

# **CHAPTER III**

## **WATER ISSUES IN INDONESIA AND THE EMERGENCE OF**

### **KRuHA**

Water is one of vital element that serves to sustaining human life. Based on the record of National Geographic, our earth consists of 71% water which is divided into saltwater, freshwater and brackish water (Sido, 2015). From the total amount of 1.385.984.610 km<sup>3</sup> water present, only 2.5% of it can be consumed by humans for daily needs. For the needs of human consumption itself, there are three types of raw water sources that can be used as follows; water springs, surface water (rivers, lakes, reservoirs, etc.), ground water (dug wells, boreholes) and rainwater. In terms of water quality, the water springs have higher level of purity than the surface water sources in general, thereby the water springs is better use than the surface water. However, the presence of water springs at this time continues to diminish.

#### **A. Condition of Water Sources in Indonesia**

Indonesia is a country with the fifth largest of water wealth in the world, after Brazil, Russia, China, and Canada. Based on data from the Ministry of Public Works in 2006 stated that the availability of water in Indonesia reached 15,500 cubic meters per capita per year. The amount is much higher than the level of availability of the world average which is only 8,000 cubic meters per year. Although Indonesia has much water, it is not offset by the ability to manage water resources properly. The lack of water resources management

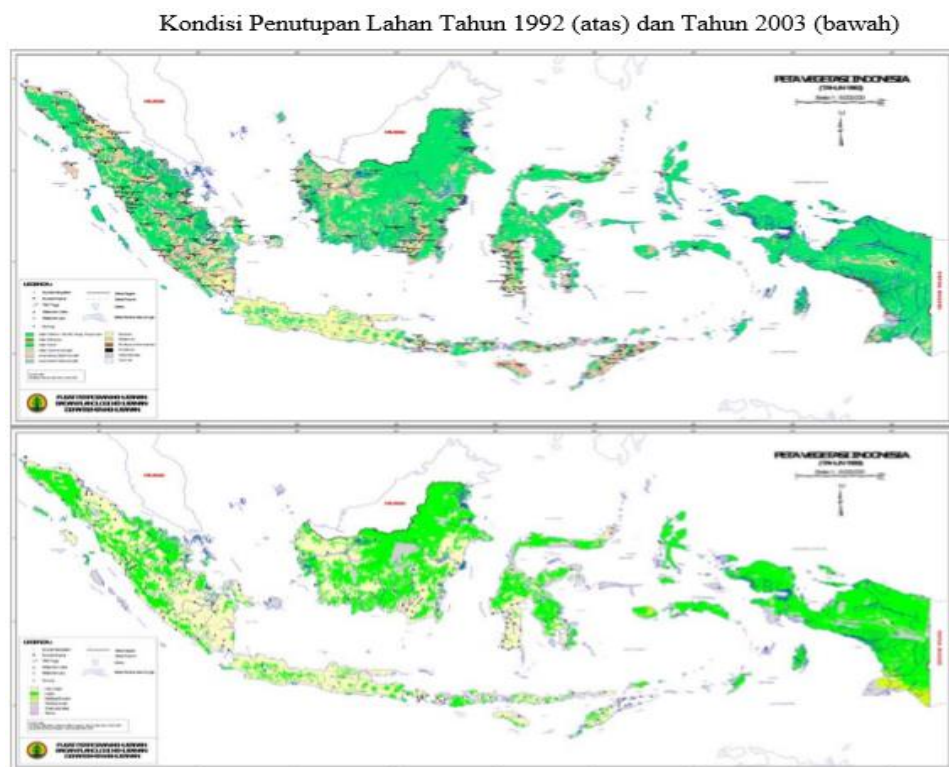
resulted in the unequal distribution of water. The unequal distribution water even made the poor people more difficult to enjoy clean water.

The report of the United Nations Development Program (UNDP) on MDGs Asia Pacific 2006 states that Indonesia is in the lowest rank alongside Bangladesh, Laos, Mongolia, Myanmar, Pakistan, Papua New Guinea and the Philippines as countries with a bad of water resources management. In the works by Candra Samekto and Ewin Sofian Winata have mentioned about some of the problems that become the factors causing the crisis of the availability of clean water in Indonesia. First, the change of seasons which can lead to imbalance of the water number. In Indonesia there are two seasons; the rainy season and dry season. In the rainy season, some regions in Indonesia experienced a remarkable abundance of water that can cause floods. While in the dry season, the drought became a disaster in some areas. Actually, rain water can be used as backup water during the dry season by making a reservoir to store the water. But it could not be done, especially in urban areas because of the lack of water catchment areas.

The second fundamental problem is the imbalance between the amount of water that can be explored and consumed by the number of Indonesian population growth that continues to grow. Refers to the calculation of the WHO (2010), the need for water is 30 liters per individual per day, which is 10 liters for drinking and 20 liters for sanitation (Sido, 2015). At the end of 2014, when the Indonesian population has reached 252 million people, it takes as much as 7.56 billion liters of water for consumption. If it predicted within

the next ten years, when the population of Indonesia could reach 285 million people, the amount of water needed will increase to 8.55 billion liters per day (Sigit, 2015).

The third fundamental problem is the environmental damage that also contributed in accelerating of water scarcity. The environmental damage such as deforestation will make critical land wider, so it can lead to weakening of the carrying capacity of the river flow. The following overview of deforestation that occurred in Indonesia:



**Figure 3.1 Deforestation in Indonesia (Ministry of Environment and Forestry, 2004)**

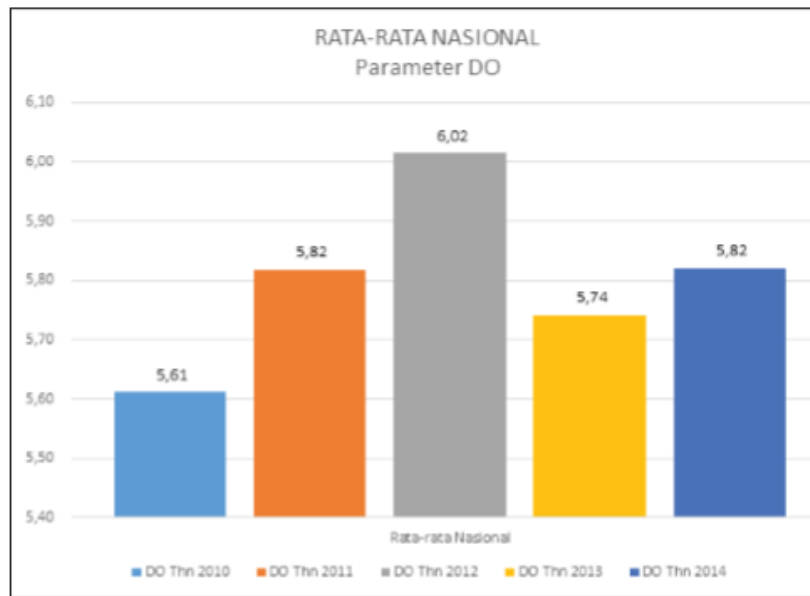
Deforestation leads to decreased ability of watersheds (DAS) to keep water in the dry season. If DAS has not functions properly it will increase the

frequency of floods. By looking the quality of water river, it can be used to indicate whether the quality of the surrounding environment is good or not.

There are several parameters used to calculate the index of water quality, such as dissolved oxygen (DO) parameter. Dissolved oxygen is used to calculate the oxygen amount contained in the water. Water that has a high number of DO indicated a low level of contamination, and instead the water has low DO indicated a high level of pollution.

No	Provinsi	Parameter DO (mg/l)				
		2010	2011	2012	2013	2014
1	Aceh	6.96	7.08	6.31	7.08	6.87
2	Sumatera Utara	6.75	5.73	7.28	5.91	6.84
3	Sumatera Barat	6.32	6.48	6.83	6.98	9.47
4	Riau	4.02	4.22	3.33	3.24	3.46
5	Kepulauan Riau	6.08	6.49	6.43	6.13	6.68
6	Bangka Belitung	4.33	5.67	5.38	4.88	5.25
7	Jambi	5.45	5.40	5.90	5.96	6.01
8	Sumatera Selatan	7.66	4.98		5.66	5.84
9	Bengkulu	4.33	4.33	5.05	5.95	4.27
10	Lampung	5.52	4.23	7.15	4.40	6.01
11	Banten	4.21	4.51		5.99	1.27
12	DKI Jakarta	3.45	2.63	2.63	3.54	3.74
13	Jawa Barat	4.38	5.90	4.20	5.10	4.28
14	Jawa Tengah	6.72	6.32	5.96	6.16	6.13
15	DIY	5.28	7.26	7.21	6.44	6.73
16	Jawa Timur	5.43	5.78	6.83	5.15	6.73
17	Bali	5.90	6.47	7.13	7.61	7.20
18	NUSA TENGGARA BARAT	6.16	5.52	5.71	5.66	4.30
19	NUSA TENGGARA TIMUR	5.10	6.72	7.66	6.09	6.55
20	Kalimantan Barat	6.93	7.53	6.75	6.75	6.50
21	Kalimantan Tengah	4.87	6.94	2.96	5.08	5.36
22	Kalimantan Selatan	3.49	5.49	6.55	6.68	5.59
23	Kalimantan Timur	4.18	5.69	5.88	5.71	5.57
24	Sulawesi Selatan	7.18	7.19	7.23	6.77	6.68
25	Gorontalo	6.01	6.25	6.07	5.39	8.17
26	Sulawesi Barat	6.01	5.07	6.96		5.51
27	Sulawesi Tengah	7.54	7.04	6.91		3.94
28	Sulawesi Tenggara	3.51	3.73	4.58	4.08	3.78
29	Sulawesi Utara	7.56	7.67	8.26	7.65	7.90
30	Maluku	6.93	7.56	6.16	4.90	6.37
31	Maluku Utara				7.74	7.91
32	Papua Barat	4.27		5.17	3.97	5.81
33	Papua	7.06	4.50		5.35	5.39
Rata-rata Nasional		5.61	5.82	6.02	5.74	5.82

**Table 3.1 Parameter DO per province from 2010 – 2014** (Ministry of Environment and Forestry, 2015)



**Figure 3.2 Parameter of DO Chart Nationally from 2010 – 2014** (Ministry of Environment and Forestry, 2015)

Based on the chart above, it can be seen that in the period 2010 - 2014 DO parameter has decreased. It shows that nationally, the river water quality in Indonesia tends to decrease.

Based on a report issued by the Directorate General of Pollution Control and Environmental Degradation of the Ministry of Environment and Forestry (KLHK) (National Geographic, 2016), in 2015, almost 68% or the majority of river water quality in 33 provinces in Indonesia is in seriously polluted status. The percentage of river water pollution reaches about 24% of the river in medium contaminated status, 6% is lightly polluted and only about 2% still meet the water quality standard.

The case of watersheds damage in Indonesia is still often occurs. There are several challenges in watersheds management such as the complexity of governance, weak enforcement of environmental laws, and lack of community

participation. All of these problems signify that water resource development in Indonesia has not become central to the political agenda.

Regarding to the water crisis, the World Water Assessment Program (WWAP) predicted that in 2025 as many as two-thirds of the world's population will live in water shortage areas. WWAP also confirmed that the water crisis is going to happen in the world will bring a terrible impact such as the spread of the epidemic disease, starvation, and death.

## **B. Water Law in Indonesia**

Water is an absolute necessity for every individual to be fulfilled. As what has been mandated by the United Nations in the General Comment No. 15, that the government has three obligations to respect, to protect, and to fulfill. That obligation must be executed in order to create a prosperous citizen by ensuring the water availability and the water management resources are good. The recognition of the right to water implies that the state has duty to organize such mechanisms through the establishment of a policy or rule of law to ensure that the right functions properly. The Indonesian government as the highest responsible person in the fulfillment of the right to water has set some policies or act to regulate water resources in Indonesia:

<b>Right to Water in the Indonesian 1945 Constitution</b>	
Article 27, Para (2)	Every citizen has the right to work and to live in human dignity.
Article 28A	Every person shall have the right to live and to defend his/her life and existence.
Article 28C	(1) Every person shall have the right to develop him/herself through the fulfillment of his/her basic needs (...) for the purpose of improving the quality of his/her life and for the welfare of the human race.  (2) Every person shall have the right to improve him/herself through collective struggle for his/her rights to develop his/her society, nation and state.
Article 28H	(1) Every person shall have the right to live in physical and spiritual prosperity, to have a home and to enjoy a good and healthy environment, and shall have the right to obtain medical care.  (2) Every person shall have the right to receive facilitation and special treatment to have the same opportunity and benefit in order to achieve equality and fairness.  (3) Every person shall have the right to social security in order to develop oneself fully as a dignified human being.
Article 33	(2) Sectors of production which are important for the country and affect the life of the people shall be under the powers of the State.  (3) <b>The land, the waters and the natural resources within shall be under the powers of the State and shall be used to the greatest benefit of the people.</b>

**Table 3.2 Right to Water in the Indonesia 1945 Constitution** (KRuHA and Blue Planet Project, 2012)

It was marked on the 1945 Indonesian Constitution article 33 paragraph 2 that all vital sources of production those essential for the lives of the people must be controlled by the state. Also on the article 33 paragraph 3 that the land and the water as well as the natural riches therein are to be controlled by the state to be used to the greatest benefit of the people (KRuHA and Blue Planet Project, 2012).

In the history of Indonesia as an independent state, Indonesia has created the first regulation of the water contained in Water Law No. 11/1974. All chapters in this law are based on the rule that water is a social good to the greatest benefit for people. Water is an absolute natural wealth and must be controlled by the state. The exercise of state control is in the hands of the government, both central and local levels. For further implementation, the

government can give their authority to certain legal entities with the requirements set by the government. Water resources should be managed to prioritize the needs of the people, such as for household use, agriculture, and industry. For the industrial purpose is not required any permits for water use as not to seek personal gain. However, if the water is use to obtain certain advantages must be accompanied by a permit issued by the government.

Then in 2004, Water Law No. 11/1974 replaced by Water Law No. 7/2004. There are three factors that become the background of the implementation of Water Law No. 7/2004. First is the urgency of the need to strengthen the right to water for people. Conflict in water use tends to increase over time as the growth of population in Indonesia. Second, the previous water law only contained the conception of the right to water. Therefore there is a need for further regulation to explain the operational of the right to water. Third, the affirmation of the right to water formally intended to provide legal certainty for rights holders to use water, while also limiting its use in terms of quantity and time in order to prevent the use of water without limit, and prevent the emergence of an adverse impact on the wider community.

Elaboration of the conception of the right to water in Water Law No. 7/2004 contains several principles as follows:

1. The right to water does not mean the right to own, but the right to obtain and use or to seek water from a water source for a particular purpose.



2. The right to water cannot be leased or transferred either partly or wholly. The law introduced *a new concept of water rights* that is different from the concept of right to water. Water right is a tool issued by the state as an institution that provides water control to individuals or legal entities to utilize water.
3. Individuals or business entities are permitted to request permission to utilize water from the government. Someone is a permit to use water in certain amounts for certain business purposes such as raw water for drinking water business, hydro power business, rafting business, or tourism business.
4. Water resources management is done transparently. Community involvement in the drafting of water resources management plan and schemes is an important step to establish the principles of transparency and fairness.

When the water law is examined as a whole, it would seem especially at point number 2 and 3 above that this law is open the way for people or business entities to use or consume water from the water source for production activities. The opening space for someone or group to use water freely led to the practice of privatization by some parties.

Privatization itself can be described as the act of transferring ownership of specified property or business operations from a government organization to a privately owned entity, as well as the transition of ownership from a publicly

traded, or owned, company to a privately owned company (Investopedia, 2013).

It has been described in previous chapters that the privatization positioned water as an economic good that can be traded. Privatization will eliminate the concept of water as part of human rights that should be protected by the state. The role of the state as the ultimate power holder for protecting water resources is not explicit here.

### **C. KRUHA as Domestic NGO on the Right to Water**

In 1992, one of the principles in the Dublin Principles was clearly declared that water has an economic value in all its competing uses and should be recognized as an economic good (World Meteorological Organization).

Within this principle, it is vital to recognize first the basic right of all human beings to have access to clean water and sanitation at an affordable price. Past failure to recognize the economic value of water has led to wasteful and environmentally damaging uses of the resource. Managing water as an economic good is an important way of achieving efficient and equitable use, and of encouraging conservation and protection of water resources.

This declaration issued the concept of water as an economic good that bring impact on the emergence of water privatization. Allowing a person to own and use water for personal gain. After the declaration of Dublin principles, World Bank changed their focus to the world's water market mechanism. The World Bank offers financial assistance to developing countries on the condition that recipient countries are required to change their

policies on water resources management that facilitate private sector participation. This condition happened in Indonesia when World Bank has been given loans project called WATSAL (the Water Resources Sector Adjustment Loan Project). The loans aimed to restructure the policy of the water resources sector in Indonesia.

KRuHA established in 2002 as civil society response that rejects the decision of government to restructure the water resources management policy in Indonesia which permits private parties to control the water resources. This condition illustrates the practice of water privatization.

Water privatization in Indonesia has been going on for a long time. The first case of water privatization took place in North Serang in 1993, in Batam in 1996, and then in Jakarta in 1998. The water privatization case that occurred in Jakarta started from the Suharto government, where the government transferred clean water management in Jakarta to two foreign companies called Thames Water (UK) and Suez Lyonnaise des Eaux (France). The cooperation contract between PAM Jaya and the two foreign companies lasted for 25 years. The involvement of two private companies is due to PAM Jaya's inability to manage clean water sources in Jakarta. In 1997, the amount of water produced by PAM Jaya was 498 million cubic meters, but only 47% of that amount was distributed to consumers. The remaining 53% is wasted due to leaks in the distribution system, illegal use and billing error.

The next privatization case comes from the famous brand of water in Indonesia, namely Aqua Danone from France. Everyone must have heard of this brand of bottled water. Aqua has 14 plants and monopolizes dozens of springs. From 2001 to 2008, Aqua has siphoned more than 30 billion liters and mastered 80% sales of bottled drinking water in Indonesia. In the process of producing, more than 50% of the water is wasted. Data from ASPADIN (Association of Indonesian Packaged Drinking Water Companies) shows that bottled water companies throughout Indonesia each year require about 11.5 billion liters of clean water, but ultimately there only 7.5 billion liters per year which become bottled water. The rest, 4 billion liters of clean water, is wasted for washing and purifying water (Redaksi Membunuh Indonesia, 2015).

Based on the report of Sugiono as head of the sub-division of natural resources of the city of Bekasi, the condition of groundwater in Indonesia is now in a dangerous state. Water volume decreases reach 40 - 60% greater than before due to excessive use. Groundwater in Indonesia is exposed to contamination with a percentage of 60%.

In Jakarta, the availability of clean water is only 2% and 4% in Java. The environmental and social impacts were felt by the residents of Pelat Adat Village, Karangasem Regency, Bali, and Cirahab, Serang Regency, which experienced a water crisis due to Aqua exploitation activities (KRuHA, 2012).

Another problem that occurs is the lack of local revenue from the exploitation of Aqua. Central Java only got 1.2 billion rupiah a year. This

income is inversely proportional to the Aqua profit reached 80 billion per month or 960 billion rupiah a year. Moreover Aqua deemed to have violated the concession. Based on permission from the district government of Klaten, Aqua is only allowed to absorb 20 million liters per month. In fact, water exploitation by Aqua reaches 40 million liters per month.

### **1. KRuHA Vision, Mission, and Value**

Water privatization in Indonesia is protected by Water Law No. 7/2004. This law provides for the privatization of the water supply sector and the control of water resources by private sector and individuals. This is not in accordance with what has been mandated by the United Nations that water and sanitation as essential for the full enjoyment of the right to life. This agreement creates an obligation for the state to respect, to protect, and to fulfill the realization of the right to water.

As coalition of people, KRuHA want to promote and protect the right to water in Indonesia, they strongly refused the water privatization. They believe that water is public good, could not be treated as an economic good. KRuHA fight for people to get safe, clean, accessible and affordable drinking water and sanitation for all.

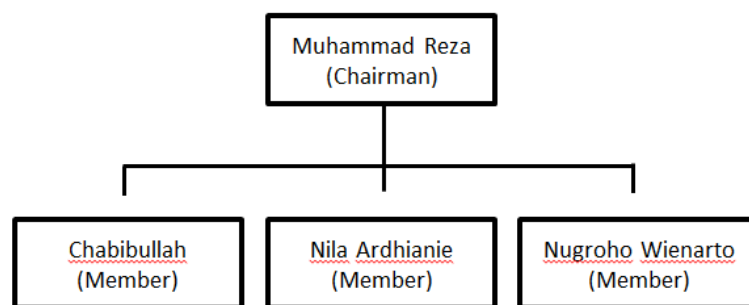
KRuHA advocacy process upholds the values of humanity produced by the United Nations. Where water is part of human rights and must be positioned as a public good. The state is obliged to ensure adequate water availability for all people. Some water norms that have been produced by

the United Nations include; ICESCR (International Covenant on Economic, Social, and Cultural Right), ICCPR (International Covenant on Civil and Political Right), CEDAW (The Convention on the Elimination all of forms Discrimination Against Women), and CRC (Convention on the Right of the Child).

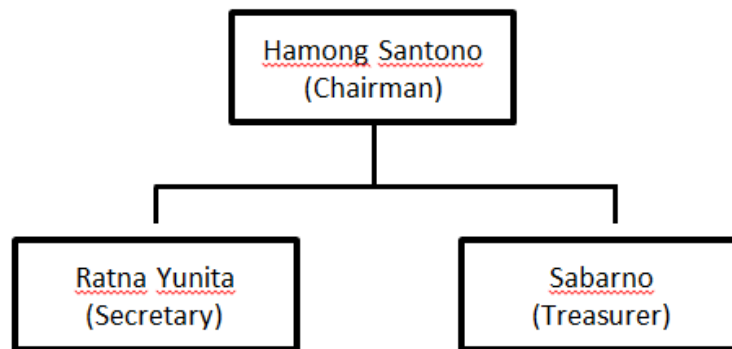
## 2. KRuHA Organization Structure

KRuHA office is located at Jalan Kebon Manggis I No. 2C, Matraman, East Jakarta. The membership of KRuHA is open to various social movements, non-governmental organizations and individuals who have concern and awareness toward the right to water, fight against the privatization and commercialization of water resources (KRuHA, 2012).

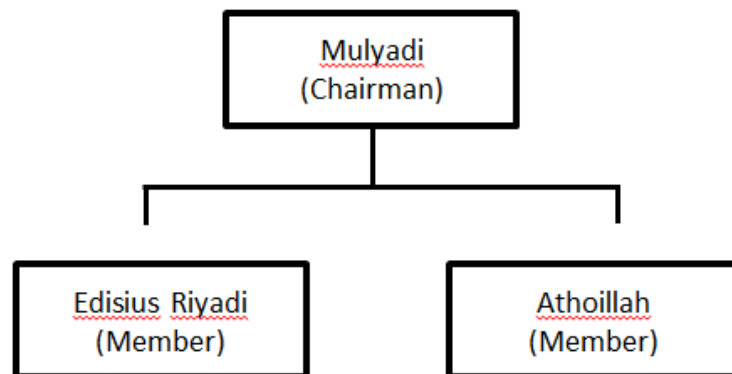
Currently KRuHA already has legal status named KRuHA foundation. Their organizational structure are divide into three main actor as follows; advocacy builder, administrator, and supervisor (KRuHA, 2012).



**Figure 3.3 the Advocacy Builder of KRuHA**



**Figure 3.4 Administrator of KRUHA**



**Figure 3.5 Supervisor of KRUHA**