

The Portrait of Water Resources Sustainable Management in Indonesia: Pragmatic Approaches

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Abstract

Article 33 of the 1945 Constitution of the Republic of Indonesia states "The earth, water and natural resources contained therein are controlled by the State and used for the greatest prosperity of the people". In this article, "water" as an object is controlled by the State. The words "mastered" by the "State" in Article 33 are the basis for the interpretation of the concept of state management. The first laws applying the concept of state management is the Law No. 5 of 1960 concerning Basic Regulations on Agrarian Principles (hereinafter referred with UUPA). The basic regulation of water resources management can be elaborated in some aspects such as environmental aspects, economic aspects, and social aspects.

Keywords: Regulation, Water Resources, Sustainable Management

1. Introduction

Water is one of the absolute sources of life for humanity. It is why water in the history of human life has a central position and is a guarantee of the continuity of human life on earth. The existence of water is a mandate and the gift of God to be utilized and must also be preserved for the survival of humanity itself. In a philosophical context, the water in a region is generally seen as a common heritage (common heritage resources).¹ Article 33 of the 1945 Constitution of the Republic of Indonesia states "The earth, water and natural resources contained therein are controlled by the State and used for the greatest prosperity of the people". In this article, "water" as an object is controlled by the State. The words "mastered" by the "State" in Article 33 are the basis for the interpretation of the concept of state management. Article 33 is also known as the article of Indonesian economic and political ideology because it contains provisions concerning the right's management of state.

The first laws using the concept of state management is the Law No. 5 of 1960 concerning Basic Regulations on Agrarian Principles (hereinafter referred with UUPA). Abrar² stipulates that UUPA defines authentically the right's management of state as mentioned in Article 2 paragraph 2, but it is specifically concerning the earth, water and space. It is then more specifically regarding land. In the reporting of the explanatory in number II / 2, it is affirmed that the words "managed by the State" in Article 2 of UUPA is not meant to be owned, but the notion is to give authority to the State as an organization of power from the Indonesian nation.

Therefore, it can be concluded that water has the essence for the sustainability of an entity, where the state has an obligation to regulate the availability of clean water. This is due to anxiety that the number of water continues to decline, so that the availability of water supply shows a gap between recharge and exploitation. The extraction of ground water for drinking and industrial purposes and overexploited irrigation will cause the earth's water reserves to decline. The result is that the water debit has decreased sharply (decreasing). Regarding the importance of water availability, it is deemed necessary to formulate sustainable water resources arrangements that can guarantee the water sustainability of the next generation.

2. Environmental Aspects in Water Resources Management

The political transition of reform with a long period of time rise to a variety of conditions that more or less influenced the implementation of various environmental policies consistently. Although, the government has affirmed formally its commitment in the management of natural resources as regulated in the law, but in reality,

¹ A. Hafied A. Gany, "Water Resources Entering to Globalisation Era (*Sumber Daya Air Memasuki Era Globalisasi*)", Constitutional Court Journal, Jakarta, 2005, p. 13.

² Abrar Saleng, *The Right's Management of State over Mining based on the Indonesian Constitution 1945* (Hak Penguasaan Negara atas Pertambangan berdasarkan Undang-undang Dasar 1945, Program Pasca sarjana, Bandung. 1999, pp.2-3.

it has been shown that environmental management is still inaccurate. Therefore, between environmental management and a commitment to "sustainable development" is still far away from the reality.

The term "sustainable development" was first officially stated in the Law Number 23 of 1997 concerning Management of the Environment. It had not yet known the Law Number 4 of 1982. The Law Number 4 of 1982 had only recognized the term "environmental insight". Regarding the use of the term, it can be seen that the direction of the conception of the thought of environmental development has developed in a specific direction, namely sustainable development which contains the principles of environmental insight.

The use of the term sustainable development with environmental insight is certainly not used for granted, but it is a response from the actions of exploitation and large-scale exploration carried out by using advances in science and technology to cause damage and deterioration of functions and natural carrying capacity for life. As it is known, the universe and the surrounding environment is an order of unity of ecosystems that are interdependent between one and the other. The damage in one area will certainly affect and have an impact on other fields.

Living natural resources and their ecosystems are the most important part of natural resources which consist of animal nature, vegetable nature or in the form of natural phenomena, both individually and collectively having the functions and benefits as the constituent elements of the environment, whose presence cannot be replaced. Considering its nature cannot be replaced and has an important position and role for human life, then the effort to conserve living natural resources and the ecosystem is an absolute obligation of each generation.¹ In addition, according to N.H.T Siahaan, the definition of the Environment is a unity of space with all objects, power, circumstances, and living things, including humans, and their behavior, which affect the survival of the lives and welfare of humans and other living things and can affect their lives.²

Discussing about water resources will certainly not be separated from the laws and regulations governing it. Until now, the law governing waters is the Law Number 11 of 1974 concerning Water Resources and the Law Number 7 of 2004 concerning Water Resources. However, the Law Number 7 of 2014 has been cancelled by the Constitutional Court Decision in the case No. 85/PUU-XI/2013.

In addition, developments Industry has spurred the use of water for domestic industrial purposes, hydropower, irrigation, etc. It is also a threat to the availability / quantity of water and its quality. Some of the problems arise due to industrial waste, agricultural activities, and decrease in ground water level. The effect of it then, sea water intrusion occurs which has an impact on an unhealthy living environment. Therefore, the use of water resources should be managed with the principle of "sustainable" and the principle of "environmental insight".

Philosophically, water is a gift of God Almighty who is the source of life and source of livelihood. Natural resources such as water, air, land, etc. are essential resources for human survival. At present, the consumption of clean water in the world is dominated by plants that consume 85% of the amount of fresh water in the world.³ If Indonesia's current population of 250 million people, to fulfill their food needs, it would require an accumulation of fresh water for food production of 30.33 trillion liters of water / month. Fresh water must be available in good quality, free from contaminants that hydrological cycle, especially in the rainy season whose cycle takes place every day. This means that the recycled water must also be maintained in quality to form quality food ingredients.⁴

This fact shows that water is absolutely necessary to produce food with a very large amount to meet the daily needs of each. In 2005, the total population of Indonesia is 218.9 million. According to the 2010 population census, the total population has increased to 237.6 million. It is not easy to be able to serve the lives of such a large population. Indonesia is one of the five countries with the largest amount of water availability in the world. Two countries above Indonesia, including Brazil and China. Water availability in Indonesia reaches 15,000 m³ /

¹ See the explanatory of the Law No. 5 of 1960 on Conservation of Living Natural Resources and its Ecosystem.

² N.H.T Siahaan, *Environmental Law and Development Ecology* (Hukum Lingkungan dan Ekologi Pembangunan), Jakarta, Erlangga. 2004, p. 4.

³ See Hoekstra, A.Y. and Chapagain, A.K. *Globalization of Water: Sharing the Planet's Freshwater Resources*, Oxford, UK., Blackwell Publishing, Oxford, UK. 2008.

⁴ Gunawan Jusuf, *Blue Gold the Source of Live; the Joint Responsibility in Water Resources Management* (Emas Biru Sumber Nyawa Kehidupan (Tanggung Jawab Bersama dalam Mengelola Sumberdaya Air Berkelanjutan), Jakarta, PT. Berita Nusantara. 2015, p. 4.

capita / year, still above the world average of only 8,000 m³ / capita / year. However, the potential for water availability in Indonesia is not linear with population distribution.¹

Calculation of household clean water services has been standardized by the government depending on the population and location of the region. For example, the island of Java which covers 7% of the total land area of Indonesia has only 4.5% of the total national freshwater potential. But this island is inhabited by around 65% of the total population of Indonesia. This condition illustrates that the potential for water scarcity in Java is very large. If you look at the availability of water per capita per year, on the island of Java there are only 1,750 m³ / capita / year, still below the standard of sufficiency of 2000 m³ / capita / year. The availability of water will continue to decline so that by 2020 it is estimated that only 1,200 m³ per year.² of household clean water will be available.

In relation to the environment in Indonesia, which is regulated in the provisions of Article 33 of the 1945 Constitution of the Republic of Indonesia, it states that "the earth and water and the natural resources contained therein are controlled by the State and used for the greatest prosperity of the people". It then can be seen that water which actually natural wealth is should be controlled by the State and used for the prosperity of the people, which means that there is no other power capable of controlling water other than the state and is used not for the interests of the people.

In the Law Number 23 of 2009 concerning Environmental Protection and Management, it is stated that the conservation of natural resources is the management of non-renewable natural resources to ensure their wise use and renewable natural resources to ensure the continuity of their availability while maintaining and improving their quality. Natural resource (SDA) Conservation is an effort to maintain the existence and sustainability of the condition, the nature and function of water so that it is always available in sufficient quantity and quality to meet the needs of living things, both now and in the future. Arsyad further states that water and soil conservation are two activities that are very closely related to one another. Each treatment that is carried out on land, it will affect the water system in that place (on site) and the areas on the downstream (off site).³

Management of water resources is not managed properly will create chaos, for example the occurrence of conflict in the use of water between the community and the bottled drinking water industry, which is also a driving factor and is considered by the judges in the Constitutional Court to cancel the Law Number 7 of 2014 concerning Water Resources and deciding again using the Law Number 11 of 1974 concerning Irrigation.

3. Economic Aspects in Water Resources Management

Water is a basic element that is important for the stability of ecosystems. The water is also a natural resource that is absolutely necessary for life not only humans, but also for other living beings and their environment. The availability of water resources varies both in quantity and quality. The functions and benefits of water require various efficient and effective water improvement and protection efforts.⁴ The population growth and environmental problems create difficulties in ensuring equal access and the availability of sustainable water resources. The human need for water always increases over time due to the increasing intensity and variety of water needs.⁵

Today, a global water crisis is becoming current environmental problems, which is expected to deteriorate in the coming decades. When the crisis gets worse, some new efforts to redefine rights to water will be needed. Economic globalization changes the notion of water as public ownership into private property, which will be exploited and traded freely. The global economic order demands the removal of all restrictions on the rules of water use and the creation of a water market. Supporters of water trade are free to view private property rights as the only alternative to state ownership and the free market as a substitute for the regulation of bureaucratic water resources.

In contrast to other resources, water must essentially remain public property and is managed especially in local community. In fact, around the whole community of private ownership of water is a very strict prohibition.

¹ *ibid.* p.26.

² *Ibid.*

³ Arsyad, S. *Conservation of Land and Water* (Konservasi Tanah dan Air). Bogor, IPB Press. 2000. p. 32.

⁴ Ahmad Santosa, *Democratization of Natural Resources Management* (Demokratisasi Pengelolaan Sumber Daya Alam), Indonesian Center for Environmental Law (ICEL), Jakarta, 1999, p. 195.

⁵ M. Daud Silalahi, *Pengaturan Hukum Sumber Daya Air dan Lingkungan Hidup di Indonesia*, Penerbit Alumnus, Bandung, 2003, p. 11.

Based on ancient texts such as the Institute of Justinian shows water and other natural resources are public goods based on the laws of nature where these objects are common property of mankind, namely air, flowing water, and the sea including the beach. Article 6 of the Law Number 7 of 2004 states that water is controlled by the state for the prosperity of the people. It can be interpreted that the philosophy of the law is in line with Article 33 of the 1945 Constitution of the Republic of Indonesia, namely to consider water as a public good. However, for some circles the substance of the law is almost the same as the Law Number 11 of 1974 in terms of its capitalistic nature. The Indonesian Forum for the Environment (WALHI) even suspects the government's privatization of water resources through the natural resources law.¹

The idea of privatization itself come from recommendation of the World Bank, which argues that commercialization and privatization are an effective solution to overcome the lack of water availability. Through these two strategies, unlimited water use can be controlled with the right to water.² Meanwhile, on the other hand, the government has another opinion. According to the government, three functions of water resources, namely social, environmental, and economic functions as stated in the Law, of Natural Resources. Those functions cannot be seen separately. However, they are a unity that are consistent with the principles of sustainable development.³ The government considers that the management of water resources does not merely prioritize economic functions. In relation to water management, social and environmental functions remain prioritized as controls to avoid abuse of authority.⁴

In connection with this, it is necessary to look at the history of making the law on water resources. At the time of the 1997 economic crisis which caused the Indonesian economy to fall and the balance of payments deficit, the Government finally encouraged to seek loans that were "quick disburse" to help Indonesia's negative balance of payments at that time. In this regard, the World Bank offers loans such as Structural Adjustment Loans (SAL) to the Indonesian government, with the requirement to carry out structural changes (institutional, regulatory and management of certain sectors).⁵ It is initially with the name NATSAL (Natural Resources Structural Adjustment Loan) which covers the forestry, agriculture and water resources sectors. In preparation, NATSAL is divided into AGSAL (Agricultural Structural Adjustment Loans) and FORSAL (Forestry Structural Adjustment Loans) which only deal with the agricultural, forestry and water resources sectors. The AGSAL program then converges again into a Water Resources Sector Adjudication Loan (WATSAL) which is only related to the water resources sector. The main agenda of this program is to replace the Law No. 11 of 1974 concerning Irrigation and its legal products under which it is considered that it is time to renew.⁶

The Government of Indonesia through the Decree of the Coordinating Minister for the Economy creates a water resources policy called the National Water Resources Policy Direction (National Policy on Natural Resources) as stated in the Decree of the Coordinating Minister for the Economy Number: KEP-14 / M.EKON / 12/2001 concerning National Policy Direction for Water Resources. In essence, the National Policy on Natural Resources contains five main missions of reforming Indonesia's water resources management, namely: 1) Conservation of sustainable water resources, 2) Utilizing fair water resources for various community needs that meet quality and quantity; 3) Control of water damage; 4) Empowerment and increasing the role of the community, the private sector and the government; and 5) Increased openness and availability of data and information in water resource management.

The Natural Resources National Policy Contents if examined in depth show a major dilemma on the part of the government, which on the one hand must fulfill the World Bank's desire to pressure the government through the withdrawal of disbursement loans, and on the other hand the government seems to some extent still listening to its conscience to maintain the interests of its own people over water resources.⁷ The reform of water resources policies through the Natural Resources National Policy and the Natural Resources Law are in line with what the World Bank wants to open the door for the private sector to become a government partner in managing water resources. In accordance with the World Bank's concept of Public-Private Partnership (PPP) and Private Sector

¹ See Wahana Lingkungan Hidup Indonesia, *Politik Air*, <http://www.walhi.or.id/publikasi>.

² Ibid.

³ Ibid.

⁴ Ibid.

⁵ Hamid Chalid, *The Human Right over Water: The Study on Water Law in Netherland, India, and Indonesia* (Hak-hak Asasi Manusia Atas Air. Studi Tentang Hukum Air di Belanda, India dan Indonesia). DISSERTATION of PhD Program of Law Faculty University of Indonesia, Postgraduate Program, Jakarta, 2009, p. 322.

⁶ Ibid.

⁷ Ibid. p. 329

Participation (PSP).¹ Thus, the water has been assessed as an economic good. According to E.S. Savas, the objects and services can be categorized into 4 categories, as followings:²

1. Private goods, which are consumed privately and are not possible to obtain without the distribution process and involvement of other parties, resulting in a cost burden for the distribution.
2. Common-pool goods, which are consumed privately which are almost impossible to prevent others from getting them for free.
3. Toll-goods, which are goods consumed together but there are costs that must be borne. If one of the consumers does not bear the cost, then he has a limitation to consume the item.
4. Collective goods, which are goods consumed together that have no cost so that it is almost impossible to prevent others from consuming.

Related to goods and services theories, water as an economic good is closely related to the position of water as private goods and toll goods. An example of it is bottled drinking water which can be categorized as private goods. While water distribution by drinking water-companies is a form of toll goods. Private sector participation commonly referred to as privatization is seen as a way out in providing inefficient, complicated and corrupt public services because of the enlarged state bureaucracy. The enlarged state bureaucracy is caused by at least three things: increasing public service needs, bureaucratic desire to meet public service needs, and increased resources for the fulfillment of public services.³

Regarding the water sector, privatization is driven by the increasing need for clean water supply and distribution while the government as a public servant cannot provide good service. The private sector can work together with the government / state as the holder of tenure rights over water. Efficient and effective cooperation is seen as being able to improve the quality and quantity of clean water supply to the public.⁴ Even supply and distribution cooperation is not only related to clean water, but also to wastewater as practiced in America.⁵

If it is understood more deeply, it turns out that privatization of water resources management has been realized in Indonesia through various laws and regulations in the water sector which was formed based on pressure from the World Bank. The concept of the right's of state management over natural resources specifically related to water resources is not based on sustainable management of water resources. In connection with this, it is necessary to have management of water resources which are basically formed by the provisions of the legislation that the basis for strengthening the provisions returned to the nature of Article 33 of the 1945 Constitution of the Republic of Indonesia which essentially states that water resources are managed by the state and used as much as possible for the prosperity of the people. Therefore, all economic policies developed specifically in the management of water resources must refer and must not conflict with the principles set out in the 1945 Constitution of the Republic of Indonesia. Now, the problem is no longer a matter of agreeing or disagreeing with such constitutional provisions. The constitution as the highest law is the highest nationality and consensus agreement that must be used as a joint guidance in all state administration activities.

4. Social Aspects in Water Resources Management

Water is a gift from God as one of the supports the survival resources of humans and other living things. Water is basic daily need to support human being's daily life. Many people think that water is an unlimited resource, even though in fact only one percent of all water available on earth is in the form of fresh water that can be utilized by humans. With its hydrological cycle, water is considered as a renewable resource. However, there has been an imbalance between the availability and needs of water because of the growing population, increasing development and economic activity, intensified use of water, water pollution over the past few decades, and global climate change.

In line with those issues, the discourse related to the idea of who is belong to the water is questioned? Is water included in private ownership or is it public? What rights do people have and should they have regarding water

¹ See Naren Prasad, *Current issues in Private sector participation (PSP) in water services*, UN Research Institute for Social Development (<http://www.unrisd.org/unrisd/website/document.nsf/%28httpPublications%29/99BC5BBB9A66673C125723A004B92BC?OpenDocument>).

² R. Ismala Dewi, 2009, *Pendayagunaan Sumber Daya Air Untuk Kesejahteraan Masyarakat Lokal: Kajian Mengenai Penguasaan Air di Kecamatan Cidahu-Sukabumi dan Polanharjo-Klaten*, Disertasi Program Doktor Pascasarjana, FHUI, Jakarta, p.110.

³ Ibid. p.147.

⁴ Ibid. p.148.

⁵ Ibid. p.149.

control? Is it a state right or is it a corporate right and a commercial interest in water? those questions as mentioned is always preoccupied by the public?

Historically, the right to water has been influenced by the limitations of ecosystems and the needs of the community. In reality, the eternal in Urdu word, which means human settlement, is rooted in “*ab*”, which means water. This is the formation of human and civilization settlements to be closely reflected in the presence of water resources. The doctrine of human rights of residents to use water is supported by a water system, especially the river system which is also born from the concept of “*ab*”. From generation to generation, water is treated as a human right that rights arise from human nature, historical conditions, basic needs, or ideas about justice. The right to water as a human right does not originate from a country where the particular ecological context of human existence is the direction of the emergence of the right to water.

As a human right, the right to water is usufructuary rights in which water can be used but cannot owned. People have the right to live and are entitled to resources for their survival such as water. The importance of water in life is the reason why, based on customary laws, the right to water has been accepted as a social fact.¹ Water is essentially a common property because water is an ecological basis for life and because of its sustainability and fair allocation depends on cooperation among community members. Although water is managed as a common property throughout the history of mankind and in different cultures, and although most people manage water sources as joint property or have access to water as public goods that are jointly owned even today, but now the privatization of central water resources Reach the momentum.

Relating to the regulation of water resources management which is essentially based on the Constitutional Court Decision Number 85 / PUU-XI / 2013 which returns the regulation regarding water management and utilization in the Law Number 11 of 1974. The substance of the regulation includes, among other things, the control of the state over water and the management of water resources, namely that the control of the state over water is based on the view that water and its resources constitute natural resources are absolutely necessary for human life to be managed by the state. The executor the authority to control the state lies with the government, both at the central and regional levels. In further implementation, some government authority can be delegated to certain legal entities with conditions set by the Government and respecting the rights of the local customary law community.

5. Conclusion

The law governing waters can be seen in the Law Number 11 of 1974 concerning Water Resources and the Law Number 7 of 2004 concerning Water Resources. However, the Law Number 7 of 2014 has been cancelled by the Constitutional Court Decision in the case No. 85/PUU-XI/2013. In the context of the portrait of water resources management, environmental, economic, and social perspectives are the pragmatic approaches to draw how the water resources play an important role in human beings' life. However, some problems arise and tend to threaten the availability of the water such as developments Industry to be spurred the use of water for domestic industrial purposes, hydropower, irrigation, etc. As can be seen that the right to water is usufructuary rights in which water can be used but cannot owned.

Bibliography

- A. Hafied A. Gany, “*Water Resources Entering to Globalisation Era (Sumber Daya Air Memasuki Era Globalisasi)*”, Constitutional Court Journal, Jakarta, 2005.
- Abrar Saleng, *The Right's Management of State over Mining based on the Indonesian Constitution 1945* (Hak Penguasaan Negara atas Pertambangan berdasarkan Undang-undang Dasar 1945, Program Pasca sarjana, Bandung. 1999.
- Ahmad Santosa, *Democratization of Natural Resources Management* (Demokratisasi Pengelolaan Sumber Daya Alam), Indonesian Center for Environmental Las (ICEL), Jakarta, 1999.
- Arsyad. S. *Conservation of Land and Water* (Konservasi Tanah dan Air). Bogor, IPB Press. 2000.
- Gunawan Jusuf, *Blue Gold the Source of Live; the Joint Responsibility in Water Resources Management* (Emas Biru Sumber Nyawa Kehidupan (Tanggung Jawab Bersama dalam Mengelola Sumberdaya Air Berkelanjutan), Jakarta, PT. Berita Nusantara. 2015.
- Hamid Chalid, *The Human Right over Water: The Study on Water Law in Netherland, India, and Indonesia* (Hak-hak Asasi Manusia Atas Air. Studi Tentang Hukum Air di Belanda, India dan Indonesia).

¹ Vandhara Shiva, *Water Wars: Privatization, Profit, and Pollution* (Privatisasi, Profit, dan Polusi), Insist Press, Yogyakarta, 2002. p. 23.

- Dissertation of PhD Program of Law Faculty University of Indonesia, Postgraduate Program, Jakarta, 2009.
- Hoekstra, A.Y. and Chapagain, A.K. *Globalization of Water: Sharing the Planet's Freshwater Resources*, Oxford, UK., Blackwell Publishing, Oxford, UK. 2008.
- M. Daud Silalahi, *Pengaturan Hukum Sumber Daya Air dan Lingkungan Hidup di Indonesia*, Penerbit Alumni, Bandung, 2003.
- N.H.T Siahaan, *Environmental Law and Development Ecology* (Hukum Lingkungan dan Ekologi Pembangunan), Jakarta, Erlangga. 2004.
- Naren Prasad, *Current issues in Private sector participation (PSP) in water services*, UN Research Institute for Social Development (<http://www.unrisd.org/unrisd/website/document.nsf/%28httpPublications%29/99BC5BBB9A66673C125723A004B92BC?OpenDocument>).
- R. Ismala Dewi, 2009, *Pendayagunaan Sumber Daya Air Untuk Kesejahteraan Masyarakat Lokal: Kajian Mengenai Penguasaan Air di Kecamatan Cidahu-Sukabumi dan Polanharjo-Klaten*, Disertasi Program Doktor Pascasarjana, FHUI, Jakarta .
- Vandhara Shiva, *Water Wars: Privatization, Profit, and Pollution* (Privatisasi, Profit, dan Polusi), Insist Press, Yogyakarta, 2002.
- Wahana Lingkungan Hidup Indonesia, *Politik Air*, <http://www.walhi.or.id/publikasi>.