to article 2 of the UNFCCC: the objective of the framework is ‘[...] stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.’ In order to achieve this goal, the Kyoto Protocol was negotiated. The industrialized parties¹⁷⁸ to the Protocol committed themselves to individual and legally binding targets to limit and reduce their emissions of six different greenhouse gasses as defined in Annex A of the Protocol (art. 3 (1) Kyoto Protocol) for the commitment period 2008-2012.¹⁷⁹

It was agreed to achieve quantified emission limitation and reduction commitments in order to promote sustainable development (article 2 (1) of the Kyoto Protocol). Developing countries, including Indonesia, are also Parties to the Protocol but do not have ‘emission reduction targets’.¹⁸⁰ The potential in Indonesia to benefit from the Clean Development Mechanism (CDM) – a mechanism in which an industrialised country can meet their Kyoto Protocol emission limitation and reduction commitments in a developing country – was the main factor in justifying the ratification,¹⁸¹ or, as stated by the State Minister for the Environment Nabeli Makarim: ‘[t]here will be no negative consequences at all, but we will benefit from the assistance from developed countries’.¹⁸²

¹⁷⁵ S. Johnston, *The Convention on Biological Diversity: The Next Phase*, 6 (3) RECIEL (1997) 222 [hereinafter *Johnston*].

¹⁷⁶ See the Climate Change Convention, *supra* note 33, available at <<http://unfccc.int/2860.php>>, last visited March 2005.

¹⁷⁷ See *id.* Indonesia signed as early as 13th July 1998 and ratified in December 2004.

¹⁷⁸ See Climate Change Convention, *supra* note 33, *Annex I*. See also *Annex B*, 1997 Kyoto Protocol on Climate Change, 37 ILM 22 [hereinafter *Kyoto Protocol*], *Annex B*. <http://unfccc.int/essential_background/kyoto_protocol/items/3145.php>, last visited March 2005. Most striking non-parties from the industrialised world are *inter alia* Australia and the United States.

¹⁷⁹ Kyoto Protocol, *supra* note 178, *Annex B*. See also M.Grubb/C.Vrolijk/ D.Brack, *The Kyoto Protocol, A Guide and Assessment* (1999), p.115 [hereinafter *Grubb et al.*].

¹⁸⁰ UNFCC, <http://unfccc.int/files/press/news_room/press_releases_and_advisories/application/pdf/press041118_eng.pdf>, last visited March 2005.

¹⁸¹ New Energy and Industrial Technology Development Organization, *National Dialogue to be held in Indonesia* (2004), <<http://www.nedo.go.jp/english/archives/160913/160913.html>>.

¹⁸² Climate Ark - Climate Change Portal, *Indonesia: House ratifies Kyoto Protocol* (Jakarta Post, 2004), <<http://www.climateark.org/articles/reader.asp?linkid=33143>>.

The ‘reduction targets’ can be met both individually and ‘jointly’. During the Seventh Session of the Conference of the Parties (COP), held at Marrakesh from 29 October to 10 November 2001, three different mechanisms were incorporated in the Protocol to achieve the targets.¹⁸³ One of these was the Clean Development Mechanism (CDM, article 12 of the Protocol), which we will discuss in more detail below.¹⁸⁴

The **ASEAN Agreement on Transboundary Haze Pollution** is a treaty of the Association of the Southeast Asian Nations (ASEAN), which members are Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam. It was signed by all the members on June the 6th 2002 and entered into force on 25 November 2003. The Agreement is the first legally binding ASEAN regional environmental accord to have entered into force. Although Indonesia did not ratify, it cannot take any action that undermines the objectives of the Agreement, despite the fact that it is not bound by the obligations contained therein.¹⁸⁵ But the fact that it is Indonesia that has not ratified yet, “poses a particularly thorny problem since the country is the principal source of the haze in the region.”¹⁸⁶ It could take at least a year before Indonesia becomes a party, since the Agreement has to be passed by different government agencies and ministries before submission to the Parliament for approval.

The Agreement was concluded in order to provide a legal framework to better facilitate regional and international co-operation in addressing the transboundary haze pollution problem more effectively.¹⁸⁷ It also furnishes a legal basis for the Regional Haze Action Plan (RHAP), which sets out co-operative measures needed amongst ASEAN member countries to address the problem of smoke haze in the region arising from land and forest fires.¹⁸⁸ The Agreement essentially calls for parties to undertake, among others, (1) legislative and

¹⁸³ UNFCCC, *The Marrakesh Accords*, <http://unfccc.int/cop7/accords_draft.pdf>, last visited March 2005.

¹⁸⁴ See below, para. 2.5.

¹⁸⁵ Art. 18 of the Vienna Convention of the Law of Treaties.

¹⁸⁶ A. Khee-Jin Tan, *Forest Fires and Haze in Southeast Asia: Prospects for Compliance with the 2002 ASEAN Agreement on Transboundary Haze*, <<http://www.law.chula.ac.th/asli/paper/f12.pdf>>, last visited February 2005 [hereinafter *Khee-Jin Tan*].

¹⁸⁷ Association of Southeast Asian Nations, <<http://www.aseansec.org/8914.htm>>, last visited February 2005 [hereinafter *ASEAN*].

¹⁸⁸ The primary objectives of this plan are: a) to prevent land and forest fires through better management policies and enforcement; b) to establish operational mechanisms to monitor land and forest fires; and c) to strengthen regional land and forest fire-fighting capability and other mitigating measures. Asean Haze Action Online, <http://www.haze-online.or.id/help/rhap.php>, last visited April 2005.

administrative measures to prevent and control activities related to land and forest fires that may result in transboundary haze pollution; and (2) national as well as joint actions to intensify regional and international co-operation to prevent, assess and monitor transboundary haze pollution arising from land and forest fires.¹⁸⁹

2.1 Damaging effects of haze on health, economy and environment (local and regional)

Haze actually means pollution, according to Simon Tay. In the ASEAN region however, governments prefer the term haze:

“The use of the term, ‘haze’ understates the risk to human health. The less serious term ‘haze’ contrasts with the fires that cause it. Use of the term ‘haze’ suggests that if winds change direction, then West Malaysia’s or Singapore’s problems will disappear.”¹⁹⁰

The ASEAN Agreement on Transboundary Haze Pollution does use the term pollution and despite the negative responses in literature pertaining to the lack of material obligations and enforceability, the Agreement can prove to be a worthwhile instrument to take the first steps in preventing or diminishing the Kalimantan forest fires in a legal way. Therefore, it is advisable for Indonesia to ratify this Agreement as soon as possible.

In the **Preamble**, the Agreement recalls earlier ASEAN-instruments adopted on transboundary pollution prevention, among others the 1990 Kuala Lumpur Accord on Environment and Development, the 1995 ASEAN Co-operation Plan on Transboundary Pollution, the 1997 Regional Haze Action Plan (RHAP) and the Hanoi Action Plan. (See Appendix). These instruments could all be considered as soft law, since they were not legally binding. The 2002 Agreement however, “is meant to be a full-fledged treaty regime with legally binding provisions.”¹⁹¹

¹⁸⁹ ASEAN, *supra* note 187.

¹⁹⁰ Tay, *Southeast Asian Fires*, *supra* note 114, p. 272.

¹⁹¹ Khee-Jin Tan, *supra* note 186.

Article 2 provides the objective of the Agreement:

‘(T)o prevent and monitor transboundary haze pollution as a result of land and/or forest fires which should be mitigated, through concerted national efforts and intensified regional and international co-operation. This should be pursued in the overall context of sustainable development and in accordance with the provisions of this Agreement.’

In **article 3**, the parties state that they will be guided by the following principles of (environmental) law: Stockholm-principle 21 (see paragraph 1.1.1) in article 3.1, the duty to co-operate in art. 3.2, the precautionary principle in 3.3 and sustainable use in article 3.4. In 3.5, it is stated that the parties should involve all relevant stakeholders (as appropriate) in addressing transboundary harm – see also article 9f.¹⁹² Similar provisions can be found in the Convention on Biological Diversity (for example article 8j).¹⁹³ Keeping Tan in mind (“The principles of international environmental law are, however, the only source for a possible remedy”) emphasising these principles in the Agreement can be considered as a positive development.

One of the main provisions of the Agreement is **article 4**. This article provides general obligations in mandatory language: states shall co-operate in developing and implementing measures to prevent and monitor transboundary haze pollution and in controlling fire-sources (4.1) and parties are obliged to respond promptly to a request for relevant information or consultation (4.2). But, most importantly, states have to ‘take legislative, administrative and/or other measures to implement their obligations under this Agreement’ (4.3).¹⁹⁴

¹⁹² ‘Each Party shall undertake measures to prevent and control activities related to land and/or forest fires that may lead to transboundary haze pollution, which include: f. Promoting and utilising indigenous knowledge and practices in fire prevention and management’.

¹⁹³ ‘Each Contracting Party shall, as far as possible and as appropriate: (j) Subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices’.

¹⁹⁴ Khee-Jin Tan, *supra* note 186.

Since non-compliance with existing laws concerning the environment is one of the main causes for the failure of the Indonesian government to legally fight deforestation at Kalimantan, this article can be a helpful incentive.

The same can be noted for **article 9**, which obliges the parties to undertake measures to prevent and control activities related to land and/or forest fires that may lead to transboundary haze pollution. These include developing and implementing legislative and other regulatory measures, as well as programmes and strategies to promote ‘zero burning policy’ to deal with fires and haze, and ensuring that legislative, administrative and/or other relevant measures are taken to control open burning and to prevent land clearing using fire.

These provisions seem to provide useable incentives.

“Arguably, these provisions are wide enough to cover specific action such as the enactment of strong anti-burning laws, the prosecution of offenders and the imposition of adequate penalties. Thus, the necessary legal and administrative measures needed to curb transboundary haze pollution arising from forest and/or land fires can conceivably be taken pursuant to the Agreement’s provisions.”¹⁹⁵

2.2 Loss of biodiversity – forests and wetlands

Both the Preamble assertions and the substantive articles of the CBD are relevant for combating deforestation, according to Birnie and Boyle.¹⁹⁶ At the same time, they seem to realise that this legal combat will not be easy:

“Despite the high profile given to deforestation, little has been done to control this problem internationally. The instruments adopted to date are weak.”¹⁹⁷

The Biodiversity Convention is a legally binding framework convention, but “(t)he forest issue, in contrast, ended up with a set of non-legally binding Forest Principles.”¹⁹⁸ (See

¹⁹⁵ Id.

¹⁹⁶ Birnie & Boyle, *supra* note 19, p. 572.

¹⁹⁷ Id., p. 633.

¹⁹⁸ G. K. Rosendal, *Overlapping International Regimes: the Case of the Intergovernmental Forum on Forests (IFF) between Climate Change and Biodiversity in International Environmental Agreements*, vol. 1 (2001), issue 4, p. 448 [hereinafter *Rosendal*]. See also pp. 453, 454 and 462 of this article for an overview of the problems during the negotiations for a ‘Forest Convention’. The rest of the article describes the status quo of the international developments pertaining to forests.

Appendix A). Still, several authors see the CBD as an opportunity for the protection of forests like those at Kalimantan:

“The CBD does not provide stringent rules that allow parties to see the conservation of biodiversity as a management constraint. However, the CBD does provide relevant guidelines for the sustainable use of forests.”¹⁹⁹

In the **Preamble of the CBD** can be found that the conservation of biological diversity is a ‘common concern of humankind’. Wolfrum notes that this results from the fact that a continuing high loss of biological resources threatens evolution in general, without regard to state borders:

“Common concern thus means that the preservation of biological diversity has ceased to be the internal affair of a single state and has become the concern of all those acting in trust for future generations.”²⁰⁰

As discussed in paragraph 1.2, categorising issues like biodiversity as ‘common concern of humankind’ gives a legitimatisation to making it subject to international legislation instead of only just domestic legislation. However, the precise scope of this formulation of value remains obscure, as was no doubt the intention:

“(…) (A)t the very least it does provide some general basis for international action, giving all states an interest in, and the right to conserve biodiversity, and for the parties to the Convention and even non-parties to observe and comment upon the progress of others in fulfilling their respective obligations and responsibilities for this purpose, both within their own national jurisdiction and beyond it (..).”²⁰¹

Because of the categorisation, the efficiency with which its (non-) contracting parties fulfil the obligation is potentially subject to international overview and complaints.²⁰²

¹⁹⁹ F. Jacquemont & A. Caparrós, *The Convention on Biological Diversity and the Climate Change Convention 10 Years After Rio: Towards a Synergy of the Two Regimes?*, 11 (2) *RECIEL* (2002) 180 [hereinafter *Jacquemont & Caparrós*].

²⁰⁰ Morrison & Wolfrum, *supra* note 73, p. 362.

²⁰¹ Birnie & Boyle, *supra* note 19, p. 573.

²⁰² See *id.*, p. 587.

For the government of Indonesia, this implies that dealing with the forest fires at Kalimantan, which cause loss of global biodiversity considering the importance of the tropical forests, is not just a domestic matter.

Most authors see the so-called ‘ecosystem-approach’, adopted by the COP as a noteworthy development. **Article 2 of the CBD** describes the term ecosystem as follows:

‘Ecosystem means a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit’.

The parties to the CBD have agreed to adopt ecosystems as the primary framework for implementing the Convention.²⁰³ The ecosystem framework is ideal for ensuring that interaction among sectors is taken into account and any gaps or conflicts addressed. For example, work programmes on (amongst others) forests have started. The COP has expanded on the subject of the ecosystem approach in Decision V/6.²⁰⁴ In this Decision, the term is described as follows:

‘The ecosystem approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. Thus, the application of the ecosystem approach will help to reach a balance of the three objectives of the Convention: conservation; sustainable use; and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.’

The ecosystem approach is a holistic one and allows the best method to achieve conservation and sustainable use for biodiversity.²⁰⁵ The approach is necessary, since the effects of large range of human activities are linked and felt throughout the entire ecosystem. Accordingly, the approach tries to assess all economic, social, cultural, legal recreational and other activities. As Johnson states:

²⁰³Biodiversity Parties, *supra* note 174, *COP-Decision II/8*,

<<http://www.biodiv.org/decisions/default.aspx?m=COP-02&id=7081&lg=0>>.

²⁰⁴ Biodiversity Parties, *supra* note 174, *Decision V/6*, <<http://www.biodiv.org/decisions/default.aspx?m=COP-05&id=7148&lg=0>>.

²⁰⁵ Johnston, *supra* note 175, p. 228.

“A fundamental part of the approach is therefore the inclusion of people and their economic needs.”²⁰⁶

In the Annex of Decision V/6, principles and guidance are recommended for implementation.

The Indonesian government however, remarks in its second National Report that applying the ecosystem approach is still ‘under consideration’.²⁰⁷ Based on the statements above, it is advisable for the government to substantially implement the ecosystem approach, since it can provide an extra dimension in protecting the tropical forests at Kalimantan:

“(I)t lays down a procedural approach directed at minimizing the negative impacts of human activities on biodiversity.”²⁰⁸

Article 6 of the CBD deals with the implementation of the treaty.²⁰⁹ As mentioned above, the parties are obliged to develop national strategies, plans or programmes. The Republic of Indonesia has complied with this article by handing in two National Reports and by developing the National Biodiversity Strategy and Action Plan (NBSAP) in 2003. However, the Indonesian government admits itself that the NBSAP is not legally binding and is hardly implemented.²¹⁰ Indonesia should therefore develop a new NBSAP, as mentioned in their Second National Report, to implement the general measures for conservation and sustainable use for which article 6 has been developed.²¹¹

By **article 8 of the CBD**, parties are required to ‘establish a system of protected areas or areas where special measures need to be taken to conserve biological diversity’ (8a) and to develop,

²⁰⁶ Id.

²⁰⁷ Biodiversity Convention, *supra* note 33, *National Report 2*, <<http://www.biodiv.org/doc/world/id/id-nr-02-en.pdf>> [hereinafter *National Report 2*], p. 80.

²⁰⁸ Jacquemont & Caparrós, *supra* note 199, p. 177.

²⁰⁹ ‘Each Contracting Party shall, in accordance with its particular conditions and capabilities: (a) Develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity or adapt for this purpose existing strategies, plans or programmes which shall reflect, *inter alia*, the measures set out in this Convention relevant to the Contracting Party concerned; and (b) Integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies.’

²¹⁰ National Report 2, *supra* note 207, p. 12. See also foreword Dr. Ir. Dedi M. Masykur Riyadi of the Ministry of State for National Development Planning/National Development Planning Agency, Deputy of Natural Resources and Environment: “To have a legitimate and effective implementation of IBSAP, it is possible to make this document legally-binding in the form of law (*Undang-undang*) or other type of legal documents. That is one option to be explored further. But at this stage, it is more important to put our focus on how to increase public awareness about the facts and problems facing our biodiversity resources.”

²¹¹ National Report 2, *supra* note 207, p. 12.

where necessary, guidelines for the selection, establishment and management of those areas (8b). From the second National Report can be concluded that in 2001 an Indonesian ‘national review of protected areas coverage’ was available. This means that a system as required by the CBD was not yet in place in Indonesia, although the government stated that certain national parks have already been established in co-operation with UNESCO (United Nations Educational, Scientific and Cultural Organization) – which have been placed on the World Heritage List (see Appendix A). Also, management plans for wetlands were made.²¹² Some wetlands have also been placed on the Ramsar-list to the Convention on Wetlands of International Importance especially as Waterfowl Habitat (see Appendix). Thus, in 2001 the Indonesian government had complied with some environmental protection regulations, but the establishment of a system of protected areas, as required by CBD-article 8a and aimed to conserve biological diversity, was not yet realised.

In the NDSAP of April 2003 however, the government claims that Indonesia is one of the first tropical countries in the world that possesses protected area systems.²¹³ Establishing such a protected area in the tropical forest-region at Kalimantan can be a good measure for the protection of those forests. Herkenrath concludes that through NBSAPs ‘representative systems of protected areas covering threatened and endemic species, major habitat types and ecosystems, and the range of wide genetic diversity’ should be instituted. The Indonesian government should thereby involve affected indigenous peoples and local communities. Besides that, applying international categories setting out areas of importance for biodiversity can be a useful tool in strengthening nationally protected areas.²¹⁴

The Republic of Indonesia can gain interesting financial benefits from the CBD. As discussed in paragraph 1.2, the principle of common but differentiated responsibilities recognises that the special needs of developing countries must be taken into account in the development, application and interpretation of rules of international environmental law. And as Malviya claims:

²¹² Id., p. 28.

²¹³ National Biodiversity Strategy and Action Plan – April 2003, p. 50 <<http://www.biodiv.org/doc/world/id/id-nbsap-v2-p05-en.pdf>>.

²¹⁴ P. Herkenrath, *The Implementation of the Convention on Biological Diversity – A Non-Government Perspective Ten Years On*, 11 (1) RECIEL (2002) 34.

“The developing countries are the genetic reservoir or gene pools of the earth’s genetic diversity.”²¹⁵

Throughout the CBD, the common but differentiated responsibility is a main issue, specifically pointed out in the **Articles 20 and 21** regarding financial resources. Birnie and Boyle state:

“For the first time in any global environmental treaty, Article 20 (2) lays down a clear obligation on the parties, not just an ‘undertaking’, to provide ‘new and additional financial resources to enable developing state parties to meet the agreed full incremental costs to them of the implementing measures which fulfil the obligations of this Convention’.”²¹⁶

As can be noted from the second National Report, the Republic is aware of the possibilities provided by these articles. The government mentions that ‘quite a number of proposals have been submitted, for instance to GEF Small Grant Projects (...)’.²¹⁷ Also, the country received financial support from the World Bank for the preparation of its national strategy and action plan.

The purpose of the articles 20 and 21 is to help developing countries like Indonesia implement their commitments by meeting the incremental costs and building up their capacity to do so. Trust funds and the Global Environmental Facility (GEF) provide access to funding for these purposes and for projects likely to result in global benefits.²¹⁸ The incentive is aimed at compensating developing countries like Indonesia for losses deriving from reorientation of their current economic uses of such biological resources as the rainforests at Kalimantan.²¹⁹

As already mentioned in the introduction of paragraph 2.2, **Decision II/9** from the Conference of the Parties to the CBD once again emphasises the importance of forests for biodiversity.²²⁰

²¹⁵ R.A. Malviya, *Biological Diversity and international environmental law with special reference to the Biological Diversity Convention*, 42 (4) ISIL (2001) 634 [hereinafter *Malviya*].

²¹⁶ Birnie & Boyle, *supra* note 19, p. 584.

²¹⁷ National Report 2, *supra* note 207.

²¹⁸ Birnie & Boyle, *supra* note 19, p.102.

²¹⁹ Birnie & Boyle, *supra* note 19, p. 584.

²²⁰ Biodiversity Parties, *supra* note 174,

Decision II/9, <http://www.biodiv.org/decisions/default.aspx?m=COP-02&id=7082&lg=0>

Decision IV/7, <<http://www.biodiv.org/decisions/default.aspx?m=COP-04&id=7130&lg=0>>.

In this Decision, co-operation with the Intergovernmental Panel on Forests (IPF), founded by the Commission on Sustainable Development, is recommended. From the second CBD-National Report however, it can be concluded that the Indonesian government has not yet taken much effort to comply with the importance of forest biological diversity. For example, in the report no indication of co-operation with the IPF can be found. Also, the government states that it does not give high priority to allocation of resources to activities that advance the objective of the Convention in respect of forest biological diversity.²²¹ Considering the importance of the tropical forests at Kalimantan for global forest biological diversity, it is advisable for Indonesia to put more effort into implementing the legal framework for the protection of forest biological diversity.

In 2002, at the Sixth Conference of the Parties at The Hague, the COP adopted the Strategic Plan for the CBD in **Decision VI/26**.²²² This plan aims to commit the parties to a more effective and coherent implementation of the three CBD-objectives (see the introduction of paragraph 2.2) and aims to achieve a significant reduction of the current rate of biodiversity loss by 2010. In the Yearbook of International Environmental law the following passage pertaining to this Decision was published:

“Despite its immediate shortcomings, the adoption of the target (...) represents a major development in the maturation of the CBD and in the parties’ understanding of their normative responsibilities.”²²³

The deforestation at Kalimantan is responsible for a significant amount of the loss of biodiversity. The Strategic Plan for the CBD should thus be considered as an extra incentive for the Indonesian government to try and combat the forest fires in the region.

2.3 Possible extinction of plant and animal species

The Indonesian government declared:

²²¹ National Report 2, *supra* note 207, p. 90.

²²² Strategic Plan for the Convention on Biological Diversity, at <http://www.biodiv.org/decisions/default.aspx?m=COP-06&id=7200&lg=0>.

²²³ Yearbook of Int'l Env'tl. Law (2002) 372.

“Indonesia has established quite a number of legal instruments in protecting necessary species of plants and animals. The country has also ratified CITES and the Ramsar Convention’.²²⁴ (see Appendix A)

Most of the treaty-articles discussed in paragraph 2.2 also apply to the threat of extinction of plant and animal species, since the tropical forests and wetlands provide their habitat. In this respect, special attention should be paid to articles 2 and 8 of the CBD.

2.4 Destruction of the environment of neighbouring countries

The CBD is based on two opposing principles: the principle of sovereign rights with respect to genetic resources versus the acknowledgement that these resources should be used in a way that their sustainable development remains possible. This is pointed out in the **Preamble**. The Convention tries to bridge those two principles, but also provides mechanisms in order to mutually enforce each other. The Convention is the first to incorporate Principle 21 of the Stockholm Declaration into the operational part of its text.²²⁵

By signing and ratifying the Biodiversity Convention, Indonesia thus agreed with the notion that activities, e.g. the forest fires, should not cause damage to the environment of neighbouring states or other areas beyond the limits of its national jurisdiction.

Art. 4 of the CBD stipulates:

‘Subject to the rights of other States, and except as otherwise expressly provided in this Convention, the provisions of this Convention apply, in relation to each Contracting Party:

- (a) In the case of components of biological diversity, in areas within the limits of its national jurisdiction; and
- (b) In the case of processes and activities, regardless of where their effects occur, carried out under its jurisdiction or control, within the area of its national jurisdiction or beyond the limits of national jurisdiction.’

²²⁴ National Report 2, *supra* note 207, p. 24.

²²⁵ Malviya, *supra* note 215, p. 673. It’s remarkable that the 1972 Stockholm-text was used, instead of the 1992 Rio-declaration in which the phrase ‘*and developmental*’ was added.

Both the areas within and beyond the limits of national jurisdiction are covered by the Convention.²²⁶ This indicates that the provisions of the CBD apply to the forest fire-problem at Kalimantan, since it can be considered to be a ‘4(b)-situation’ - the effects of the forest fires occur (also) in the neighbouring countries.

Article 5²²⁷ of the treaty also requires states to co-operate in areas beyond national jurisdiction and other matters of mutual interest for conservation and sustainable use of biological diversity.²²⁸ Birnie and Boyle state:

“Much of the success of the Biodiversity Convention in ensuring responsible exercise of state sovereignty when identifying and using biological resource will depend on the willingness of the parties to fulfil their various duties under it to co-operate.”²²⁹

Throughout the CBD, duties to co-operate in specific areas are laid down in multiple articles, but article 5 provides a general obligation to co-operate.²³⁰ It can be concluded that the Republic of Indonesia should work together with the governments of surrounding countries like Malaysia in combating the forest fires.

In the second CBD-National Report, it is stated that Indonesia has already begun to do so. In the forestry sector, an “(i)nter-boundary project has been developed between Indonesia and Malaysia in West Kalimantan of Indonesia and Serawak of Malaysia.”²³¹ The importance of this co-operation is emphasised by many authors:

“(T)he biodiversity problems of a region may be influenced by larger economic forces, such as (...) illegal trade. This invokes (...) effective enforcement at both export and import points. The CBD is in a position to strengthen a web of legal and institutional relationships to foster integrated problem diagnosis and the development of

²²⁶ M.M. Goote, *Convention on Biological Diversity – The Jakarta Mandate on Marine and Coastal Biological Diversity*, 12 (3) *The International Journal of Marine and Coastal Law* (1997) 378.

²²⁷ ‘Each Contracting Party shall, as far as possible and as appropriate, co-operate with other Contracting Parties, directly or, where appropriate, through competent international organisations, in respect of areas beyond national jurisdiction and on other matters of mutual interest, for the conservation and sustainable use of biological diversity.’

²²⁸ Birnie & Boyle, *supra* note 19, p. 575.

²²⁹ *Id.*, p. 589.

²³⁰ See *id.*, p. 590.

²³¹ National Report 2, *supra* note 207, p. 28.

specialized response measure through existing international processes or new instruments as necessary.”²³²

2.5 Climate change caused by carbon emissions: The Clean Development Mechanism

Article 12 of the Kyoto Protocol (of the UNFCCC) stipulates that the dual functions of the CDM are to foster sustainable development in developing countries while at the same time to assist the industrialised countries to meet their emissions reduction commitments and thus ‘contribute to the ultimate objective of the Convention’.²³³ The Parties can undertake environmental project activities in developing countries, both Party and Non-Party. This in turn results in ‘certified emission reductions’ for the investing country (art. 12 (3) under a). These activities may involve both private and/or public entities (art. 12 (9)). Further conditions for projects are mentioned in article 12 (5), which is also one of the more controversial provisions in the Kyoto Protocol, since it’s wording is somewhat ambiguous.²³⁴ The investment of industrialised countries in environmental projects in developing countries can be seen as an extra/additional means of efficiently complying with the targeted emission reductions. These countries will pay a certain amount of money for each ton of carbon saved, and then be granted a reduction in their emission levels.²³⁵

The possibility of co-operation in the Clean Development Mechanism between the ‘developed’ and ‘developing’ countries is widely recognised as a very important achievement. For example, the following statement was made in a recent press release announcing the entry into force of the Kyoto Protocol: ‘[t]he Clean Development Mechanism (CDM) will move from an early implementation phase to full operations. The CDM will encourage investments in developing-country projects that limit emissions while promoting sustainable development’.²³⁶ The CDM should guide foreign investment in developing countries towards

²³² L. A. Kimball, *Institutional Linkages Between the Convention on Biological Diversity and Other International Conventions*, 6 (3) RECIEL (1997) 241 [hereinafter *Kimball*].

²³³ Art. 12 (2) Kyoto Protocol, *supra* note 178.

²³⁴ For an in depth analysis of the wording used in this article and possible pitfalls, see Grubb et al., *supra* note 179, especially Chapter 7, pp. 226-247. For procedures regarding CDM projects see: <<http://cdm.unfccc.int/Reference/Procedures/7add3.pdf>>, last visited March 2005.

²³⁵ <<http://www.wwf.or.id/Default.php?ID=799>>, last visited March 2005.

²³⁶ <http://unfccc.int/files/press/news_room/press_releases_and_advisories/application/pdf/press041118_eng.pdf>, last visited March 2005. For an extensive discussion on the integration of climate change in sustainable development see: <http://unfccc.int/resource/docs/publications/first_ten_years_en.pdf>, especially Chapter 3.

‘goals of sustainable development’.²³⁷ It is even argued that the ‘[...] CDM is first and foremost a vehicle to foster sustainable development’.²³⁸

The CDM is thus, at least in theory, one of the most promising international mechanisms to balance conflicting interests on Kalimantan. The Indonesian Government has already recognized this opportunity and is negotiating projects with, *inter alia*, Canada, Denmark, the Netherlands and Japan. The project type within CDM that is especially interesting for the situation on Kalimantan is afforestation/ reforestation, ‘[...] where industrialised countries can help regrow Indonesia's perishing forests that are disappearing at the rate of 3.5 million hectares per year due to uncontrolled logging’.²³⁹

3. WEAK ASPECTS OF THE MAIN TREATIES

The most expressed criticism on the Convention on Biological Diversity that can be found in literature is related to the weak and broad terms used in the treaty. A clear example of this criticism comes from Birnie and Boyle:

“Both its Preambular recitals and its substantive articles are expressed in broad terms, the requirements of which are often further weakened by such additional qualifications. These include such phrases as ‘as appropriate’, ‘as far as possible’, ‘practicable in accordance with particular conditions and capabilities’.²⁴⁰

Malviya comes to a similar conclusion when he states that:

“Use of general language which calls on states to “encourage” certain practices or use their “best endeavours” to protect biodiversity is less likely to achieve any tangible conservation benefits.”²⁴¹

²³⁷ Grubb et al., *supra* note 179, p. 226.

²³⁸ <<http://www.pelangi.or.id/spektrum/?artid=10&vol=2>>, see also <<http://www.terranel.or.id/beritae.php>>, on Indonesia and Kyoto, more links. For more information/links on the Clean Development Mechanism and several projects and proposals see: <<http://cdm.unfccc.int/>>, last visited March 2005.

²³⁹ <<http://www.wwf.or.id/Default.php?ID=799>>, last visited March 2005.

²⁴⁰ Birnie & Boyle, *supra* note 19, p. 572.

²⁴¹ Malviya, *supra* note 215, p. 642.

At the same time, without this wording, there would not have been a Biodiversity Convention at all. Birnie and Boyle note that the negotiating states were very reluctant to more precise commitments. The negotiators were also anxious to leave clarification of the details of such commitments to national decision-making. The authors conclude therefore that, to evaluate the success of the CBD, focus on “related agreements, protocols and annexes to the Convention, as well as to state practice in implementing it at national, regional, and international levels” is needed.

In this chapter, we considered the CBD and the Kyoto Protocol to the UNFCCC as the treaties applicable to the deforestation-issue at Kalimantan. The interaction between these instruments can however create a problem. Both the instruments are concerned with forests, but their provisions may not only supplement, but also conflict with each other. For example, converting an old natural forest into a single species forest, which can be seen as a positive incentive regarding the Kyoto Protocol, can be destructive for biodiversity:

“(T)he incorporation of carbon sequestration incentives in private decision making on *afforestation and reforestation*, without accounting for biodiversity, likely will lead to a sub-optimal over-planting of fast-growing exotic species.”²⁴²

The choices in some forest practices with the view to enhance carbon sinks may therefore have an adverse impact on biodiversity. In literature, several authors have suggested solutions to overcome these problems²⁴³, an extensive discussion of this falls out of the scope of this report.

The Kyoto Protocol entered into force later than expected. After the withdrawal of the United States, with a weight of emissions of 25% of the global total,²⁴⁴ the further implementation of the Kyoto protocol was described as ‘meaningless’.²⁴⁵ Not only the final number of states party to the treaty was subject to scepticism. Also the mechanism most important for purposes of this paper, the CDM, was described as a ‘leap into *terra incognita*’.²⁴⁶ The main criticism concentrates on the idea of developed countries that the CDM is primarily an effective way of

²⁴² Jacquemont & Caparrós, *supra* note 199, pp. 175-176. See also Rosendal, *supra* note 198.

²⁴³ See for example Jacquemont & Caparrós, *supra* note 199. See also Rosendal, *supra* note 198.

²⁴⁴ Grubb et al., *supra* note 179, p. 31.

²⁴⁵ *Id.*

²⁴⁶ *Id.*, p. 245.

minimising costs of meeting their commitments. Instead, the CDM should be to guide foreign corporate investment towards sustainable development projects in developing countries. The ambiguous wording of article 12 (5) Kyoto Protocol raises questions on how to implement and administer this mechanism, how to prevent corruption, how to certify the projects, how to equally distribute activities, what project are eligible under the CDM and what financing sources are to be used. In sum, it is argued that the CDM is ‘[...] likely to be constrained by the inherent limitations of credit-based, project-based systems’.²⁴⁷ It remains to be seen how the CDM will develop in practice and whether the above-mentioned problems will actually occur.

In literature, there has also been substantial criticism on the ASEAN Agreement on Transboundary Haze:

“The fires demonstrate a number of inadequacies in ASEAN. These inadequacies suggest that regionalism is not a panacea for environmental protection. Global institutions and international assistance will often be necessary for sufficient environmental protection.”²⁴⁸

According to several authors, the so-called “ASEAN way” is one of the above mentioned inadequacies. Tay describes this term as follows:

“The “ASEAN Way” emphasised, among other things, the norm of non-interference in other states’ affairs, preferred consensus and non-binding plans to treaties and legalistic rules, and relied on national institutions and actions, rather than creating a strong central bureaucracy.”²⁴⁹

ASEAN-agreements and treaties have not been able to provide sufficient legal protection for the environment and adequate incentives to prevent or reduce the deforestation-problem. The Haze-agreement is also drafted in a way that leaves state sovereignty uncompromised, as can be noted from subparagraph 2.1. But some authors feel that “(t)his would probably have been the only way to avoid outright rejection of the Agreement by the relevant states.”²⁵⁰

²⁴⁷ Id., p. 246 and chapter 7.

²⁴⁸ Tay, *Southeast Asian Fires*, *supra* note 114, p. 244.

²⁴⁹ Id., p. 255.

²⁵⁰ Khee-Jin Tan, *supra* note 186.

Another problem, according to several authors, is the absence of a sanction-system in the Agreement which can provide a legal basis for sanctioning the parties that do not live up to these obligations. In 1999, Tay gave several recommendations for a very much-needed future treaty on transboundary haze pollution:

“A regional treaty setting thresholds for transboundary harm and creating efficiently strong institutions to monitor and ensure compliance with them would be a step toward guarding Southeast Asia against future fires (...). Because stricter treaties have more successfully dealt with transboundary pollution, taking steps to evolve the ASEAN Plans toward either a liability regime or strict pollution limits might prove worthwhile.”²⁵¹

However, the text of the Agreement is probably as stringent as possible considering the “ASEAN Way”. In fact, keeping this in mind, it can be considered a small miracle that this agreement has been signed by the ASEAN-countries and that it actually has entered into force

“(G)iven ASEAN’s history of consensual decision-making, abhorrence of challenges to sovereignty and rare resort to treaty adoption.(...) (I)t may signal a new willingness among ASEAN member states to deal with issues of transboundary concern in a more formalistic manner, entailing legal rights and obligations for states.”²⁵²

4. CONCLUSION

The forest fires at the Indonesian island of Kalimantan have been a problem for years, and if nothing will be done, will cause problems for years to come. Therefore, we can agree with Simon Tay when he states:

“The fires are not a phenomenon that is past, but are a continuing disaster for the environment. They challenge the search for sustainable development in the region and.

²⁵¹ Tay, *Southeast Asian Fires*, *supra* note 114, p. 285-286.

²⁵² Khee-Jin Tan, *supra* note 186.

moreover, challenge the adequacy of environmental law, both in practice and in principle.”²⁵³

International law-principles such as the principle of good neighbourliness and international co-operation, of common but differentiated responsibility, of preventive action and the polluter pays-principle can be of significant use in encouraging the Indonesian government to stop and prevent the Kalimantan fires.

Indonesia has a duty to prevent, reduce and control transboundary environmental harm. The rights of the country in the exercise of permanent sovereignty are not unlimited. If the government will not take (sufficient) measures to prevent and stop the fires, it can be held accountable by other countries. Since Indonesia also has a duty to co-operate, the government can be held accountable as well if they refuse to work together with other countries.

The principle of common but differentiated responsibility can provide assistance in two different ways. The Republic of Indonesia can benefit from this principle, since the country is considered to be a developing country and thus profits from the differentiated standards in treaties. On the other hand, a disadvantage for Indonesia can be that the forest fires at Kalimantan significantly harm ‘components of the world environment’, which could indicate that the country does have a great responsibility under international (environmental) law, despite the fact that it can be considered as a developing country.

Based on the principle of preventive action, there lies an obligation under international (environmental) law upon the government to prevent, reduce, limit or mitigate the damage the forest-fires cause, in which national legislation has to play an important part. Finally, the polluter-pays-principle can also provide a good incentive for the Indonesian government to prevent and stop the forest fires. Based on this principle, Indonesia can be held accountable for the financial damage that is caused by the fires. This damage probably amounts to millions of dollars, a price that the country will not be able to pay.

Several major environmental security issues at Kalimantan have been mentioned in the Introduction of this report, and our conclusion is that international environmental law can provide solutions for combating these issues.

²⁵³ Tay, *Southeast Asian Fires*, *supra* note 114, p. 241.

The ASEAN Agreement on Transboundary Haze Pollution can be of value in the prevention of damaging effects of haze on health, economy and environment, even though it leaves state sovereignty uncompromised and lacks a sanction-system. For example, article 4 provides in mandatory language that the parties shall co-operate in developing and implementing measures to prevent and monitor transboundary haze pollution and in controlling fire-sources as well as that parties are obliged to respond promptly to a request for relevant information or consultation. Most importantly, states have to ‘take legislative, administrative and/or other measures to implement their obligations under this Agreement’. Therefore, despite its shortcomings, the Agreement can prove to be a worthwhile instrument to take the first steps in preventing or diminishing the Kalimantan forest fires in a legal way. Considering this, it is advisable for Indonesia to ratify this Agreement as soon as possible.

The Convention on Biological Diversity can prove to be helpful in the prevention of the loss of biodiversity and the possible extinction of plant and animal species. It is therefore necessary that the Indonesian government puts more effort into implementing the provisions of this treaty. Several authors state that given its broad wording, the CBD can only be successful in actually conserving biodiversity if the parties actually implement it into their national legislation. The government of Indonesia can gain interesting financial benefits from this treaty, since the country is a developing country. On the basis of the principle of common, but differentiated responsibility, developed-country parties are obliged to give financial aid to the developing countries in implementing the CBD.

The Kyoto Protocol and especially the Clean Development Mechanism in article 12 is another way for developing countries to benefit from the worldwide effort to prevent environmental degradation. Under the CDM, developed countries can invest in sustainable development projects in developing countries as an additional way of meeting their emissions reduction commitments. Although the scope and exact meaning of *inter alia* article 12 of the Kyoto Protocol is subject of interpretation and discussion, the CDM as an unique opportunity for developing countries to generate money for sustainable development projects is widely accepted.

CHAPTER 3: INTERNATIONAL HUMAN RIGHTS LAW

1. GENERAL: THE HUMAN RIGHTS ASPECT OF SUSTAINABLE DEVELOPMENT

The aim of this chapter is to search for international legal instruments in the field of human rights law the Republic of Indonesia could adopt, implement and enforce to guarantee sustainable development in its broadest sense.²⁵⁴ The environmental harm caused by illegal logging on the Indonesian island of Kalimantan adversely affects various individual and community rights. A human rights-based approach to environmental protection (*e.g.* right to a clean and healthy environment, right to nature protection, and other basic procedural and democratic rights) could provide an effective remedy.²⁵⁵ Especially the last twenty years or so, human rights and environmental law have become more intertwined. Both the UN General Assembly and the UN Commission for Human Rights have recognized the interconnectedness between both environmental preservation and human rights.²⁵⁶ This chapter deals with both existing and emerging human rights pertaining to environmental protection.

First, existing and emerging global human rights with environmental implications will be discussed. This will be done by analyzing the status of contemporary human rights instruments, developments in international law and soft-law. The analysis will also be made on a regional level. Findings will be used to assess the current situation on the Indonesian Island of Kalimantan using a list of indicated environmental security issues. Based on this we will finally make some recommendations on which environmental human rights could be adopted in order to secure interests on a local (national), regional and global level.

2. GLOBAL HUMAN RIGHTS STANDARDS PERTAINING TO ENVIRONMENTAL ISSUES

In this part we will discuss the main global human rights treaties and their respective provisions pertaining to environmental issues. Currently binding human rights standards on Indonesia, whether as treaty obligation or as customary law, will be discussed in following paragraphs on both regional and global level.

²⁵⁴ For extensive overview of organisations dealing with the link between environment and human rights, see <<http://www.carnegiecouncil.org/viewMedia.php/prmTemplateID/8/prmID/4976>>, last visited December 2004.

²⁵⁵ <<http://www.earthjustice.org/regional/international/2004UNreport.pdf>>, last visited November 2004.

²⁵⁶ See *inter alia* Sands, *International Environmental Law*, *supra* note 17, p. 295.

2.1 Presently applicable standards

2.1.1 *International human rights treaties: actions taken by Indonesia*

At present, the Republic of Indonesia has ratified the Convention Against Torture and Other Cruel Inhuman or Degrading Treatment or Punishment (CAT), the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and the Convention on the Rights of the Child (CRC) and the International Convention On The Elimination Of All Forms Of Racial Discrimination (CERD).²⁵⁷ For purposes of this report we will only focus on provisions of those international human rights instruments with environmental rights. At present, the Republic of Indonesia has ratified no international legal instruments pertaining to substantive or procedural environmental issues. However, Indonesia is party to several treaties of which certain provisions could be interpreted in a ‘green’ way.

The human rights instruments which have these so-called environmental implications are e.g. The Convention On The Rights Of The Child (New York, November 20, 1989) (CRC): right to be free from discrimination (article 2), right to life (article 6), right to health (article 24) and the right of children of minorities and indigenous populations to enjoy their own culture (article 30). The CRC refers to aspects of environmental protection in respect to the child’s right to health. Article 24 provides that States Parties shall take appropriate measures to combat disease and malnutrition “through the provision of adequate nutritious foods and clean drinking water, taking into consideration the dangers and risks of environmental pollution.” (Art. 24(2)(c)). Information and education is to be provided to all segments of society on hygiene and environmental sanitation (Art. 24(2)(e)).²⁵⁸

The Committee on the Elimination of Discrimination against Women (CEDAW) linked environment to the right to health in its Concluding Observations on the State report of Romania, expressing its “concern about the situation of the environment, including industrial accidents, and their impact on women’s health.”²⁵⁹

²⁵⁷ <<http://www.hrw.org/worldreport99/asia/indonesia.html>>. See also <<http://web.amnesty.org/pages/treaty-countries-ratification-eng>>, last visited in February 2005.

²⁵⁸ <<http://www.cedha.org.ar/docs/doc62.htm>>, last visited December 2004.

²⁵⁹ Id.

2.1.2 Customary law

Environmental rights have not reached the enforceable hard law stage as yet.²⁶⁰ According to Birnie/Boyle, the right to life as mentioned in both the ICCPR and the ICESCR and arguably the right to private life and property have the status of customary law. Furthermore, the universality of the Universal Declaration of Human Rights, was accepted in 1993 during the World Conference on Human Rights in Vienna.²⁶¹ However, Indonesia has strong arguments against the ICCPR and the ICESCR, which it has described as treaties that incorporate western-based values. Whether norms incorporated in these treaties actually qualify as customary law for Indonesia is thus dependent on the situation in which this right is invoked. We will discuss possible customary status of environmental rights when dealing with the various environmental security issues.

2.2 ‘Environmental rights’: definition and status

Before discussing contemporary treaties containing environmental rights and customary law binding on the Republic of Indonesia, the concept of environmental rights will be clarified. A clear-cut and authoritative definition for the term environmental rights does not exist. Birnie and Boyle define environmental human rights as: ‘terminology [used] to ascribe value or status to the interests and claims of particular entities’.²⁶² Churchill defines the term as ‘[...] broadly the right of an individual or group to a decent environment, [...] that extends beyond what is judicially enforceable but limited to genuine rights [...] as they are found in existing human rights treaties’.²⁶³ This last definition seems to be the most useful for purposes of this report. ‘Environmental right’ in this report is the term used to describe both existing human rights with environmental implications (or derivative rights) and the emerging right to a clean and healthy environment. The latter will be dealt with more extensively below, it suffices for now to conclude that an explicit right to a clean and healthy environment is emergent but has not yet reached the hard law stage.²⁶⁴

²⁶⁰ <<http://www1.umn.edu/humanrts/>>, see also

<<http://www.unhchr.ch/Huridocda/Huridoca.nsf/0/eeab2b6937bcca18025675c005779c3?Opendocument>>.

²⁶¹ For complete text, see <<http://www.ohchr.org/english/law/vienna.htm>>, last visited March 2005.

²⁶² Birnie & Boyle, *supra* note 19, p. 250.

²⁶³ A.E. Boyle & M.R. Anderson (eds.), *Human rights approaches to environmental protection*, p. 89 [hereinafter *Boyle & Anderson*].

²⁶⁴ See subparagraph 2.4, Soft law and developments. See also Boyle & Anderson, *supra* note 263, p. 49.

The interconnectedness of environmental issues and human rights is however clear. As stated in the Ksentini²⁶⁵ report ‘human rights violations lead to environmental degradation and [...] environmental degradation leads to human rights violations’.²⁶⁶ The term environmental rights is used quite often in contemporary literature on sustainable development to describe the human rights aspect of this very principle, or, as stated in the preamble of the Draft Declaration on Human rights and the Environment: ‘[...] sustainable development links the right to development and the right to a secure, healthy and ecologically sound environment’.²⁶⁷ According to Hill, Wolfson and Targ nowadays a

‘[...] repeated recognition of a rights-based approach to environmental protection [exists]. Such recognition demonstrates that a right to a clean and healthy environment, whether as a separate, codified right or as the result of repeated application of other human rights to environmental harms, has become an international legal norm’.²⁶⁸

The currently existing human rights instruments contain several provisions with environmental implications. Certain provisions from human rights instruments might not have been drafted for environmental purposes, but the terms and wording of these provisions are abstract enough for interpretation by judicial bodies. Nowadays there seems to be consensus on the ‘green possibilities’ of some human rights provisions. The most cited are the right to life, the right to property, right to health and other basic procedural and democratic rights.²⁶⁹

Overview of ‘environmental rights’ in current international treaties²⁷⁰

In literature, the most widely accepted distinction between different norms of existing environmental rights is the distinction between civil and political rights on the one hand and economic, social and cultural rights on the other, both containing procedural and substantive

²⁶⁵ See chapter 1, Human Rights in the principle of sustainable development, above.

²⁶⁶ Preamble of Ksentini report.

²⁶⁷ UN Commission on Human Rights, Sub-Commission on Prevention of Discrimination and Protection of Minorities, *Human Rights and the Environment*, Final Report of the Special Rapporteur (Mrs. Ksentini), UN Doc. E/CN.4/Sub.2/1994/9 (6 July 1994), preamble

²⁶⁸ <<http://www.earthjustice.org/regional/international/2002%20ISSUE%20PAPER-DEVELOPMENTS-FINAL.pdf>, p.5>.

²⁶⁹ *Inter alia* several provisions from ICCPR/ICESCR.

²⁷⁰ Caroline Dommen, ‘*Claiming environmental rights: some possibilities offered by the United Nations’ Human Rights Mechanisms*’, *Geo. Int’l Envrmtl. L. Rev.*, Fall 1998.

rights.²⁷¹ When discussing these substantive and procedural rights, we do not mean this in a strict sense, for the right to life for example can cover both substantive and procedural rights. Several binding international human rights instruments, developed on both regional and global level, create both substantive and procedural environmental rights. Substantive rights are defined as setting a certain standard of quality of environment²⁷², whereas procedural rights are defined as guarantees of process and participation.²⁷³ Procedural rights like access to relevant information and participation in decision-making on environmental issues are identified on both national and international level.²⁷⁴ The distinction was *inter alia* made in the already mentioned Ksentini Reports.²⁷⁵ In the final Draft Principles On Human Rights And The Environment procedural rights are incorporated in Part III, whereas Part I and II of the draft principles contain substantive rights. In her final report, the Special Rapporteur Mrs. Ksentini stated that both substantive and procedural environmental rights set out in the Draft Principles of Human Rights and the Environment could be implemented directly by existing human rights instruments.²⁷⁶

The environmental rights in contemporary human rights instruments can thus roughly be divided in these two categories. We will elaborate on the difference between those rights and their status in international law using two of the main human rights instruments at present, namely the International Covenant on Civil and Political Rights (ICCPR),²⁷⁷ and the International Covenant on Economic, Social and Cultural Rights (ICESCR), both concluded in 1966.

The International Covenant On Civil And Political Rights (ICCPR) contains both substantive and procedural rights that are relevant to environmental protection. Examples are the right to life (art. 6), right to a fair trial (art.14)²⁷⁸ freedom from arbitrary or unlawful interference with privacy and home (art. 17), right to public participation (art. 25) and rights of members of

²⁷¹ Provisions mentioned are not purely substantive or procedural.

²⁷² Boyle & Anderson, *supra* note 263, p. 130.

²⁷³ Boyle & Anderson, *supra* note 263, p. 9, with overview of procedural standards. Currently 153 Parties to Covenant.

²⁷⁴ See *inter alia* Boyle & Anderson, *supra* note 263, p. 9.

²⁷⁵ UN Doc. E/CN.4/Sub.2/1994/9.

²⁷⁶ Birnie & Boyle, *supra* note 19, p. 255.

²⁷⁷ See <<http://untreaty.un.org/ENGLISH/bible/englishinternetbible/partI/chapterIV/>>. Currently 153 Parties to Covenant.

²⁷⁸ This seems far-fetched as an environmental right, but Churchill for one argues that art. 14 can provide 'substantive criteria for adjudication'. See R.R. Churchill, Environmental rights in Treaties, in Boyle & Anderson, *supra* note 263, p. 96.

minorities (article 27). These provisions do not contain express environmental rights, but are said to ‘be capable of being applied in such a way as to provide individuals with some limited derivative rights in the environmental field’.²⁷⁹ The right to life for example is said to contain a ‘clear prohibition on the state not to take life intentionally or negligently’.²⁸⁰ In cases as *Chernobyl* and *Bhopal*, this right could be invoked to obtain compensation.²⁸¹ The right to a fair trial could be invoked when the approval of logging operations is expected to have a harmful effect on the environment, and the rights to a fair hearing could help individuals fight the approval.²⁸² Article 17 could be invoked if environmental degradation or pollution affects the home or privacy of an individual, that is, to the extent that the state can be held responsible.²⁸³ Article 25 of the ICCPR, or the right to public participation is mentioned *inter alia* in Principle 10 of the Rio Declaration and can also be found in soft-law instruments like Agenda 21.²⁸⁴ Public participation is regarded by *inter alia* Birnie and Boyle as having the ‘greatest potential to influence environmental decisions’.²⁸⁵

The International Covenant On Economic, Social And Cultural Rights (ICESCR) contains economic and social rights that are widely accepted as determining the substantive rights of individuals; substantive in the way that they are capable of setting a certain standard of quality of environment.²⁸⁶ Provisions in the ICESCR contain *inter alia* the right to safe and healthy working conditions (article 7), right to an adequate standard of living (article 11), right to health (article 12) and right to enjoy the benefits of scientific progress (article 15). What are the environmental implications of these provisions? Article 7 of the protocol could be interpreted as the obligation that workers are free from pollution in the work place.²⁸⁷ Article 12 could mean to live in an environment free from pollution. Article 11 is of special interest since it is stated in (2) under (a) that states shall take measures to reform agrarian systems ‘in such a way as to achieve the most efficient development and utilization of natural resources’

²⁷⁹ Boyle & Anderson, *supra* note 263, p.90.

²⁸⁰ *Id.*, p. 90. When discussing substantive and procedural rights, we do not mean this in a strict sense, for the right to life for example can mean both substantive and procedural rights.

²⁸¹ International Environmental law Reports, Human rights and Environment, both cases.

²⁸² Churchill, in Boyle & Anderson, *supra* note 263, p. 96.

²⁸³ Lopes/Ostra, only case law of similar provisions in European Charter.

²⁸⁴ Agenda 21, *supra* note 20. See for example Chapter 27.9 and 38.44.

²⁸⁵ Birnie & Boyle, *supra* note 19, p. 263.

²⁸⁶ Boyle & Anderson, *supra* note 263, p. 130.

²⁸⁷ Boyle & Anderson, *supra* note 263, p. 100. See for ‘obligation’ art. 2 of the ICESCR, especially ‘to the maximum of available resources.’

The question is whether these are rights in a useful, enforceable sense. It can be argued that substantive environmental human rights are controversial with regard to the standards they set and the possible interpretation of vague terminology. For instance, what is meant by safe and healthy working conditions (article 7)? Or by the right to an adequate standard of living (article 11)? Birnie and Boyle stated that ‘there is little international consensus on the correct terminology’ in both global and regional human rights instruments,²⁸⁸ and that any attempt to define environmental rights in qualitative terms is ‘bound to suffer from uncertainty [...] and [...] cultural relativism’.²⁸⁹ To date no court has authoritatively defined the precise content any of the substantive rights. There are however several cases in which different courts have determined certain rights without explicitly referring to substantive environmental human rights. However, it is uncertain whether human rights bodies can use these substantive rights to determine whether ‘environmental standards and conditions are maintained at a satisfactory level’.²⁹⁰

Indigenous Rights in current human rights instruments

Also important for the situation on Kalimantan are the two international instruments specifically drafted/concluded on the rights of indigenous peoples: the 1989 International Labour Organisation Convention concerning Indigenous and Tribal Peoples in Independent Countries²⁹¹ and the Declaration on the rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities as prepared by the Working Group on Indigenous Populations of the UN Human Rights Commission's Sub-Commission on Prevention of Discrimination and Protection of Minorities in 1992. The latter has several articles, which could be described as environmental rights; inter alia article 2 (3) on public participation and article 4 (2) on development of traditions.

The ILO Convention contains various references to the lands, resources, and environment of indigenous peoples.²⁹² The ILO Convention articles 4(1) and 7(4) are also important for protection and preservation of the environment of these groups. Indigenous ‘[...] peoples have real rights to resources that must be respected’.²⁹³ The ILO Convention uses the term "land"

²⁸⁸ Birnie & Boyle, *supra* note 19, p. 256.

²⁸⁹ *Id.*

²⁹⁰ Sands, *International Environmental Law*, *supra* note 17, p. 297.

²⁹¹ <<http://www.ilo.org/ilolex/english/subjlst.htm>>, last visited October 2004. Date of coming into force: 05:09:1991.

²⁹² <<http://www.cedha.org.ar/docs/doc62.htm>>, last visited December 2004.

²⁹³ <<http://www.cedha.org.ar/docs/doc62.htm>>, last visited December 2004.

to cover "the total environment of the areas which the peoples concerned occupy or otherwise use." ²⁹⁴(Article 13(2)) Article 14(1) states that:

The rights of ownership and possession of the peoples concerned over the lands, which they traditionally occupy, shall be recognised. In addition, measures shall be taken in appropriate cases to safeguard the right of the peoples concerned to use lands not exclusively occupied by them, but to which they have traditionally had access for their subsistence and traditional activities....

Article 7(1) is also relevant:

The peoples concerned shall have the right to decide their own priorities for the process of development as it affects their lives, beliefs, institutions and spiritual well-being and the lands they occupy or otherwise use, and to exercise control, to the extent possible, over their own economic, social and cultural development. In addition, they shall participate in the formulation, implementation and evaluation of plans and programs for national and regional development, which may affect them directly.

Furthermore, the UN Human Rights Committee has interpreted Article 27 of the Covenant on Civil and Political Rights in a broad manner, observing that culture manifests itself in many forms, including a particular way of life associated with the use of land resources, especially in the case of indigenous peoples. That right may include such traditional activities as fishing or hunting and the right to live in reserves protected by law. ²⁹⁵

2.3 What existing legal standards could Indonesia adopt?

As discussed in paragraph 2.2, current treaties with most environmental rights provisions are the ICCPR and the ICESCR of 1966. These treaties contain both substantive and procedural rights suitable for 'green' interpretation. As of yet, Indonesia has not ratified these covenants. The main reason for not ratifying these covenants is known as the so-called Asian Values

²⁹⁴ <<http://www.unu.edu/unupress/unupbooks/uu15oe/international%20recognition%20of%20the%20rights>>, last visited November 2004.

²⁹⁵ Quote from prof. D. Shelton, at <http://www.cedha.org.ar/docs/doc63.htm#_ftnref17>, last visited December 2004.

Argument. This argument is put forward by, *inter alia*, ASEAN countries to defy the applicability of Universal Declaration of Human Rights (UDHR) of 1948, on the ground that they are supposed to be 1) western oriented, 2) individualistic, 3) based on the belief that economic rights should come first and 4) that principles stated in the UDHR are a threat to Asian culture and tradition.²⁹⁶ However, universality of the UDHR was accepted in 1993 by all participating countries during the World Conference on Human Rights in Vienna.²⁹⁷

Besides these covenants, several more international human rights instrument could be applicable to the situation on Kalimantan. Especially the UN Declaration and the ILO Convention on the rights of indigenous people are important for the protection of the rights of Dayaks. See appendix A and table 1 for an overview of discussed treaties and declarations with their respective provisions.

2.4 Global developments and soft-law

The Rio Declaration on Environment and Development 1992, the United Nations Draft Principles on Human Rights and the Environment: Ksentini Report 1994 and the Plan of action as adopted by the 2002 Johannesburg Summit on Sustainable Development all place more and more emphasis on a human rights to a clean and healthy environment. A specific human right to a clean environment does not currently exist. Environmental rights are however emerging, but what is the status of these environmental rights, a global endeavour or enforceable hard law? It seems safe to endorse the conclusion by Hill, Wolfson and Targ: ‘One thing that can be said for sure is that internationally, the right to a clean and healthy environment has not reached the enforceable "hard law" stage as yet’.²⁹⁸

Sustainable development has however become the ‘core of international environmental policy’.²⁹⁹ The above-mentioned instruments and their respective provisions are believed to be capable of ‘immediate implementation by human rights bodies through existing rights to life, health, development and procedural rights of due process, public participation and access to effective remedies’.³⁰⁰ For example, one of the ‘priority areas for legal and institutional

²⁹⁶ <http://asiapacific.amnesty.org/apro/aproweb.nsf/pages/asian_values>, last visited November 2004.

²⁹⁷ For complete text, see <<http://www.ohchr.org/english/law/vienna.htm>>, last visited March 2005.

²⁹⁸ B.E. Hill, S. Wolfson, N.Targ, *Human rights and the environment: a synopsis and some predictions*, Geo. Int’l. Envrtl. L. Rev. Spring (2004) [hereinafter *Hill et al.*] p.32.

²⁹⁹ Birnie & Boyle, *supra* note 19, p. 259.

³⁰⁰ *Id.*, p. 255.

change' already mentioned in the Brundtland report was '...the need to expand the rights, roles and participation in development planning, decision-making and project implementation of an informed public [and] non-governmental organisations'.³⁰¹ As argued by several authors, the right to participation in decision-making is considered as a 'fundamental prerequisite for sustainable development'.³⁰² Participation can be seen as an 'argument for improving the quality of government and promoting environmental responsibility on the part of the public'.³⁰³ Principle 10 of the Rio Declaration also recognized the importance of 'participation of all concerned citizens'. The human right of 'participation in public decision-making' can thus be seen as an important development in international law.

2.5 Recommendations

- Adopt, implement and enforce both 1966 UN Covenants: ICCPR and ICESCR. 'Green' interpretation of all norms once Covenants are adopted and implemented;³⁰⁴
- Sign and ratify ILO Convention on Indigenous Peoples and the Declaration on the rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities;
- Recognition of indigenous peoples' customary rights over their land and resources.

3. REGIONAL HUMAN RIGHTS STANDARDS PERTAINING TO ENVIRONMENTAL ISSUES

In this part we will discuss which, if any, human rights instruments have been developed and their respective provisions pertaining to environmental issues on a regional level.

³⁰¹ Sands, *International Environmental Law*, *supra* note 17, p. 49.

³⁰² Boyle & Anderson, *supra* note 263, p. 136. See also Birnie & Boyle, *supra* note 19. And see Hill/Williamson/Targ p. 392.

³⁰³ Birnie & Boyle, *supra* note 19, p. 261.

³⁰⁴ <[http://web.amnesty.org/aidoc/aidoc_pdf.nsf/Index/ASA210272003ENGLISH/\\$File/ASA2102703.pdf](http://web.amnesty.org/aidoc/aidoc_pdf.nsf/Index/ASA210272003ENGLISH/$File/ASA2102703.pdf)>, important report on *inter alia* recommendations on what international instruments to adopt, last visited March 2005.

3.1 Presently applicable standards

At present, no regional human rights instrument exists that is binding on Indonesia.

3.2 What existing legal standards could Indonesia adopt?

Since no regional human rights instrument exists in Asia, we will briefly discuss some of the regional human rights instruments as developed in other region across the world. Based on certain values that can be derived from these instruments, the ASEAN could develop an own regional human rights instrument.

The currently existing (main) regional human rights instruments are the European Convention on Human Rights (1950), the American Convention on Human Rights (1969) and the African Charter on Human and Peoples' Rights (1981). All three instruments contain the right to life, the right to be free of interference with one's home and property and the right to a fair trial. The substantive rights pertaining to environment are the right to a healthy environment, the right to a decent working environment, the right to decent living conditions and the right to health. All regional treaties contain the above provisions in stronger or lesser wording.³⁰⁵ It is outside the scope of this report to elaborate further on the exact meaning, implications and differences between the respective instruments. It must however be stated that wording and implications vary considerably between the regions based on, *inter alia*, cultural differences.

Recently, one of the most 'significant and comprehensive' multilateral treaties dealing with participation in its broadest sense was concluded.³⁰⁶ This 1998 Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters³⁰⁷ guarantees rights to access of information, participation and access to justice.³⁰⁸

The main regional body capable of negotiating and concluding treaties in the South East Asian region is the ASEAN. However, to date no regional human rights treaty has been

³⁰⁵ For a extensive discussion on the differences and similarities between the instruments, see R.R. Churchill, *Environmental Rights in Treaties*, in Boyle & Anderson, *supra* note 263, pp. 89-108.

³⁰⁶ Birnie & Boyle, *supra* note 19, p. 262.

³⁰⁷ <<http://www.unece.org/env/pp/>>, last visited in February 2005.

³⁰⁸ <<http://www.unece.org/env/pp/>,documents/cep43e.pdf>>, last visited February 2005. See article 1 for the objectives of the Convention.

negotiated nor concluded, let alone an instrument containing several of the environmental rights we discussed earlier. That is, not a binding, inter-governmental instrument pertaining to either substantive or procedural (environmental) human rights. In Amnesty International's latest report on human rights in ASEAN countries it was concluded that ASEAN '[...] has been entirely silent on other human rights issues in the region, even though the poor record of other countries within ASEAN continues to tarnish the reputation of the whole grouping.'³⁰⁹ The ASEAN was however one of the first regional organisations to incorporate sustainable development³¹⁰ in one of its regional treaties in 1985, and has since then developed several multilateral environmental agreements to combat environmental degradation.³¹¹ The role of human rights in sustainable development as used in the Jakarta Declaration of 1987 is however vague. In this resolution it is stated that ASEAN countries are '[c]onvinced that it is imperative for the peoples of ASEAN to continue and accelerate their development processes in order to meet their growing needs and to provide them with a quality of life in accord with their dignity and well-being'.³¹²

3.3 Regional developments and soft-law

Although no specific regional, inter-governmental instruments dealing with both substantive and procedural human rights currently exist, there is an Asian Human Rights Charter prepared by the regional 'civil society'. This charter was completed after three years of preparation and discussion, with over 200 non-governmental organisations (NGOs) and thousands of experts and activists having taken part. When the final version of the Asian Human Rights Charter was presented, it was referred to by its drafters as 'a people's charter on human rights'. The draft charter is used by regional human rights organisations to promote, disseminate and communicate human rights 'Asian style'.³¹³ This peoples' charter contains certain environmental rights. It is stated that '[...] all peoples have the right to a clean environment, including clean air and clean water', which is much like some of the substantive

³⁰⁹ <http://web.amnesty.org/library/index/ENGASA010012003>.

³¹⁰ Country profile on Indonesia and sustainable development, available at <<http://www.un.org/esa/agenda21/natlinfo/wssd/indonesia.pdf>>, last visited November 2004.

³¹¹ See chapter 2 International Environmental Law. Paragraph on regional instruments.

³¹² Jakarta Resolution on Sustainable Development, Jakarta (1987), *preamble*, at: <<http://www.aseansec.org/6081.htm>>.

³¹³ 14 - 18 May, 1998, After three years of preparation and discussion, with over 200 non-governmental organisations (NGOs) and thousands of experts and activists having taken part, the final version of the ASIAN HUMAN RIGHTS CHARTER - a people's charter on human rights - has completed. See *inter alia* <http://www.ahrchk.net/charter/mainfile.php/draft_charter/>, last visited November 2004.

environmental rights discussed above. Also the right to participation is incorporated in the instrument in some form: '[...] all peoples have the right to development which includes the right to participate effectively in the formulation and implementation of development projects'. Finally, the specific environmental rights for indigenous peoples have been recognised in this charter, stating that they have '[...] the right to hold and full control and use of their territories and ancestral domains as the foundation of their existence to hold, to control, protect and develop all natural resources within those domains and to shape their economic life according to their beliefs and practices'.

It must be emphasized that individuals or groups cannot derive any rights from a civil society human rights instrument. It is only used here to indicate certain developments within this civil society. The rights stated are only an indication of a possible future direction in negotiations on a human rights treaty between member states of the ASEAN.

3.4 Recommendations

- Create an own regional Human Rights Treaty based on Asian Values and Universal human rights principles: Even if Indonesia can uphold Asian Values argument, this is all the more reason and incentive to develop an 'own', regional human rights treaty. This treaty would probably be most effective if negotiated within the ASEAN. International human rights instruments are drafted at certain level of generality and abstraction, so at national level a detailed, culturally sensitive and ecologically appropriate standards can be developed.³¹⁴

4. LEGAL ASPECTS OF ENVIROSECURITY ASSESSMENT: ENVIRONMENTAL DEGRADATION ON KALIMANTAN

This part will focus on the human rights effects of environmental degradation and possible remedies as provided for in the human rights instruments as discussed above.³¹⁵ So far we have discussed several international human rights instruments, developments and soft law on both regional and global level and highlighted the environmental implications of the rights

³¹⁴ Boyle & Anderson, *supra* note 263, p. 18.

³¹⁵ Westrich, *supra* note 1, p. 6.

incorporated in these instruments. Starting with the Rio Declaration of 1992, the interconnectedness of environmental degradation and human ‘insecurity’ or suffering as a result of this degradation, has become integrated in the wider concept of sustainable development. Environmental rights, or the ‘green’ interpretation of existing human rights is nowadays a topic of fierce discussion. The following analysis of the current situation on Kalimantan will provide an overview of envirosecurity issues and the respective international legal norms that could be applicable to these issues, or could at least provide for some guarantees of sustainable development to all stakeholders. This in order to enhance the environmental security in the region, that is, to guarantee security for both the environment and humans. Findings are summarized in a table in Appendix A-2.

Conclusions drawn from this analysis could serve as an indication for policymakers on what existing or additional international law to ratify, implement and/or enforce. The developments and soft law are a good indication of trends in contemporary international law, especially in sustainable development law. The developments can be used to interpret existing human rights treaties not particularly drafted for environmental purposes or to adopt future policies aimed at an optimal use of international law.

The right to a safe and healthy working and living environment

The most serious and direct threat from deforestation by forest fires is obvious: haze from forest fires causes damage to human **health** and economy (tourism, agriculture, travel), and environment (acid rain, poor air quality, poorer visibility). This results in pollution of air, water, and food sources. The destruction of local environment in turn results in landslides, drought, erosion, flooding, and (more) fires, which harm local communities and the landscape. The effects are both local and regional and are suffered by all: men, women, children, migrant workers and indigenous peoples. The right to health is *inter alia* ratified by Indonesia in the UN Convention on the Rights of the Child of 1989, article 24. The right to the ‘highest attainable standard’ of health is also mentioned in article 12 ICESCR, which could be read a right to live in an environment free from pollution. The right to safe and healthy working conditions is also mentioned in article 7 ICESCR. Article 11 ICESCR mentions a right to an adequate standard of living. Of special interest is article 11 (2) under (a) that states shall take measures to reform agrarian systems ‘in such a way as to achieve the most efficient development and utilization of natural resources’.

The customary right to a clean and healthy environment does however not exist yet, but it is argued that ‘[a]ctions and statements from international bodies continue to shape the emergent customary international right to a clean and healthy environment.’³¹⁶ A closely related right is the right to life mentioned, *inter alia*, in article 6 ICCPR. This is also one of the rights often cited as an environmental right and is said to contain a ‘clear prohibition on the state not to take life intentionally or negligently’.³¹⁷ The right to life currently has the status of customary law.³¹⁸ At the global level this right might even play a role when considering the effects of global warming. Article 17 ICCPR, freedom from arbitrary or unlawful interference with privacy and home, could for example be invoked if environmental degradation or pollution affects the home or privacy of an individual. Article 17(2), in which it is stated that everyone has the right to protection under the law from such interference, is interesting when dealing with the conflict between indigenous/local communities and logging/oil palm industries over land rights.

Non-discrimination and Indigenous rights

Other problems related to the use of natural resources on Kalimantan are disruption of local (indigenous) communities (the Dayak) and their way of life by large-scale logging and oil palm operations. Reportedly, a ‘[...] tactic [...] used by plantation owners to obtain control of land occupied by indigenous peoples is to simply set fire to the area and force them to leave’. Kalimantan also has experienced fierce ethnic conflict fomented by influx of immigrants and migrant workers. These migrants from other parts of Indonesia often arrive to work on logging concessions, and frequently face struggles with discontented local communities, whose traditional use of the land is neither acknowledged nor compensated for. This resulted in violence and internally displaced persons (IDPs). The Indonesian judiciary has a history of being passive concerning the land use rights of local and indigenous communities; for many with legitimate complaints violence is the only means to enact change.

Indonesia has not ratified the main human rights instruments dealing with, *inter alia*, discrimination, let alone indigenous rights. The earlier mentioned Declaration on the rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities of 1992 and the 1989 International Labour Organisation Convention concerning Indigenous and Tribal

³¹⁶ <<http://www.earthjustice.org/news/documents/3-04/2004UNreport.pdf>>, report Prepared for the U.N. Commission on Human Rights by EarthJustice.

³¹⁷ See above, para 2.2

³¹⁸ See above, para on customary law.

Peoples in Independent Countries could play a pivotal role in the environmental security problems faced on the Island of Kalimantan. Both instruments, as well as article 27 ICCPR, contain explicit cultural and land rights for indigenous peoples. Article 4 (2) ICCPR for one mentions the rights to maintain the traditional way of cultivating lands. Article 27 ICCPR was interpreted as having special effect for indigenous people associated with the use of land resources. The ILO Convention also has several provisions, especially drafted for traditional way of cultivating lands and land rights. Since the Dayaks only use the resources they need and give nature time to recover, a more sustainable use of the land seems guaranteed by granting the above-mentioned rights. The latter seems widely accepted by the regional 'civil society', but this is only a development.

Basic Procedural and Democratic Rights

One of the further concerns for Kalimantan is that the demand from foreign and domestic timber processing industries fuels unsustainable logging and illegal practices. The legitimate (and sustainable) logging operations are struggling to remain competitive in an illegal environment. Furthermore, corruption in the (local) government, law enforcement, and legal system makes it difficult for locals and NGOs to adequately address these and the already mentioned security threats. They lack a suitable forum for redress or change.

Procedural/democratic rights are especially significant where economic, social and cultural rights are effectively absent, like in the case of Indonesia. Even in the absence of certain substantive environmental rights, stakeholders on local, regional and global level can participate in decision-making and policy regarding environmental issues. Procedural rights like access to relevant information and participation in decision-making on environmental issues could prove very effective. The right to public participation (art. 25 ICCPR) and especially the rights to take part in public affairs could prove to be an effective solution in coping with some of the above mention problems. The approval of even more logging operations is expected to have a harmful effect on the environment. Public participation and the rights to a fair hearing (article 14 ICCPR) could help individuals fight the approval.

5. CONCLUSIONS/RECOMMENDATIONS

It seems clear from the above that environmental rights as hard, enforceable law on an international level do not yet exist. Since the Rio Declaration of 1992 there has been a significant increase in discussion, academic study and international attention for the interconnectedness of environmental degradation and human rights. At present, several procedural and substantive environmental rights can be said to exist in both regional and global human rights instruments.

One of the conclusions to be drawn here is that human rights cannot flourish without a sound and sustainable development of natural resources and vice versa. Current human rights instruments like the ICCPR and the ICESCR seem well equipped to deal with the most urgent threats to environmental degradation and the accompanying threats to basic human rights. The different instruments on rights of indigenous peoples are widely accepted as capable of dealing with threats to local and regional environmental security and health. Soft-law and developments in the very broad and dynamic topic area of sustainable development also play a pivotal role in the quest for a balance between human health, development, preservation of nature and security. The problem of environmental degradation is not a local, regional or global problem. It is a local, regional **and** global problem. It should be dealt with accordingly. Judging from the Johannesburg summit, a lot has still to be done. For one, differences between developing and developed world should be overcome by co-operation on all 'topic areas' of sustainable development.

The Republic of Indonesia has been developing a policy aiming at improvement on all different levels since the late 1990s. By ratifying and implementing several human rights treaties, the awareness of the importance of environmental rights has also grown. Current human rights law is believed to have '[...] significant potential for remedying deficiencies in national regulation and enforcement', especially in countries where '[...] failure of government action is a major source of environmental harm'.³¹⁹ Indonesia can and should adopt, implement and enforce more of the currently existing treaties, especially the ICESCR and the ICCPR. Even more significant for the solution of the environmental security problems

³¹⁹ Birnie & Boyle, *supra* note 19, p. 261.

at Kalimantan are the international legal instruments dealing with indigenous rights, i.e. the ILO Convention and the UN Draft Declaration. Indonesia should furthermore promote public participation in environmental decision-making, especially participation by Dayaks.

The aim of this part of our report was to derive from several international human rights instruments a core of environmental rights to be used in dealing with the situation on the Indonesian Island of Kalimantan. When applying the most widely accepted environmental rights to the environmental degradation on the Indonesian island of Kalimantan, it can be concluded that adopting, implementing and enforcing several existing human rights instruments can guarantee stakeholders on a local, regional and global level of sustainable development of the natural resources on the island, and thus environmental security.

CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS

By discussing two topic areas of sustainable development law, i.e. environmental and human rights law, an assessment of the legal aspects of the environmental security issues on the Indonesian Island of Kalimantan was made. This was done in order to see what international obligations are currently binding on the Republic of Indonesia, and what additional international legal instruments it could adopt in order to guarantee sustainable development of its natural resources to different stakeholders and thus contribute to environmental security.

It must be stated that not all terms used in this report are clear-cut, accepted as ‘legal’ or non-debatable. They are however useful for the aim of this report, that is to indicate those international legal norms as well as developments and soft law that can serve as part of a solution for environmental security issues on Kalimantan, or at least of giving an insight of the versatile legal aspects to be dealt with. The report hopes to give some concrete legal tools that affirm the necessity of sustainable development of the natural resources on Kalimantan and contribute to further development of an EnviroSecurity Action Plan. The legal aspects should be seen in the much broader environmental security assessment and thus as a possible extra guarantee for environmental security. Also, soft-law and developments in this very broad and dynamic topic area of sustainable development play a pivotal role in the quest for a balance between human health, development, preservation of nature and security.

Findings of the assessment are summarized in two tables as attached to this report. These tables give a quick overview of the current environmental security issues on Kalimantan, and what international norms could be applicable to the situation. Again, by ‘applicable’ the authors do not mean applicable in a strict legal sense; we mention the norms to indicate what international legal instruments are dealing with the specific subject matter. The instruments however differ in scope, object and purpose. Whereas the Rio Declaration might be a more political agenda containing ambiguous wording and good intents instead of enforceable obligations, the Kyoto Protocol is a highly specific and detailed instrument, although also containing ambiguous wording and subject of fierce discussion.

Sustainable Development Law

International law recognises a principle (or concept) of 'sustainable development'. The principles of sustainable development perform a "guidance function". They impose a respective political obligation and set the framework for the exploitation or use of components of the environment including natural resources. According to one of the elements of sustainable development, i.e. the *principle of intra-generational equity*, developed countries shall provide new and additional financial resources to enable developing countries to meet the incremental costs for implementing their environmental commitments. The respective principle indicates that environmental commitments have to be adjusted reflecting the capabilities of states concerned. This is especially important when realising that there is strong evidence that the actual way in which Indonesia focuses on economic development cannot co-exist with a commitment to preserving and protecting Indonesia's land resources.

There is no agreement over the extent to which sustainable development is law.

Environmental law

Indonesia has a duty to prevent, reduce and control transboundary environmental harm. The rights of the country in the exercise of permanent sovereignty are not unlimited. If the government will not take (sufficient) measures to prevent and stop the fires, it can be held accountable by other countries. Since Indonesia also has a duty to co-operate, the government can be held accountable as well if they refuse to work together with other countries.

The principle of common but differentiated responsibility can provide assistance in two different ways. The Republic of Indonesia can benefit from this principle, since the country is considered to be a developing country and thus profits from the differentiated standards in treaties. On the other hand, a disadvantage for Indonesia can be that the forest fires at Kalimantan significantly harm 'components of the world environment', which could indicate that the country does have a great responsibility under international (environmental) law, despite the fact that it can be considered as a developing country.

Based on the principle of preventive action, there lies an obligation under international (environmental) law upon the government to prevent, reduce, limit or mitigate the damage the forest-fires cause, in which national legislation has to play an important part. Finally, the polluter-pays-principle can also provide a good incentive for the Indonesian government to prevent and stop the forest fires. Based on this principle, Indonesia can be held accountable for the financial damage that is caused by the fires. This damage probably amounts to millions of dollars, a price that the country will not be able to pay.

Several major environmental security issues at Kalimantan have been mentioned in the Introduction of this report, and our conclusion is that international environmental law can provide solutions for combating these issues.

The ASEAN Agreement on Transboundary Haze Pollution can be of value in the prevention of the damaging effect of haze on health, economy and environment, even though it leaves state sovereignty uncompromised and lacks a sanction-system. For example, article 4 provides in mandatory language that the parties shall co-operate in developing and implementing measures to prevent and monitor transboundary haze pollution and in controlling fire-sources as well as that parties are obliged to respond promptly to a request for relevant information or consultation. Most importantly, states have to 'take legislative, administrative and/or other measures to implement their obligations under this Agreement'. Therefore, despite its shortcomings, the Agreement can prove to be a worthwhile instrument to take the first steps in preventing or diminishing the Kalimantan forest fires in a legal way. Considering this, it is advisable for Indonesia to ratify this Agreement as soon as possible.

The Convention on Biological Diversity can prove to be helpful in the prevention of the loss of biodiversity and the possible extinction of plant and animal species. However, therefore it's necessary that the Indonesian government puts more effort into implementing the provisions of this treaty. Several authors state that given its broad wording, the CBD can only be successful in actually conserving biodiversity if the parties actually implement it into their national legislation. Besides that, the government of Indonesia can gain interesting financial benefits from this treaty, since the country is a developing country. On the basis of the principle of common, but

differentiated responsibility, developed country-parties are obliged to give financial aid to the developing countries in implementing the CBD.

In the Kyoto Protocol to the UNFCCC it was agreed to achieve quantified emission limitation and reduction commitments in order to promote sustainable development (article 2 (1) of the Kyoto Protocol). Developing countries, including Indonesia, are also Parties to the Protocol but do not have 'emission reduction targets'.³²⁰ The potential in Indonesia to benefit from the Clean Development Mechanism (CDM, article 12 Kyoto Protocol) - a mechanism in which an industrialised country can meet their Kyoto Protocol emission limitation and reduction commitments in a developing country - was the main factor in justifying the ratification. The CDM should guide foreign investment in developing countries towards goals of sustainable development. Conditions for projects are mentioned in article 12 (5), which is also one of the more controversial provisions in the Kyoto Protocol, since it's wording is somewhat ambiguous. The CDM could be used to generate foreign investment for sustainable development projects regarding any of the environmental security issues. Indicated weak aspects of the CDM can however frustrate the potential benefits presently forecasted by the Indonesian government.

Human Rights Law

Since the Rio Declaration of 1992 there has been a significant increase in discussion, academic study and international attention for the interconnectedness of environmental degradation and human rights. Current human rights instruments like the ICCPR and the ICESCR seem well equipped to deal with the most urgent threats to environmental degradation and the accompanying threats to basic human rights. Several procedural and substantive environmental rights can be said to exist in both regional and global human rights instruments.

The different instruments on rights of indigenous peoples are widely accepted as capable of dealing with threats to local and regional environmental security and health. However, environmental rights as hard, enforceable law on an international level do not yet exist.

³²⁰ <http://unfccc.int/files/press/news_room/press_releases_and_advisories/application/pdf/press041118_eng.pdf>, last visited March 2005.

Certain provisions from human rights instruments might not have been drafted for environmental purposes, the terms and wording of these provisions are abstract enough for interpretation by judicial bodies. The most cited are the right to life, the right to property, right to health and other basic procedural and democratic rights.

Conclusion

The problem of environmental degradation is not a local, regional or global problem. It is a local, regional **and** global problem. It should be dealt with accordingly. Most important, however, is the notion that an effective improvement of the environmental security situation on Kalimantan cannot be achieved without a comprehensive approach to this situation and international cooperation in all areas of concern. Although its status as customary law is debatable, there is near universal agreement on international sustainable development law as the appropriate framework for environmental and development decision-making. Both international environmental and human rights law as part of this concept are an unmistakable part of the *corpus* of international law. Existing international legal instruments contain clear, specific and enforceable norms that could contribute to a comprehensive solution to the envirosecurity issues at Kalimantan. Several of these norms are already binding on the Republic of Indonesia, whether as customary law or as treaty-obligation. Indonesia should strive for powerful enforcement of currently binding environmental and human rights norms.

The Republic of Indonesia is nowadays making considerable effort to balance local, regional and global interests of both humans and the environment. As a developing country it can use several treaties to generate investments from developed countries in sustainable development projects, as it is already doing within, *inter alia*, the Kyoto Protocol. By international co-operation it can put an end to forest fires caused by illegal logging. By ratifying, implementing and enforcing additional human rights instruments, the Republic of Indonesia could combat adverse effects of environmental degradation on inhabitants of Kalimantan, especially the indigenous Dayaks. Both regional and global environmental and human rights law can thus serve as a guarantee for sustainable

development of natural resources on the Indonesian Island of Kalimantan, and thus contribute to the overall environmental security.

APPENDIX A-1

	Treaties		
	Convention on Biological Diversity (R)	Kyoto Protocol to the United Nations Framework Convention on Climate Change (R)	ASEAN Agreement on Transboundary Haze Pollution (S)
EnviroSecurity Issues Kalimantan			
Haze damaging health, economy and environment (local and regional)		Art. 12	(Preamble), art. 2, 3, 4, 9
Loss of biodiversity – Forests and Wetlands	(Preamble), art. 2, 6, 8, 20, 21. COP-Decision II/9, VI/26	Art. 12	
Possible extinction of plant and animal species	Art. 2, 8	Art. 12	
Destruction of the environment of neighbouring countries	(Preamble), art. 4, 5	Art. 12	
Climate change caused by carbon emissions		Art. 12 ³²¹	

R= Ratified by Indonesia

S= Signed, not ratified by Indonesia

N= No action taken by Indonesia

³²¹ The CDM could be used to generate foreign investment in sustainable development projects regarding any of the environmental security issues.

APPENDIX A-2

	Treaties							Customary Law
	CRC (R)	CEDAW (R)	CERD (N)	ICCPR (N)	ICESCR (N)	Convention concerning Indigenous and Tribal Peoples (ILO) (N)	Declaration on the rights of Minorities (UN) (N)	Customary Law
EnviroSecurity Issues Kalimantan								
Global warming								Right to life
Haze from forest fires causes damage to human health	Art.24			Art. 6,17	Art. 7,11,12			
Haze from forest fires causes damage to economy (tourism, agriculture, travel)								
Disruption of local (indigenous) communities								Right to private life/property
Ethnic conflict: violence and internally displaced peoples				Art. 4, 17, 27		Art. 4 (1), 7(4), 13 (2), 14(1)	Art. 2 (3), 4 (2)	
Conflict between indigenous and local communities			Art. 2	Art. 4, 27		Art. 4 (1), 7(4), 13 (2), 14(1)	Art. 2 (3), 4	
Pollution of air, water, and food sources								
Destruction of local environment								
Legitimate (and sustainable) logging operations unable to remain competitive								
Corruption in the government, law enforcement, and legal system makes it difficult for locals and NGOs to adequately address these security threats				Art. 14, 25				

R= Ratified by Indonesia

N= No action taken by Indonesia

APPENDIX B

As indicated before, an environmental security assessment comprises much more than just legal aspects. It was also concluded that a long-term solution for current environmental security issues can only be brought about by a comprehensive approach and international cooperation in all areas of concern. This appendix contains additional legal and non-legal instruments not (extensively) considered in this report, but nevertheless very important and useful for further development of an EnviroSecurity Action Plan.

Incentives for ratifying, implementing and enforcing international legal instruments

-Aid conditionality: Aid is dependant on certain conditions, *inter alia* in the field of human rights.’ an annual conference of Indonesia's largest donors convened by the World Bank, continues to pledge significant sums, although donors increasingly are conditioning assistance on good governance and legal reform³²².

-‘[I]n those countries where the failure of governmental action is a major source of environmental harm, human rights law, both national and international, has significant potential for remedying deficiencies in national regulation and enforcement.’³²³

- Good governance, transparency, accountability, upholding the rule of law, and respecting human rights are also essential goals of sustainable development etc. ‘[...] corruption must be reduced, because large scale corruption (defined as abuse of public power for private profit) is the result of political systems that do not respect the principles of accountability and transparency. This is particularly true of **many South Asian** [emphasis added] countries where widespread corruption and lack of transparency have greatly reduced the chances of achieving sustainable development’³²⁴ ‘the Plan of Action (of Johannesburg summit) recognizes the critical role of good governance both within countries and at the national level, including the importance of public participation and government responsiveness’³²⁵

³²² <<http://hrw.org/english/docs/2003/12/31/indone7005.htm>>, under international actors.

³²³ Birnie & Boyle, *supra* note 19, p. 261.

³²⁴ Atapattu, *supra* note 10, especially footnote 69 and 70.

³²⁵ Hill et al., *supra* note 299, p. 377.

- Kyoto Protocol to the Framework Convention on Climate Change: Clean Development Mechanism: Annex I of the Protocol enables parties to this annex to invest in greenhouse gas reduction activities abroad to earn credits. This is believed to be a very good incentive for Indonesia to develop sustainable economic activities. [The development of economic activities does not necessarily mean better human rights, but could be an extra condition for foreign investments, something completely different from first incentive of 'aid conditionality. Maybe link incentive with human rights by western governmental investments/ western values, - argument, since in Kyoto, it is the States that undertake to reduce greenhouse emissions]

Overview of UNCHR treaties and status for Indonesia:³²⁶

CAT-Convention Against Torture and Other Cruel Inhuman or Degrading Treatment or Punishment: **Ratification**

CAT-OP-Optional Protocol to the Convention Against Torture and Cruel Inhuman or Degrading Treatment or Punishment: **No Action**

CCPR-International Covenant on Civil and Political Rights: **No Action**

CCPR-OP1-Optional Protocol to the International Covenant on Civil and Political Rights: **No Action**

CCPR-OP2-DP-Second Optional Protocol to the International Covenant on Civil and Political Rights: **No Action**

CEDAW-Convention on the Elimination of All Forms of Discrimination against Women: **Ratification 29/07/80**

CEDAW-OP-Optional Protocol to the Convention on the Elimination of All Forms of Discrimination against Women: **Signature only 28/02/2000**

CERD-International Convention on the Elimination of All Forms of Racial Discrimination: **Accession**

CESCR-International Covenant on Economic, Social and Cultural Rights: **No Action**

CMW-International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families: **Signature only, 22/09/2004**

CRC-Convention on the Rights of the Child: **Ratification, 26/01/90**

³²⁶ <<http://www.unhchr.ch/tbs/doc.nsf/Statusfrset?OpenFrameSet>>, latest update: September 2004. See also <<http://web.amnesty.org/pages/treaty-countries-ratification-eng>>.

CRC-OP-AC-Optional Protocol to the Convention on the Rights of the Child on the involvement of children in armed conflict: **Signature only, 24/09/2001**

List of environmental law treaties applicable to the deforestation-issue at Kalimantan

Local level:

Convention on Wetlands of International Importance especially as Waterfowl Habitat, 2-2-1971.
(<http://www.ramsar.org/>)

Ratified by Indonesia on April 8, 1992. Entry into force on August 8, 1992

Aim of this treaty is the conservation of existing wetlands through international co-operation. Set up of the Ramsar List, a list of wetlands that the parties of this treaty have put under special protection. Indonesia has already put two areas on this list, one of them is the Danau Sentarum-area at Kalimantan.

Recommendation:

art 2.5: bring more wetlands up for the Ramsar-list. With special attention to peatlands, since there are not yet any Indonesian peatlands on the list. The Ramsar Convention has special attention for peatlands; development of 'Guidelines of Global Action on Peatlands'. Parties of the Convention have been asked to give information about the situation of their peatlands by handing in a 'National Report' before February 28, 2005. Indonesia should use this opportunity to create special protection for his peatland-areas.

"The Ramsar Convention has expanded from an agreement which more comprehensively tackles protection of wetland ecosystems. It has increasingly supported co-operation at the regional level to advance and co-ordinate activities among Contracting Parties and with other conventions and institutions."³²⁷

³²⁷ Kimball, *supra* note 232, p. 244.

Convention concerning the Protection of the World Cultural and Natural Heritage, 16 November 1972 (<http://whc.unesco.org/archive/convention-en.pdf>)

Not signed or ratified by Indonesia, Entry into force: yes.

“Some forests are also to some extent protected by the World Heritage Convention.”³²⁸

Recommendation: put the tropical forests at Kalimantan up for the World Heritage List, founded by art. 11 of this Convention, as has been done with the Tropical Rainforest Heritage of Sumatra in 2004. (See <http://whc.unesco.org/pg.cfm?cid=31> for the List)

International Tropical Timber Agreement, 26 January 1994
(<http://sedac.ciesin.columbia.edu/entri/texts/ITTA.1994.txt.html>)

“(I)n effect it is little more than a commodity market adjustment among consumer and producer states, accompanied by ‘soft ecological guidelines’ and a commitment to introduce sustainable production techniques by the year 2000.”³²⁹

Soft Law:

World Summit on Sustainable Development 2002

This summit has set a target of reducing the current rate of loss of biological diversity by 2010 through among others, promoting concrete international support and partnership for the conservation and sustainable use of biodiversity, including ecosystems, at World Heritage sites; and effective conservation and sustainable use of biodiversity, promoting and supporting initiatives for hot spot areas and other areas essential for biodiversity and promoting the development of national and regional ecological networks and corridors;

UNCED (1992 UN Conference on Environment and Development):

Non binding results: - Rio Declaration (<http://habitat.igc.org/agenda21/rio-dec.html>) – UNCED Forest Principles (<http://www.un.org/documents/ga/conf151/aconf15126-3annex3.htm>) – Agenda

³²⁸ Birnie & Boyle, *supra* note 19, p. 633.

³²⁹ Id.

21 (= action plan for global partnership for sustainable development, <http://www.iisd.org/rio+5/agenda/agenda21.htm>)

Transboundary/Regional Level:

Treaties:

ASEAN Agreement on the Conservation on Nature and Natural Resources (9-7-85):

Signed and ratified by Indonesia. Not yet into force.

Art. 1: Fundamental Principle:

(1) The Contracting Parties, within the frame- work of their respective national laws, undertake to adopt singly, or where necessary and appropriate through concerted action, the measures necessary to maintain essential ecological process and life-support systems, to preserve genetic diversity, and to ensure the sustainable utilisation of harvested natural resources under their jurisdiction in accordance with scientific principles and with a view to attaining the goal of sustainable development.

(2) To this end they shall develop national conservation strategies, and shall co-ordinate such strategies within the framework of a conservation strategy for the Region.

“A number of regional treaties contain general provisions on rational or sustainable use of tropical forests, of these only the 1985 ASEAN Convention requires a serious commitment to forest protection in a broader environmental context, and it is not in force.”³³⁰

Soft Law:

(The text of the documents below are available via <http://www.aseansec.org/8919.htm>)

“The effectiveness of such measures, however, suffers from weaknesses in monitoring, assisting and ensuring state compliance. These weaknesses are endemic to the “AEAN Way” and its preference for non-interference in the domestic affairs of member states; for non-binding plans, instead of treaties; and for central institutions with relatively little independent initiative or resources. As such, the ASEAN environmental undertakings may be characterised as plans for cooperation between national institutions, rather than as the creation or strengthening of any

³³⁰ Birnie & Boyle, *supra* note 19, p. 633.

regional institutions as a central hub for policy-making or implementation. These same characteristics of the “ASEAN Way” find expression in the specific agreements on the Southeast Asian fires and the resulting haze.”³³¹

ASEAN Declaration on Heritage Parks, 18-12-03

Includes Appendix 1, on which national protected areas are listed as ASEAN Heritage Parks. With this Agreement, the ASEAN-countries want to carry out the principles stated in the Convention on Biological Diversity and to help achieve the target of the World Summit on Sustainable Development 2002 (WSSD).

Recommendation: include areas at Kalimantan, since the declaration-list now only contains two parks: one at Sumatra and one at Irian Jaya

Yangon Resolution on Sustainable Development, 18-12-03:

Elaborates on the WSSD and states among others:

“We, the Ministers responsible for environment of the ASEAN member countries, do hereby:

Reiterate strong commitment and resolve to fulfil the obligations in the WSSD, and to meet the Millennium Development Goals and achieve meaningful co-operation in the ten priority areas* as agreed at the Seventh Informal ASEAN Ministerial Meeting on the Environment.”

* The ten priority areas as agreed are global environmental issues; land and forest fires and transboundary haze pollution; coastal and marine environment; sustainable forest management; sustainable management of natural parks and protected areas; freshwater resources; public awareness and environmental education; promotion of environmentally-sound technologies and cleaner production; urban environmental management and governance; and sustainable development monitoring and reporting, and database harmonisation.”

Jakarta Declaration on Environment and Development, 18-8-97:

³³¹ Tay, *Southeast Asian Fires*, *supra* note 114, p. 258. This article gives an oversight of the steps that have been taken by the ASEAN on the environmental level.

“WE, THE ASEAN MINISTERS FOR THE ENVIRONMENT, HEREBY AGREE:

(...)

3. To cooperate and render assistance wherever available, to prevent and control all domestic sources of pollution and activities that could contribute towards transboundary pollution, including haze formation;
4. To welcome international cooperation and assistance to strengthen ASEAN capability to combat transboundary pollution, including haze.”

Resolution on Environment and Development Bandar Seri Begawan, 26-4-94:

In this Resolution, the ASEAN-countries state – among others - to implement Agenda 21

Resolution on Environment and Development, 18-2-92:

The ASEAN ministers of Environment adopt in this resolution the ‘ASEAN Strategic Plan of Action on the Environment 1994-1998’ (<http://www.aseansec.org/8950.htm>)

Kuala Lumpur Accord on Environment and development, 19-6-90:

Art. 1: To initiate efforts leading towards concrete steps pertaining to environmental management, including:

- a. the formulation of an ASEAN strategy for sustainable development and a corresponding action programme,
- b. the harmonisation of environmental quality standards,
- c. the harmonisation of transboundary pollution prevention and abatement practices,
- d. the undertaking of research and development and the promotion of the use of clean technologies.

Jakarta resolution on Sustainable development, 30-10-87:

‘I. That ASEAN member countries adopt the principle of sustainable development to guide and to serve as an integrating factor in their common efforts. II. That ASEAN cooperative efforts be focused upon those common resources and issues that affect the common well-being of the people, of ASEAN, including, but not be limited to:

- the common seas;
- land-resources and land-based pollution;
- tropical rain-forces;
- air quality; and
- urban and rural pollution.’

Bangkok Declaration on the ASEAN Environment 1984:

‘The ASEAN-states declare their desire to strengthen and enhance their regional co-operation. In the field of environmental protection to meet the increasing and challenging environmental problems of the ASEAN region in the decade ahead, and to this end hereby adopt the following objective and policy guidelines;

The objective of this declaration is: to implement the ASEAN DEVELOPMENT STRATEGY through an integrated approach entailing advance or forward planning in the environmentally related activities with a view to incorporating environmental dimension. in development planning right at the base level in order to achieve sustained development and long-term conservation of environmental assets and at the same time improving the quality of life for all.’

Manila Declaration on the ASEAN Environment 1981:

‘(a)	Objective
To ensure the protection of the ASEAN environment and the sustainability of its natural resources so that it can sustain continued development with the aim of eradicating poverty and attaining the highest possible quality t- life for the people of the ASEAN countries.’	

- Taken from National Report 2, p. 11 en 12, (<http://www.biodiv.org/doc/world/id/id-nr-02-en.pdf>):

Indonesia has been a strong contributor to International Agreements, Programs and Bilateral Cooperation. Current examples of active involvement have been provided for each of the three categories.

Bilateral Cooperation

Norway: technical assistant relating to terrestrial, marine and coastal biodiversity 2001-2004

Ministry of Forestry and LIPI (Indonesia Institute of Sciences) in collaboration with JICA to develop biodiversity conservation, carbon trade, forest fire, and forest rehabilitation

Ministry of Agriculture and USAID in agriculture sustainability

AUSAID, GTZ, CIDA: marine and coastal environment protection

International Programs

Joint programs among members of ASEAN countries, in the forest fire control and anticipation. In highlighting the considerations in the ten-year review progress, Indonesia is planning to go on with the previous planning:

Forest fire control and anticipation;

Cooperation with other international and regional organizations (IRRI, ARCBC, MREP, LREP, MCRMP (NBIN), CFOR, BIOTROP, DFID, ICRAF, GEF (in financial exploration for programs activities in biodiversity collection project, community empowerment projects, capacity building in the management of biodiversity; and other resources for management plan and action plan development)

Implementing other relevant conventions: RAMSAR, CITES, CCM, World Heritage, etc.

Continuing implementation plan on access and benefit sharing legislation establishment.

International Agreements

Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Convention)(1971)

Convention for the Protection of the World Cultural and Natural Heritage (1972)

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)(1973)

Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention)(1979)

Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (1994)

Cooperation with Papua New Guinea on Wasur National Park and Tonda Wild Life Management.

Cooperation with Malaysia on Betung Kerihun dan Lanjak Entimau (transboundary reserves); cooperation with ITTO on development Betung Kerihun and Kayan Mentarang National Park

Indonesia Biodiversity Observation Year (IBOY) at Gunung Halimun National Park (cooperation Indonesian Institute of Sciences (LIPI), Ministry of Forestry, Jepang)

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IES EnviroSecurity Assessments

A major proportion of the world's ecosystems and the services they perform for society and nature is being degraded or used unsustainably. This process affects human wellbeing in several ways. The growing scarcity of natural resources creates a growing risk for human and political conflicts and hinders sustainable development and the poverty alleviation that depends on it. Situations involving resource abundance can also be related to serious environmental degradation, increased community health risks, crime and corruption, threats to human rights and violent conflicts – in short, to a decrease of security.

The overall objective of IES EnviroSecurity Assessments is to secure the natural resource livelihood basis on the local, regional and international level. IES pursues this objective along the following mutually related lines: (1) the conservation of ecosystems and their related services, (2) the implementation of the international legal order, (3) the provision of economic incentives for maintenance of ecosystem services, and (4) empowerment of relevant actors and dissemination of results.

About the Institute

The **Institute for Environmental Security (IES)** is an international non-profit non-governmental organisation established in 2002 in The Hague, The Netherlands with liaison offices in Brussels and Washington, D.C.

The **Institute's** mission is: *"To advance global environmental security by promoting the maintenance of the regenerative capacity of life-supporting ecosystems."*

Our multidisciplinary work programme - **Horizon 21** - integrates the fields of science, diplomacy, law, finance and education and is designed to provide policy-makers with a methodology to tackle environmental security risks in time, in order to safeguard essential conditions for sustainable development.

Key objectives of the **Horizon 21** programme are:

- **Science:** Create enhanced decision tools for foreign policy makers, donors and their target groups on regional, national and local levels;
- **Diplomacy:** Promote effective linkages between environment, security and sustainable development policies.
- **Law & Governance:** Contribute to the development of a more effective system of international law and governance;
- **Finance:** Introduce new and innovative financial mechanisms for the maintenance of the globe's life supporting ecosystems; and
- **Education:** Build the environmental knowledge capital of people and organisations.

Our mission and programme should be seen in the context of promoting international sustainable development goals and as a contribution toward long-term poverty alleviation.

Institute for Environmental Security
Anna Paulownastraat 103
2518 BC The Hague, The Netherlands
Tel +32 70 365 2299 • Fax +31 70 365 1948
info@envirosecurity.org • www.envirosecurity.org

