

The Responsibility of the Indonesian Government to Fulfill the Rights to Water During the COVID-19 Pandemic: Some Legal Issues

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Abstract. Indonesia has enough access to freshwater resources of the planet. However, uneven distribution together with mediocre water management and a lack of water infrastructures make a significant number of households in this country have inadequate access to safe water. This becomes big issues, because the provision of safe water, sanitation and hygienic conditions are essential to protect human health and save humanity during the Covid-19 pandemic. When this article was written, COVID-19 patients who were confirmed to be infected were in all Indonesian provinces, with the largest numbers of patients located in Java. The purpose of this study is to determine the efforts of the Indonesian government to fulfill its responsibilities in fulfilling clean water during a pandemic. The study collects all regulations and policies concerning clean water and an analyses them using doctrinal method. The result of the study shows that although there are enough regulations governing the use of clean water, they have not resolved the problem of clean water fulfillment. In overcoming water needs during the pandemic, the Indonesian government did not make additional efforts other than those previously planned in the Strategic Plan of the Ministry of Public Works and Housing. The disruption of the economy has an impact on state finance, causing the government to refocus budgeting. As a result, many programs related to clean water are postponed. This minimum effort by government is neglecting its responsibility in fulfilling the right to water. The government must emulate how to fulfill the needs for water during the pandemic from other countries and using this situation to fix the problem of clean water in Indonesia

Keywords: Indonesia, clean water, COVID-19

1. Introduction

Water scarcity is one of the main backgrounds for the recognition of human right to water. The amount of freshwater (fresh water) in the world is only about 2.5%, and 97.5% of water comprises of sea water. The 2.5% of freshwater consists of approximately 87% permanent ice/glaciers, while 13% water consists of groundwater and surface

water with risks of pollution. Based on the configuration of the water distribution and global climate change, water scarcity will increase by 20% in the next 25 years. The increasing global population and the increasing need for agricultural land also trigger water scarcity. A study conducted by the International Water Management Institute (IWMI), a research center under a body called the Consultative Group on International Agricultural Research (CGIAR), found that one third of the

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world's population will experience severe water scarcity in the period up to 2025.¹

The Indonesian Government is aware with the importance of water existence as stated in Article 33 section (3) of the 1945 Constitution of the Republic of Indonesia: "The earth, water and natural resources contained, are controlled by the State and used as much as the amount for the prosperity of the people". The state is responsible for controlling water for the greatest prosperity of the people and fulfilling clean water to every household. However, uneven distribution together with mediocre water management and a lack of water infrastructures make a significant number of households in the country have inadequate access to safe water. Unlike the situation in developed countries where (almost) all households are served by a good piped water system, households in Indonesia rely on a variety of water sources. These water sources can be classified into piped water (metered and retailed), bottled water (branded and refillable) and other water sources include drilled/pumped wells, protected wells, protected springs, rain water, unprotected wells, unprotected springs, rivers, and others. Most of the water from these sources can be obtained freely by households.² In conclusion, the government has lagged far behind the private sector in fulfilling the needs of household drinking water.³

The coronavirus infectious diseases 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS COV-2) that initially occurred in Wuhan, China, have now spread to many countries including Indonesia. In the midst of the COVID-19 pandemic, the need for water appears to have increased dramatically compared to the situation before the pandemic. On a household and community scale, the key to prevent the spread of the COVID-19 pandemic and how to care for people who are confirmed to be infected with COVID-19 at home is to adopt healthy hygienic behaviors. Washing your hands regularly with the right techniques is very important. This practice must be done at home, school, public places such as markets, places of worship, trains and bus terminals. Washing hands regularly should be done before preparing food, before and after eating, after using the toilet or after changing a child's diaper, and after handling animals. A well-functioning hand washing facilities are equipped with soap and running water and must be available at a maximum distance of 5 meters from the toilet. In addition, attention needs to be paid to the safe handling of human faeces

through the sanitation management chain, starting from ensuring that there are functioning and safe toilets/toilets, safe septic tanks, transportation, and disposal processing.

In dealing with the Covid-19 pandemic, WHO stated that "the provision of safe water, sanitation and hygienic conditions is essential to protecting human health during all infectious disease outbreaks, including the COVID-19 outbreak". The human-to-human transmission of the COVID-19 virus could be prevented by applying WASH and waste management in communities, homes, schools, marketplaces, prisons, and health care facilities. The Interim Guidance of Water, Sanitation, Hygienic and Waste Management for the COVID-19 virus which was published by WHO and UNICEF on 23 April 2020 specified briefly about the important matters related to WASH as follows:

1. Frequent and correct hand hygiene is one of the most important measures to prevent infection with the COVID-19 virus. WASH practitioners should work to enable more frequent and regular hand hygiene by improving access to hand hygiene facilities and use multimodal approaches (refer to Hand hygiene practices) to support good hand hygiene behavior. Performing hand hygiene at the right time, using the right technique with either alcohol-based hand rub or soap and water is critical.
2. Existing WHO guidance on the safe management of drinking-water and sanitation services applies to the COVID-19 outbreak. Water disinfection and sanitation treatment can reduce viruses. Sanitation workers should have proper training and access to personal protective equipment (PPE) and in many scenarios, a specific combination of PPE elements is recommended.
3. Many health co-benefits can be realized by safely managing water and sanitation services, and by applying good hygiene practices.

Based on WHO and UNICEF guidelines, clean water is vital for the prevention of COVID-19. In fact, it is estimated that two billion people worldwide do not have access to clean water. UN-Water in 2016 issued a list of countries whose people had difficulties in accessing clean water, and Indonesia was ranked 6th (sixth).⁴ The Indonesian government targets 100 percent of access to safe drinking water for all Indonesian citizens to be

achieved in 2019. However, in 2018 the realization only reached 72 percent. Regarding this, the Ministry of Public Works and Housing targeted access to safe drinking water, so the number would increase to 76-77 in 2019.⁵ That means there are still 23% of the populations who do not have clean water and they are susceptible to COVID-19.

The epicenter of the spread of the COVID-19 in Indonesia is DKI Jakarta and its supporting areas, and it is spread to other areas. When this article was written, COVID-19 patients who were confirmed to be infected were in all Indonesian provinces, with the largest number of positive patients is located in Java. The coverage of clean water in Jakarta has only reached 60%. This means that the remaining 40% of its residents do not have access to clean water.⁶ Despite the improvement in services, low-income groups in Jakarta are the most affected by the outbreak of the COVID-19 today. Significant impact includes services to get clean water at which point many low-income groups of people were unable to keep up with PAM Jaya (drinking water company) earlier. In addition to impartial regulations, there are still a numbers of factors which make people in Jakarta are unable to access clean water easily, and the cause is due to poor water quality which is unsuitable for consumption or use. This condition happened in many areas, such as Rawa Badak and Koja in North Jakarta, whose water condition is turbid and smelly. Examples of other regions that are also experiencing the same conditions are Pegadungan and Kalideres in West Jakarta. In all of these areas, people are forced to consume water that is black, smelly, foamy, while the water supply through the PAM pipeline cannot be obtained smoothly by the people who have paid.⁷

During the COVID-19 pandemic, the government must provide clean water for people to keep their hands hygiene and to prevent them from contracting the virus in accordance with WHO instructions.⁸ It is clear that the government is responsible for providing clean water during the pandemic. Based on this background, this article will explain the responsibility of the Indonesian government in providing the need of clean water during the COVID-19 outbreak based on existing laws and regulations and the efforts the government can make to fulfill these responsibilities. The discussion will begin with the need of clean water during the pandemic, followed by the government policies related to the fulfillment of clean water, the arrangements for the fulfillment of clean water and

lastly with the government efforts to provide the need of clean water.

2. Literature Review

Hamid Chalid said that water is a public object given by God to humans to be used and enjoyed in order to carry on their lives.⁹ The right to water, was not only invoked in a legal challenge to the minimum level of free water and use of prepaid meters but was central in an accompanying grassroots political campaign. The Committee on Economic, Social and Cultural Rights (CESCR) also recognizes the political value of the right when it states that, 'in order to create a favourable climate for the realisation of the right, states should take appropriate steps to ensure that the private business sector and civil society are aware of, and consider the importance of, the right to water in pursuing their activities'.¹⁰

For human rights to move from recognition to realization, they need to become part of the everyday practice of local government and other service providers. Local governments are the duty bearers with primary responsibility for water and sanitation service delivery in most contexts¹¹ the first time the right to water is explicitly referred to as human rights in General Comments No. 15: The Rights to Water, Article 11.¹²

The State basically has 3 (three) obligations in the fulfillment of human rights, namely the obligation to respect human rights, to prevent violations from third parties, and the obligation to guarantee the fulfillment of these human rights.¹³ Furthermore, the three main tasks of the state for the achievement of the right to water are elaborated as follows:¹⁴

1. respect: by not carrying out unfair interventions related to community's access to water, for example by severing water connections even though the community is unable to pay
2. protect: protect and secure access to clean water from the threat of other parties, for example water pollution or price increases that are not affordable, carried out by clean water service providers;
3. fulfill: use all available resources to realize the right to water for the whole community, for example through legislation, affordable pricing policies, programs to expand community access to clean water and sanitation and so on.

3. Research Material and Methods

This study aims to explore the legal research method using a descriptive analysis. The data collection was through library research. The library research was conducted to seek relevant information by collecting secondary data and valid info compiled by researchers between April and August 2020. The regulations and laws which are used in this study are those that regulate rights to access clean water during the Covid-19 pandemic where all the collected data were analyzed using doctrinal method. In addition, the researchers also learned about the provision of clean water by the South African and the government of Ethiopia during the Covid-19 pandemic. Comparisons with South Africa and Ethiopia are needed to show the better measures in meeting water needs during the pandemic and to encourage the Indonesian government to work better in fulfilling water needs during this pandemic.

4. Result and Discussion

4.1. *The Need for Clean Water During the COVID-19 Pandemic*

World Water Forum at Den Haag in March 2000 predicted that Indonesia was one of the countries that would experience a crisis in 2025. The primary reason is lack of water management, such as inefficient water use. The level of demand for water resources and their potential ability are unbalanced, providing pressure on nature's ability to supply water.¹⁵ Access to safe drinking water in Indonesia barely keeps pace with population growth. Only half urban dwellers have piped water. Water quality and security are under serious threat from pollution, catchment degradation, and over exploitation.¹⁶

The lever of water scarcity is growing higher, meanwhile population growth is accompanied by a lifestyle that demands an extravagant use of water, thus adding a lot of pressure to the quantity of water. Apart from the large volume of water needed by humans to fulfill their needs, it is clear that the most important thing is the quality of the water, because in fact not all water resources have good quality. Lack of clean water has a vicious impact not just for health but also on economic condition, for people have to pay extra to fulfill their need for clean water.¹⁷

The provision of safe water, sanitation and hygienic conditions is essential to protecting human health during all infectious disease outbreaks, including the Covid-19 pandemic. However this becomes a challenge in a country like Indonesia of which access to WASH is still limited. People live in informal settlements. The poorest and the marginalised could be particularly vulnerable as they often rely on communal water points and toilets, private vendors and water tankers. High water costs and limited access could prohibit generous use of water for hand washing, whilst the need to leave home to access communal facilities and to queue for access in close proximity to others makes self-isolation and social distancing are difficult to implement.

According to a survey report that was conducted by the Directorate of Water Supply Development, Ministry for Public Works and Housing, the average water usage of households in Indonesia was around 144 liter (0,144 m³) per day. Water usage for bath occupies the largest usage which requires approximately 60 liter per day or 45% of total water usage. For the minimum basic need, each person uses 121 liter per day, including for drinking and cooking, washing clothes, bathing, cleaning house, and praying. It stated that in relation to the survey report, Indonesia's minimum basic need for each person was 70 liter per day.¹⁸

The data obtained by Statistics Indonesia recorded an increase in the number of people who had access to good and sustainable sanitation. In 2017, 67,54% of households had access to good sanitation. In 2018, the percentage increased to 70,97%, then reached a higher number at 77,39%.¹⁹ Even though it was quite high, the distribution rate still tended to be unbalanced, for we could see that DKI Jakarta was at 92,89%. West Java had a similar calculation to Jakarta, which was 69,64%. However, the proportion of differences that occur was large in contiguous areas such as West Papua that had 76,39%. On the other hand, Papua Province only had 32,87%. Moreover, only 6,8% of the population had gained secure access. Overall, 93,2% of the population still have not gained safe access.

The Directorate General of Public Health, the Ministry of Health, guaranteed the availability of clean water for the public. This guarantee is included in the Ministry of Health's Strategic Plan 2020-2024 through strategies to improve access to clean water and hygienic behavior and to strengthen community-based total sanitation²⁰ which are

carried out through The PAMSIMAS (Provision of Community Based Drinking Water and Sanitation) program. The Ministry of Public Works and Housing in the draft of Strategic Plan of the Ministry of Public Works and Housing also supports the execution of the program in the context of improving the quality of water resources. Among the list in the draft of August 8, 2020 is a program to increase the capacity of water resources to 60 m³/capita per year, to carry out the construction and new dam areas, constructions of 500,000 ha of irrigation areas, and rehabilitation of 2,500,000 ha of existing irrigation areas.

The research by Eko Wiji Purwanto showed that the government budget in the last 5 years for clean water was around Rp3,5–6,5 trillion with an average annual rate of around Rp4,5 trillion. If this number can be maintained every year until 2030, the government funds that would be available are worth around Rp45 trillion. It is this far to reach the need for development in 2024, which could cost Rp147 trillion or even Rp238 trillion for the funding needs in 2030. The policy of refocusing the budget during the crisis due to the COVID-19 pandemic has the potential to delay the acceleration of access to drink water in areas which are not yet served by PDAM (local water company), and this would lower the government support to accelerate the expansion of access to PDAM (local water company) drinking water services by the people.²¹

The President Director of PAM Jaya (drinking water company) said that during the pandemic, the need for clean water have shifted the composition of consumption, from industrial commercial to household consumption. The addition of handwashing and the installation of a portable sink increased the consumption of clean water. In fact, a significant increase occurred in the distribution process through tank cars for both handwashing and water kiosks that existed in several places which did not have piping networks as well. In discussions with journalists, Prayitno stated that 62% of the people in Jakarta have access to piped water services and 64% of the people in Jakarta have handwashing facilities using soap and water at home.²² Similar with Priyatno's statement, Secretary of the local water company (PDAM) Tirtaraharja, Teddy Setiabudi, when responded to consumer's complaints in Bandung, said they were concerned about the increase in water bills, and he confirmed that there had not been an increase in water rates. However, since the COVID-19

pandemic, it had clearly changed the behavior of consumers of local water company (PDAM) Tirta Raharja. This virus outbreak definitely triggered the use of clean water and caused bills increase.²³

4.2. Indonesian Government's Policy to Fulfill Clean Water

One of the Sustainable Development Goals/SDGs is to ensure the availability and management of sustainable clean water and sanitation for all. As a form of the government's political commitment in implementing the SDGs, President Joko Widodo has signed the SDGs Presidential Regulation Number 59 of 2017 concerning Implementation of the Goals of Achieving Sustainable Development. The regulation is also a commitment that the implementation and achievement of SDGs is carried out in a participatory manner by involving all parties. The targets related to clean water and sanitation are as follows²⁴:

Infrastructure development in 2020–2024 will focus on three main frameworks (Basic Service Infrastructure, Economic Infrastructure, and Urban Infrastructure) which are supported by energy and electricity development and the implementation of digital transformation. Infrastructure development for basic services is prioritized to ensure equitable development in all Indonesian regions in order to reduce inequality between regions. The scope of basic service infrastructure which will be built is included with the provision of adequate housing supported by drinking water and sanitation systems, improvement of on-grid and off-grid network services for electricity access, provision of telecommunications and internet services for public facilities, development of past safety systems transportation, pioneering transportation services (land, sea and air) as well as the construction of multi-purpose and irrigation reservoirs. Infrastructure development for urban area includes improvement of facilities and infrastructures that will support the convenience of living in cities such as the construction of mass public transportation, construction of city gas pipelines, drinking water and sanitation pipes and waste management.²⁵

The Sustainable Development Goals (SDGs) target the access to improved drinking water and sanitation as one of the basic needs that must be fulfilled to improve the quality of health, to prevent stunting, to eradicate poverty, and to improve the

Table 1
Indonesian clean water and sanitation targets

| No. | Global Targets | National Targets | Managing Institution |
|-----|--|--|---|
| 1. | By 2030, achieve universal and equitable access to safe and affordable drinking water for all | <ol style="list-style-type: none"> 1. Increased access to improved drinking water services in 2019 to 100% (2014: 70%) 2. Increased capacity of raw water infrastructure to serve households, cities and industries | Coordinating Ministry for Economic Affairs; Ministry of National Development Planning; Ministry of Finance; Ministry of Public Works and Public Housing, Provincial Government; Regency / City Government. |
| 2. | By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations | <ol style="list-style-type: none"> 1. Increased access to proper sanitation 2. Increasing the number of villages that implement community-based total sanitation | Coordinating Ministry for Economic Affairs; Ministry of National Development Planning; Ministry of Finance; Ministry of Public Works and Public Housing, Provincial Government; Regency / City Government. |
| 3. | By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally | <ol style="list-style-type: none"> 1. Development of wastewater infrastructure with a centralized system of city, regional and communal scale. 2. Improving the quality of local waste water treatment systems through improving the quality of local management systems through improving urban sludge management and the construction of sludge management installations 3. Management of water quality in rivers, reservoirs, lakes, ponds, river mouths, beaches, including the improvement of hydrological monitoring systems and water quality with indicators of improving water quality in lakes and rivers 4. Improving river water quality as a source of raw water towards the average quality standard of class II river water | Coordinating Ministry for Economic Affairs; Ministry of National Development Planning; Ministry of Finance; Ministry of Public Works and Public Housing, Provincial Government; Regency / City Government. |
| 4. | By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity | <ol style="list-style-type: none"> 1. Control and law enforcement for excessive use of ground water accompanied by an acceleration of the supply and management of economic area's raw water and the adoption of policies on the imposition of competitive industrial water tariffs 2. Providing incentives for saving agricultural / plantation and industrial water including the application of the principle of reduce, developing reuse and recycle, as well as developing the concept of the use of safe wastewater for agriculture | Coordinating Ministry for Economic Affairs; Ministry of National Development Planning; Ministry of Finance; Ministry of Public Works and Public Housing, Ministry of Environment and Forestry; Ministry of Agriculture; Ministry of Industry; Provincial Government; Regency / City Government. |
| 5. | By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate | <ol style="list-style-type: none"> 1. Internalization of 108 integrated watershed management plans that have been prepared into the RTRW 2. Updating and revitalizing hydrological and climatological stations in 8 river areas and establishing water resources information networks in 8 river areas 3. Establishment of information networks in 8 river areas 4. Increasing the number of watersheds that have increased the number of springs and 19 watersheds that have cross-border MoU 5. Restoring watershed health through the development of community plantations, community forests, village forests, customary forests, community forests and enhancement of non-timber forest products 6. Increasing community participation in river and lake catchment management in 10 river areas 7. Continuing the institutional arrangement of water resources | Coordinating Ministry for Economic Affairs; Ministry of National Development Planning; Ministry of Finance; Minister For Public Works and Human Settlements; Ministry of Environment and Forestry; Provincial Government; Regency / City Government. |
| 6. | By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes | <ol style="list-style-type: none"> 1. Increased water quality in 15 lakes 2. Increase of 15 lakes whose silting up is less than 1% 3. Increased lake which erosion level decreased to 15 lakes 4. Reducing the area of degraded land through rehabilitation in KPH covering 5.5 million hectares 5. Protection of springs and restoration of river health in 5 priority watersheds (Ciliwung, Citarum, Serayu, Bengawan Solo and Brantas) and 10 other watersheds. | Coordinating Ministry for Economic Affairs; Ministry of National Development Planning; Ministry of Finance; Minister For Public Works and Human Settlements; Ministry of Environment and Forestry; Provincial Government; Regency / City Government. |

quality of human resources. Globally, clean water and sanitation could fit into 17 SDGs, namely Goal 6: Clean Water and Proper Sanitation. Universal access to safe and affordable drinking water is not only achieved by improving proper sanitation, but also by stopping the practice of Open Defecation, good waste management, and reduction of untreated wastewater.²⁶

Indonesia needs to improve the access to safe drinking water and sanitation in order to reach the target of 100% by 2030, along with the commitment to realize the Sustainable Development Goals (SDGs). The 2018 National Socio-Economic Survey conducted by the Central Statistics Agency recorded that the national access to drinking water had reached 61.29%. Meanwhile, the achievement of proper national sanitation access had only reached 74.58% or around 188 million people of Indonesia.

In the National Medium-Term Development Plan 2020–2024, access to proper sanitation development is targeted at 90%, including 20% of safe access and 0% of large waste disposal. For the drinking water development target, 100% is set for proper access, including 30% piping access through the construction of 10 million house connections, whereas fulfilling safe drinking water access is targeted at 15%. The achievement of drinking water and sanitation targets in the National Medium-Term Development Plan 2020–2024 will support the acceleration of Goal 6 in SDGs achievement, and to decrease the prevalence of stunting due to poor water quality and sanitation, and secure drinking water quality.

Targets, indicators and targets in the provision of basic service infrastructure related to water supply: for households that occupy housing with access to safe and safe drinking water base line in 2019, 87.8% feasible and 6.7% safe (the target in the year 2024 would be 100% feasible and 15% safe); for households with access to drinking water from the base line pipeline in 2019, 20% (the target of 2024 would be 30%).²⁷

One of the efforts to achieve this target is the signing of a new agreement between the Governments of Indonesia, the United States and Switzerland to provide clean water to 60,000 Indonesian urban communities by strengthening seven local water companies (PDAM), three of which are located in West Java and four in Central Java.²⁸

Indonesia has a landmark case regarding the community's right to clean water, namely the

Kendeng Case. The case also shows Kendeng women fighting for their access to clean water. The movement began to stir in 2014 when the villagers learned that a state-owned cement company, PT Semen Indonesia, was in the advanced stages of a plan to mine karst. Without the villagers' knowledge, two years earlier, the governor of Central Java, Bibit Waluyo, had issued an environmental license. It was one of the most important licenses the company would need to begin operating. It should have been issued after the community was consulted as part of an environmental impact assessment. Some villagers had seen a draft of the assessment as early as 2010, and raised concerns that it failed to identify the existence of underground springs. After that, though, they were cut out of the process, Indonesia's National Commission on Human Rights reported in 2016. The limestone that gives the Kendeng karst its characteristics is also the key ingredient in cement. The Kendeng Mountains had been targeted by cement companies since the 1990s. Yet, by the 2010s interests had stepped up, stimulated by government investments in infrastructure.

An assessment commissioned by the national government found that the demand for clean water for more than half a million people living throughout the North Kendeng Mountains already exceeded the supply. Karst was crucial for maintaining that supply, acting as a sponge that released clean water through the dry season. But the provincial government had prioritized mining the limestone, threatening to significantly reduce and pollute the water supply as firms ground down through subterranean springs and rivers.²⁹

It is not just a hill, but a karst: a limestone formation that undergirds the North Kendeng Mountains and stretches 180 kilometers (112 miles) east to west. The rock has been eroded over time to form a giant warren of underground caves and rivers, providing clean water to the people of the region throughout the year. The Indigenous people of Kendeng consider the karst to be their *Ibu Bumi* — their Mother Earth. She nurtures and even breastfeeds the land, in their lore, allowing them to grow rice and other crops.

The Supreme Court's Judicial Review won the lawsuit of the Kendeng mountain farmers and the Wahana Lingkungan Hidup Foundation (Walhi) against PT Semen Indonesia. The victory made the environmental permit issued by the Governor of Central Java for PT Semen Indonesia to be

canceled. Based on the Supreme Court's official website, the lawsuit was decided on October 5, 2016. The verdict granted the lawsuit and canceled the object of the dispute.³⁰

In this judge decision, president also asked that during the Strategic Environmental Assessment (SEA) process, no new mining permits were issued. All limestone mining processes and production activities must be stopped. SEA must be open and involve the people actively. Unfortunately, the mandate of the country's top leadership on the ground is very conflicting. New permits have been issued by the local government, limestone mining is continuing and the production of the cement factory in Rembang has also continued until now public access to water are still lacking.

4.3. Clean Water Regulation in The Indonesian Legal System

Considering the importance of water as the source of life for all living things, since the founding of this country the regulation of water has been incorporated into the Constitution of the Republic of Indonesia as stated in Article 33 section (3) of the 1945 Constitution of the Republic of Indonesia which 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". From this Article it is seen that there is a mandate given by the people to the State to manage the vital resources for people's lives, one of which is water.³¹

The guarantee of the provisions in Article 33 section (3) of the 1945 Constitution of The Republic of Indonesia is emphasized in Law Number 23 of 2014 concerning Regional Government that the fulfillment of clean water for the community is one of the responsibilities of the government and regional governments as part of public services that must be done. The limited availability of Water Resources on one hand and the increasing need for water on the other hand lead to a competition among users of Water Resources that have an impact on the strengthening of the economic value of Water. This condition has the potential to create conflicts of interest between sectors, regions, and various parties related to Water Resources. For this reason, an arrangement to provide protection of community interests to meet their daily basic needs and the irrigation of people's agriculture is required.³²

Based on state control over Water Resources, the Central Government and/or Regional Governments are given the task and authority to regulate and to manage Water Resources, including the task of meeting the minimum daily basic needs of Water for the community,³³ especially clean water availability. Regulations regarding clean water can be found in various 3 Laws in Indonesia consisting of:

1. Law Number 17 of 2019 concerning Water Resources

It is written explicitly that Water Resources are controlled by the state and are used for the greatest prosperity of the people. For this reason, the state guarantees the people's right to water to meet the minimum daily basic needs for a healthy and clean life with sufficient quantity, good quality, safe, sustainable, and affordable. In addition, the state prioritizes people's right regarding water for (1) daily basic needs, (2) smallholder agriculture, (3) business needs to meet daily basic needs through the Drinking Water Supply System, (4) non-business activities to public interest; and (5) other business requirements for which permits have been determined. The regulation of water resources includes state control and people's rights to water, duties and authority in water resources management, water resources management, licensing, water resources information systems, empowerment and supervision, funding, rights and obligations, community participation and coordination.³⁴

Water resources management is based on the principles of public benefit, affordability, justice, balance, independence, local wisdom, environmental insight, sustainability, integration and harmony, as well as transparency and accountability. The purpose of regulating water resources is to provide protection and guarantee of the fulfillment of people's rights to water, to ensure the sustainability of water and water resources availability in order to provide fair benefits to the community, to ensure the preservation of water and water resources functions to support sustainable development, to ensure the creation of legal certainty for the implementation community participation in supervision of the utilization of water

resources ranging from planning, implementation and evaluation of utilization, to ensure the protection and empowerment of communities including indigenous people in efforts to conserve water and water resources, as well as to control the overall destructive force of water which includes prevention and recovery efforts.³⁵

The people's right to water is not a right to own water, but is limited to the right to obtain and use a number of water quotas in accordance with the allocation stipulated by a Government Regulation. The fulfillment of people's rights to water is guaranteed by the State, because water is a minimum daily staple requirement. Aside from being a basic daily necessity, the State also prioritizes people's right to water for people's agriculture, and the use of water resources for business needs through the provision of drinking water.³⁶

2. Law Number 28 of 2002 concerning buildings

The Law on Buildings governs the functions of buildings, building requirements, operation of buildings, including the rights and obligations of owners and users at every stage of building construction, provisions on the role of the community and guidance by the government, sanctions, transitional provisions, and closing. This law also provides provisions to considerate social diverse, economic and cultural conditions of the Indonesian people. In this case, the government continues to encourage, empower and enhance the ability of the community to be able to meet the provisions in this law in stages so that the guarantee of security, safety and public health in organizing buildings and their environment can be enjoyed by all parties fairly and be imbued with enthusiastic humanity, togetherness, and mutual assistance, and imbued with the implementation of good governance.³⁷

The building health requirements include ventilation system, lighting, sanitation, and the use of building materials. The sanitation system is a sanitation need which must be provided inside and outside of the building to meet the need for clean water, disposal of dirty water and/or wastewater, sewage and garbage, and distribution of rainwater.³⁸

The drinking water system in buildings requires things as follows:³⁹

- a. It must be planned and installed by considering the source of drinking water, the quality of clean water, the distribution system, and its storage
 - b. Can be obtained from subscribed water sources and or other water sources that meet the requirements in accordance with applicable guidelines and technical standards
 - c. Planning for the distribution of drinking water in buildings must meet the minimum water discharge and pressure required
 - d. Drinking water storage in buildings is strived in such a way as to ensure water quality
 - e. Drinking water reservoirs must meet the requirements for the proper functioning of buildings
 - f. Plumbing requirements in buildings must comply with:
 - 1) Government Regulation Number 16 of 2005 (drinking water quality); Plumbing Guidelines (pipe installation)
 - 2) SNI 03-6481-2000 Plumbing System 2000, or the latest edition
- ## 3. Law Number 1 of 2011 concerning Housing and Settlement Areas

Home planning must consider the health aspect. In the long term, this aspect will greatly contribute to the sustainability of the residential process in a building. Some of the issues related to health issues and home building planning are as follows:⁴⁰

- a. Clean Water Adequacy

One of the basic supplies needed to support the activities of human life is clean water. A good house must be built in an area that has an adequate supply of clean water.
- b. Sufficient Light

Sunlight is very important for human life, especially for health. In order to get enough light, each room must have a light hole that allows direct or indirect sunlight.
- c. Sufficient Air

The house will provide freshness and comfort to its residents if the freshness of the air in the house is guaranteed.

According to a theory stated by Komarudin, a healthy home must have the requirements for environmental health, order and environmental harmony. The components of the housing environment that affect public health should be supplemented as needed including the provision of adequate environmental infrastructure in accordance with the number of occupants, safeguarding the housing environment against pollution (maintenance of clean water sources and management of household and environmental waste disposal).⁴¹

Arrangements for housing and settlement areas are carried out to provide legal certainty in the administration of housing and settlement areas, supporting regional arrangement and development and proportional population distribution through the growth of residential and residential areas in accordance with spatial planning to create a balance of interest, to increase the use of electricity and natural resources for housing development while still paying attention to the preservation of environmental functions, both in urban and rural residential environments, and to ensure that housing is adequate and affordable in a healthy, safe, harmonious, organized, planned, integrated environment, and sustainable.⁴²

Article 28

- (1) Housing infrastructure, facilities and public utilities planning include:
 - a. Plans for providing land plots for housing as part of the settlement; and
 - b. Plans for completeness of infrastructure, facilities and public housing utilities⁴³.
- (2) The plan for providing land plots as referred to in section (1) letter a is used as a basis for planning infrastructure, facilities and public utilities.
- (3) Plans for providing land plots are intended to increase the usability and yield of land for plots ready to build in accordance with building and environmental planning.

The 'infrastructure plan' (Article 28 section (1) letter b) covers at least roads, drainage, sanitation and drinking water. In addition, Article 130 stipulates that in the implementation of housing and settlement areas, everyone is obliged:

- a. To maintain security, order, cleanliness, hygiene and health in housing and residential areas;
- b. To participate in the prevention of housing and settlement areas which are detrimental to and endanger the interests of others and/or the public interest;
- c. To maintain environmental infrastructure, environmental facilities and public utilities in housing and residential areas; and
- d. To oversee the utilization and functioning of infrastructure, facilities and public utilities in housing and settlement areas.)

4.4. *Government Efforts to Fulfill the Right to Clean Water During the Pandemic*

Human rights were initially generally regulated. One of the basic rights regulated in human rights is the right to life.⁴⁴ The right to water is considered to be subordinate to the right to life. The determination of the right to water as an independent human right is a process of conceptual change in human rights, where in the past the right to water was conceptually considered a derivative right that was born from other fundamental rights.⁴⁵

In July 2010, the United Nations General Assembly (UNGA) had declared clean water and sanitation as human rights. Through the voting process, 122 countries approved the resolution of water as a human right and 41 states declared abstention. Indonesia became one of the countries who approved this resolution.⁴⁶ Thus, according to Hamid Chalid, eliminating one's access to water is nothing but a violation of human rights related to the right to life and independence and personal security which is very fundamental.⁴⁷

In the national economic system, the Indonesian constitution places water as one of the resources that must be controlled by the State, both physically and commercially. This can be seen in the two principles contained in Article 33 of the 1945 Constitution. First, it is contained in Article 33 section (2) the 1945 Constitution which states that "production branches which are important for the State and which control the livelihoods of the public are controlled by the State". Furthermore, in section (3) it is stated 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". In the explanation of Article 33, it is stated that companies which are important to the state and

control the lives of many people must be in the hands of the state.⁴⁸

In the midst of the COVID-19 pandemic, the World Health Organization (WHO) recommends everybody who is forced to go out of the house to wash their hands with running water to kill viruses and germs before they arrive at their destination. After arriving back at home, it is recommended to clean yourself and to wash clothes that have been used to prevent the growth of the invisible virus.⁴⁹

Although various efforts have been made to support healthy lifestyles to prevent the spread of the virus that is more widespread, there are still several layers of society that have difficulty gaining access to clean water, such as low-income communities and communities where their homes still do not have access to clean water. In slums, people normally purchase water from travelling vendors who carry water containers in wheelbarrows. During the pandemic, this activity is continuing even though most vendors do not wear masks and PPE. This has led to an added risk of transmission in these communities. Those who walk to shops to place orders with water vendors are unable to practise physical distancing due to space constraints, intensifying the pathways of human-to-human transmission. Whilst everyone is urged to wash their hands with soap and water, there is a lack of specific governmental WASH interventions targeting informal settlements.⁵⁰

The Ministry of Public Works and Housing (PUPR) supports the handling of COVID-19 by making structural efforts to improve a culture of clean and healthy living. The Ministry of PUPR is developing technological innovations in the Train for Bathing, Washing, Toilet, and Sink (MCK Train) to be applied to areas that do not yet have good and proper sanitation facilities in several areas in Jakarta. The MCK Train Innovation is a development of the Mobile Toilet technology prototype created by the Housing and Settlements Research and Development Center (Puslitbang) of the Ministry of PUPR.⁵¹ The MCK train has a water tank capacity of 7,000 liters, projected to be able to serve up to around 350 people per day with a consumption of 20 liters/person/day.⁵²

The Indonesian government chose Large-scale Social Restrictions in handling the COVID-19 pandemic. Based on that choice, the government only ordered the limitation of activities on a large scale. In this condition, there is no additional obligation for the Indonesian government in terms

of basic services. Related to the provision of clean water which is a community need, the government made efforts to fulfill according to the planning contained in the RPJM⁵³ and Renstra⁵⁴. According to researchers, the government action violates their obligation to fulfill their right to water because, as previously mentioned, the provision of clean water is carried out in stages. Meanwhile, in such an emergency situation as the pandemic, a breakthrough is needed to immediately meet the need for water.

As a basic service, clean water is under the authority of the regional government. Therefore, during the pandemic, several regional governments encouraged regional water managers to provide water fare relief. In addition to conduct budget refocusing, the government continued to prioritize the fulfillment of basic services. Water Resources Council stated that in preventing the COVID-19 outbreak, tactical solutions were needed to help provide adequate clean water. At least to overcome the temporal problem being faced. Charitable assistance from the state and the community which so far has generally been in the form of groceries is a good idea to be recalculated so that it can be allocated to help supply clean water.⁵⁵ The lack of support in providing clean water against the pandemic by government forces local leaders to initiate the creation of additional handwashing facilities near shared areas such as communal washing areas, communal toilets, markets and places of worship. In dealing with water needs during the pandemic, the Indonesian government needs to learn from the governments of South Africa and Ethiopia.

In South Africa, following the announcement of the country's lockdown by President Ramaphosa, the department set up the Covid-19 National Command Centre for Water and Sanitation on March 23, 2020. The center, based at Rand Water in Johannesburg, ensured that areas with no proper water infrastructure received water storage tanks and water tankers (water trucks). This would ensure that no community was left without water and people were able to constantly wash their hands with water and soap and to maintain good hygienic practices. Washing of hands is a practice encouraged among citizens to minimize the spread of the coronavirus, which is mainly transmitted through unhygienic hands. The country is now preparing to enter Level 3 of national lockdown as of today, easing some of the restrictions and

allowing people back to work. Most importantly, learners across the country will also be phased in to schools. The Department of Water and Sanitation will play a critical role in supplying water to schools. The department has entered into an Implementation Protocol Agreement with the Department of Basic Education and Rand Water to ensure that no school will be without water. Since the country's lockdown, the Department of Water and Sanitation has delivered 18,262 water storage tanks and 1,299 water tankers at various district and local municipalities in all nine provinces. The Covid-19 National Command Centre for the department has also delivered 7,405 water storage tanks and 347 water tankers out of the grand total.⁵⁶

The Ministry of Human Settlements, Water and Sanitation led by Minister Lindiwe Sisulu and her Deputies, DM David Mahlobo and DM Pamela Tshwete, was involved with the joint Portfolio Committee and Select Committee on Human Settlements, Water and Sanitation to assess the Committees on the critical work delivered across the country to curb the spread of the Coronavirus (COVID-19). Minister Sisulu laid the ground for the presentation by detailing all the work that led to the President's declaration of the State of National Disaster, which then precipitated the actions that followed and are still continuing by the two departments, namely Human Settlements and Water and Sanitation. The declaration of the State of National Disaster implied the suspension of the normal workings of Cabinet replaced by the setting up of the Presidential Coordinating Council and the NATJOINTS. The Ministry of Human Settlements, Water and Sanitation set up a Water and Sanitation Command Centre at Rand Water co-chaired by the Acting DG at DWS and the CE of Rand Water. This Centre allows us to link up daily with the DWS Provincial Heads, Water Boards across the country, as well as Municipalities. Connected with the association of water tanks and tankers manufacturers that allowed us to purchase these directly from them, this is possible to allow bulk purchases and therefore realizes huge savings whilst acquiring these for the state. Whilst everything is being done to ensure the response to the pandemic is driven from this amount, it is also obvious that it would not be enough. This has led to current discussions between the DWS and National Treasury to find a further R831 million that would then augment the current funding but, more critically, will ensure the response continues and is

sustainable. 7,698 water tanks had been installed across the country, whilst 1,239 water tankers (trucks) had been delivered as well. These figures are moving targets which change on a daily basis as more delivery occurs. The point is that the use of water tanks and tankers is not seen as the ultimate solution to the issues of water availability and services. Therefore, a number of solutions have to be considered. It will be important to broaden the water mix to incorporate under-utilized water resources, e.g. groundwater, return-flows, Water Conservation and Water Demand, as well as water tanks for households.⁵⁷

In Ethiopia, the International Water Management Institute has mobilized trained members of the public, known as para-hydrologists, to collect data on household knowledge of the coronavirus and to assess how the current access and use of water affects disease mitigation measures. This information will help scientists and public agencies identify, among other things, more effective ways of implementing mitigation measures such as social distancing. This might include finding alternatives to communal water points where people from several households might gather at the same time and risk spreading the virus. Even in the midst of water shortage, new technologies have provided struggling families to cope with water shortage. For instance, the expansion of relatively low-cost solar-powered irrigation pumps in low-income countries can provide new ways for farmers to access more reliable water supplies, not only for irrigation but also for their daily use. The pumps cost around \$1,000, and some governments have experimented with financing models to subsidize the cost and make them affordable for farmers. Solar pumps and other water-lifting technologies could be scaled up to reduce potential knock-on effects from the pandemic in remote areas by increasing access to safer and more reliable groundwater. Other low-cost technologies include simple hand-pump designs and rainwater harvesting structures, including from rooftops. The challenge, however, remains one of balancing water availability with water quality, including suitability for consumption at a domestic level.⁵⁸

5. Conclusion

The Indonesian Government has not made additional effort to fulfill clean water sector during

the COVID-19 pandemic other than those previously planned in the Medium Term Development Plan or the Strategic Plan of the Ministry. Although realizing that the need for clean water is very important in dealing with the COVID-19 pandemic, the disruption of the economy has an impact on state finances so that the government needs to refocus on the budget. As a result, many programs do not go according to plan. Nevertheless, as part of basic services, clean water remains a priority program so that the development of pipeline infrastructure as a clean water facility is still being carried out. Apart from that, the awareness of the importance of clean water makes the community maintain existing clean water and sanitation facilities.

The minimum efforts made by the government are not enough. The COVID-19 pandemic period should be optimally utilized by the government to fix the problem of clean water in Indonesia. The Indonesian government could learn a lesson from other countries such as South Africa that have built 41 thousand additional clean water supply points throughout the country in overcoming the pandemic, or from Ethiopia, which introduces new technologies to help struggling families cope with water shortage. In addition, as a form of responsibility, the government can also ask assistance from other countries, the private sector and the community to support clean water supply.

Acknowledgments

This study was funded by Universitas Padjadjaran Research Grant *Riset Data Pustaka dan Daring* 2020.

Regulations

Constitution of The Republic of Indonesia

Law Number 28 of 2002 concerning Buildings

Law Number 1 of 2011 concerning Housing and Settlement Areas

Law Number 17 Year 2019 concerning Water Resources

Regulation of The Minister of Public Works Number: 29 / PRT / M / 2006

Presidential Regulation No. 59 of 2017 concerning Implementation of Achieving Sustainable Development Goals

Presidential Regulation Number 18 Year 2020 Regarding National Medium-Term Development Plan 2020-2024

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