

CHAPTER II

INDONESIA'S ENVIRONMENTAL CONDITION AND ITS PROBLEMS

In this chapter, the writer tries to elaborate the situation and condition of Indonesia regarding to the environmental issues. This is more telling the history how Indonesia dealing with the issues. Firstly, the writer will explain the situation and condition of Indonesia's environment. Secondly, the explanation will jump to the problem of Indonesia's environment. The third, the writer will discuss about the domestic policy of Indonesia to overcome the problem of environment.

A. The Condition of Indonesia's Environment

Everything that exists in the universe holds its own portion and limitation, including the earth. A place that we step today bears a big amount of weights number which every time could be increasing rapidly. The phenomenon of the earth shows two sides, whether it shows the incredible of the earth that excessively providing anything for the living things (human, animals, and plants) from the small needs to the complex needs and also reverse shows many disaster phenomena that damaging the earth.

Indonesia is the world's largest country which outstretched from Sabang until Merauke and consists over 17.000 islands and home to over 237 million

inhabitants⁷. It makes Indonesia as the fourth most populated country in the world. The number of people is growing rapidly, since 1970; the population has more than doubled. Indonesia supports tremendous species diversity of both animal and heterogeneous plant life in its rain forest and its coastal and marine areas. Nearly 60% of Indonesia's area is forested. The landscape is also mountainous and volcanic with over 500 volcanoes out of which 129 are still active.⁸

Because of the high level of population, the total land in Indonesia which reach up to 1.811.570.0 sq km⁹ in 2013 based on the data from world bank, the land in Indonesia are decreased step by step and lead to its scarcity. It happened because the higher amount of the population in one country, then the bigger amount of their needs. It can be start from the needs of the people to settle and live in one place, the needs of the people to eat and drink, and the needs of the people to be educated, hospitalized, or get job to earn some money. The needs to settle and live could be achieved by having a shelter, the needs to eat and drink could be achieved by having food and beverage, the needs to be educated or hospitalized could be achieved by having a proper place to do it such as school or hospital. Then housing, building, agriculture, industrial thing and many others will become the factors that decrease the broad of the forest in Indonesia. It

⁷Central Intelligence Agency (CIA), The World Fact Book – Indonesia (Updated 10 June 2008).

⁸World Bank, 2003. Indonesia Environment Monitor 2003. World Bank Indonesia Office, Jakarta January 2003.

⁹<<http://data.worldbank.org/indicator/AG.LND.TOTL.K2>> (Accessed on September 29th, 2014)

occurred in order to fulfill the needs of the people, then the land will be always used for human needs rather than for environmental needs.

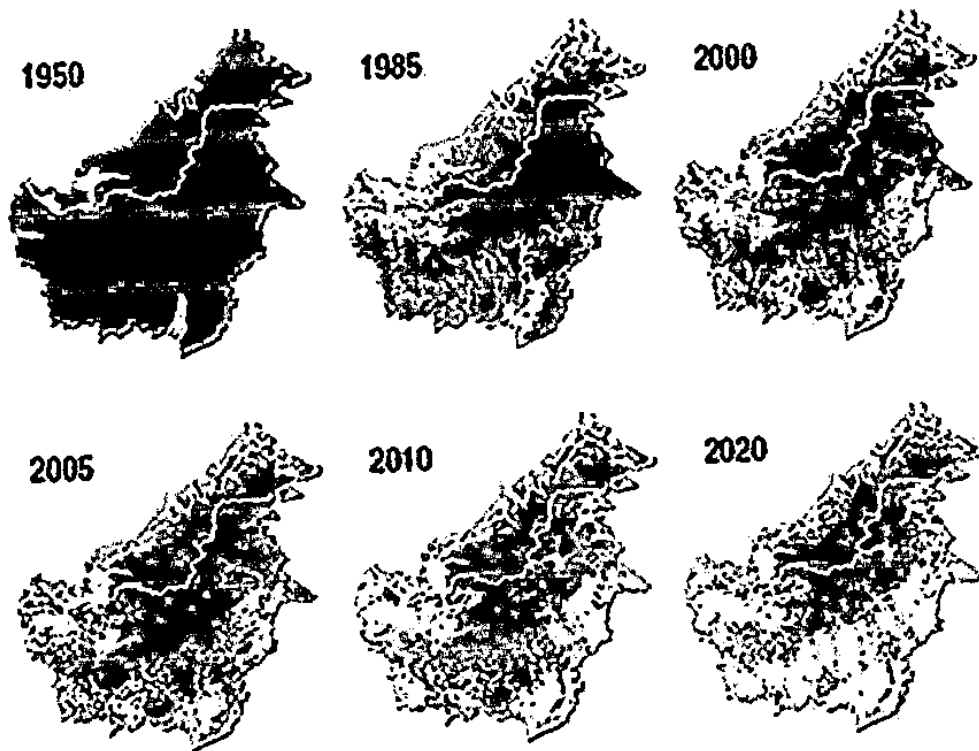
B. Indonesia Environmental Problem

Most of the biggest problems that happened to the earth tend to come from human. It was created continuously to inhabit the land of the earth up to meet the high number of population. This high number of population required the finite earth (refer to its natural resources) to fulfill the infinite demand from the people.

By that fact about environment in Indonesia, it makes Indonesia has long historical period in keeping its environment. By that fact, there are many issues that Indonesia has to face. The first is deforestation. Indonesia holds the world's third largest tropical forest. It is covering almost two-thirds of the country's land area, and place for plenty biodiversity. However, over the past 50 years, Indonesia has lost over 40% of its total forest.¹⁰ Between 2000 and 2005, 1.8 million ha of Indonesia's forest were destroyed.¹¹

¹⁰ World Bank, 2008. The deforestation rate in Indonesia is significantly higher than the other two most tropical-forested countries, Brazil (0.6%) and Democratic Republic Congo (0.3%). The global mean deforestation rate is 0.5%

Figure 2.1 Deforestation in Kalimantan



Source: http://www.greengrants.org/wp-content/uploads/2010/08/deforestation_borneo.jpg

Whereas, the exploitation of Indonesia's forests contributes to another problem: floods, landslides, and water shortages. Moreover, it also caused the degradation of decreasing agricultural production, hydropower production and pollution for water resources. Then, the main problem is the cause of greenhouse gases.

The second is water pollution. Indonesia holds a large part of the Asia Pacific freshwater, over 20%. However, water resources in Indonesia are scarce and Indonesia is struggling to provide clean water for human consumption, and adequate water supply for industry and agriculture. Actually, during the rainy season, the clean water availability is sufficient, but that is not when dry season,

Besides, the water quality is also low, which produced the unsafe water and caused the diseases. The cause of this problem is the existence of the micro industries, pulp and paper, crude palm oil, tapioca, petrochemical, oil and mining activities which is not supported by good water treatment and sanitation facilities.

The third problem is air pollution. It is also the major environmental problem in Indonesia, since the transportation sector contributes the most of air pollution, about 80%, and then followed by emission from industry, forest fires and domestic activities. This air pollution has significant negative effect on public health, forest building, and surface water quality.

The fourth is natural disaster. Due to Indonesia geographic location, composition and demography, Indonesia and its population are highly vulnerable to disasters. In the last decade as many as 6.8 million people in Indonesia were affected by various types of natural disaster. Between 2003 until 2005, 1430 disasters occurred including floods, droughts, earthquakes, tsunamis, and volcanic eruption.¹² In the 2004, in Aceh tsunami nearly 170.000 people died and in 2006, Yogyakarta earthquake has resulted 5.700 people died.¹³

Those Indonesia's environmental problems which have already mentioned have a domino effect to another aspect. It could be an impact on

¹² Between 1990 and 2008, earthquakes/tsunamis have been the major cause of deaths, while droughts, earthquakes and wildfires have affected most people. Wildfires and earthquakes/tsunamis have caused the highest economic damage loss.

¹³ World Bank 2008-06-11

poverty, economy, and health definitely. From the poverty, Indonesia has got a bad rank in poverty statistic, 17% of Indonesian live in extreme poverty and half of the population lives on less than US\$2 per day.¹⁴ Urban poverty has become a serious problem in Indonesia and while rural and total poverty rates declined, urban poverty has been increasing (1.15% in 1999-2002).¹⁵

According to the United Nations, the major causes of poverty and hunger include: insufficient budgetary allocations to key human development sectors, unemployment, poor nutrition, unfulfilled basic right, and a lack of adequate livelihood opportunities, and the over-exploitation of natural resources.¹⁶

In Indonesia, about 40 million people lives depend on forest resources. Poor people mostly depend on natural resources. Then, on the coastal and marine sector which also contribute significantly to the country growth as millions of poor people depend on them for employment and their livelihood. Therefore, the environmental problem is causing to the livelihood and human rights problems in Indonesia.

Another impact is on economy. The natural resources are their main income, but it is not supported by the good knowledge and technology to maintain and manage its resources, which resulted the scarcity of resources.

¹⁴ According to the Human Development Report 2007/2008 the Human Development Index is 0.728, ranking of Indonesia is 107th out of 177 countries, and the country's Human Poverty Index ranks the country 47th out of 108 countries

¹⁵ Marcus, A., Asmorowati, S., 2006, "Urban poverty and the Rural Development Bias: Some notes from Indonesia", *Journal of Developing Societies* 2006; 22; 145

Agriculture, forestry, and mining are contributing about 25% of the country's GDP. That is a big number for the contribution in economy of a country. However, the natural resources have not been managed in a sustainable or equitable manner, which has led to over-exploitation, and depletion.¹⁷

Besides, the disobedient of the societies toward the application of family planning (*KB*) in Indonesia made Indonesia could not bear the higher number of population that rapidly increases every year. The growing population pressures together with inadequate environmental management are challenges for Indonesia. For example, total economic losses attributable to limited access to safe water and sanitation are estimated to be equivalent to more than 2% of GDP (about US\$ 29 per person), while the annual costs of air pollution to the Indonesia economy have been calculated at around US\$400 million.¹⁸ The failure of treat wastewater leads to pollution of water source, which further raises costs of clean water production and contributes to the high water-related diseases.

Then, the impacts of environmental problem on health, in Indonesia the growth of population have created a waste disposal problem. Urban areas generate about 55.000 tons of solid waste every day out of only about half is collected.¹⁹ There is significant difference between rural and urban households in terms of access to improve sanitation. In rural areas only 40% have access to improve sanitation while the number of urban areas is 73%. These resulted high

¹⁷ World Bank 2008-06-11; and UN CCA, 2004

¹⁸ *ibid*

occurrences of diarrhea, skin disease, intestinal and other waterborne diseases in low-income communities. WHO estimates that there are more than 75.000 annual deaths in Indonesia due to diarrhea causes by polluted water/bad hygiene, indoor and outdoor air pollution.

C. Indonesia's Environmental Policy

By the understanding of environmental condition of Indonesia above, the condition is extremely amazing. In order to keep the environment of Indonesia, government prepared constitution to maintain its environment. Besides, the involvement of Indonesia in international arena which concern on environment is counted as the real action of Indonesia in solving the problem.

The Ministry of Environment has been the vocal ministry for climate change, which means that integration with development priorities has been a problem, and has created certain situations where government policies such as a push to expand the use of fossil fuels, work against legislation from the Ministry of Environment.

However, these issues are not only focused on Ministry of Environment, the central government on National Development Program (PROPENAS) made Act No. 25 year 2000 to reduce the poverty.²⁰ Indonesia's guiding development document is the Medium Term Development Plan (MTDP) 2004-2009,

²⁰Republic of Indonesia, 2003. *Interim Poverty Reduction Strategy Paper. A Process Framework of Strategic Framework for Targeted Social Assistance*. Committee for Poverty Alleviation, Jakarta.

formulated after the first ever direct presidential elections and outlining the key policy priorities and direction of the government.

Actually, Indonesia has implemented the Act No. 4 year 1982 on the basic provisions which defined the environmental pollution for the management of the living environment as:

Pencemaran lingkungan adalah masuknya atau dimasukkannya makhluk hidup, zat, energi, dan atau komponen lain ke dalam lingkungan dan atau berubahnya tatanan lingkungan oleh kegiatan manusia atau oleh proses alam, sehingga kualitas lingkungan turun sampai ke tingkat tertentu yang menyebabkan lingkungan menjadi kurang atau tidak dapat berfungsi lagi sesuai dengan peruntukannya.

By understanding the act above, environmental pollution is a criminal act regulated in Articles 202 and 203 of the Penal Law, and further in Article 22 of Act No. 4/1982, and widely associated with the violation of the rights of the individual to a good and healthy living environment (Article 5 of Act No. 4/1982).

According to the article of "Environmental Problems in Indonesia: A Review" by Thomas Sunaryo, he mentioned about the classification of right which can be classified into five level.

First, the right not to have one's life or health harmed or endangered as a result of environmental pollution, the health effects

which are known, predictable, serious, and relatively immediate.

Second, the right to a reasonable level of environmental quality, even when a specific pollutant or pollution source cannot now be identified with certainty as the cause of specific health damage or risk, on the grounds that sooner or later serious pollution of the environment will threaten human life and health as well.

Third, the right to a level of environmental quality which is not violated by pollution depriving one of the use and enjoyment of the environment, even when there are no health effects or dangers.

Fourth, the right of the environment to be protected from serious pollution for its own sake, even if pollution incidents should result in no direct or indirect risk or harm to human health or limitation upon the use or enjoyment of nature.

Fifth is the right to have one's private property which protected from damage by pollution or caused by others.

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By the elaboration of the condition in Indonesia to the issues that happened and ensued with the several policies that launched by Indonesia in responding and dealing with the issues. it showed the reason behind why Indonesia finally end up joined and did several agreements with another

International... which in the end most Indonesia up toward the decision

to ratify the convention named Kyoto Protocol. This decision was hopefully could bring the world generally and Indonesia especially into a better condition which able to help maintaining the environmental situation into the sustainable development which guarantee the stability of the world for a longer period