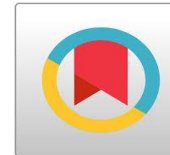


The Politics of Clean Water Management: A Critical Review on the Scarcity of Clean Water in Kedungringin Village

Politik Pengelolaan Air Bersih: Tinjauan Kritis terhadap Kelangkaan Air Bersih di Kampung Kedungringin



Restu Rahmawati^{1*}, Firman Firman²,

¹ Universitas Pembangunan Nasional Veteran Jakarta

¹ Jl RS. Fatmawati Raya, Pondok. Labu, Kec. Cilandak, Kota Depok, Jawa Barat 12450

² Universitas 17 Agustus 1945 Jakarta

² Jl. Sunter Permai Raya, Sunter Agung Podomoro Jakarta Utara 14356

restu.rahmawati@upnvj.ac.id¹, firman@uta45jakarta.ac.id²

Corresponding Author: restu.rahmawati@upnvj.ac.id*

ARTICLE INFORMATION

Keywords

*The Politics of Clean Water Management;
 PDAM;
 Cluster Housing;*

ABSTRACT

This paper will examine the politics of clean water management, a review on the scarcity of clean water quality in Kedungringin Village, Sukawangi District, Bekasi Regency. This study is conducted due to a problem occurred in Kedungringin Village regarding the lack of access to clean water both in quality and quantity. Various efforts have been taken by the villagers of Kedungringin, such as constructing boreholes with the help of benefactors. However, this is insufficient to meet the needs of clean water for all residents. In this case, the role of PDAM Tirta Bhagasasi is limited as not being able to reach the Kedungringin Village area due to the far distance of Clean Water Pipeline from the location of Kedungringin Village. By these problems, this study will examine the efforts taken by PDAM Tirta Bhagasasi and the authority of Sukaringin Village in fulfilling the need of clean water access in Kedungringin Village. The research method used in this study is a descriptive qualitative research method with a case study approach. The results of this study indicate that the efforts taken by PDAM Tirta Bhagasasi in fulfilling the need of clean water for the villagers in Kedungringin have not been realized yet. This is for the reason that in constructing a new clean water pipeline, PDAM Tirta Bhagasasi only reaches the housing/cluster area in Sukaringin Village. Hence, the clean water is unable to flow to Kedungringin Village since PDAM Tirta Bhagasasi prioritizes the cluster housing areas by collaborating with developers. This means that the well-financed community will be prioritized over the low-financed community.

Kata Kunci

*Politik Pengelolaan Air Bersih;
 PDAM;
 Perumahan Cluster;*

ABSTRAK

Tulisan ini akan mengkaji tentang politik pengelolaan air bersih sebuah tinjauan atas langkanya kualitas air bersih di Kampung Kedungringin Kecamatan Sukawangi Kabupaten Bekasi. Alasan penelitian ini dilakukan adalah karena terjadi persoalan di Kampung Kedungringin yakni tidak adanya akses terhadap air bersih baik secara kualitas maupun kuantitas. Berbagai upaya telah dilakukan oleh masyarakat Kampung Kedungringin seperti membangun sumur bor dengan bantuan dari para dermawan. Namun hal ini belum cukup untuk memenuhi kebutuhan air bersih bagi seluruh warga. Peran PDAM Tirta Bhagasasi pun dalam hal ini belum mampu menjangkau wilayah Kampung Kedungringin karena Saluran Pipa Air Bersih jauh dari lokasi Kampung Kedungringin. Dengan permasalahan tersebut, maka penelitian ini akan mengkaji terkait bagaimana upaya yang dilakukan PDAM Tirta Bhagasasi dan Pemerintah Desa Sukaringin dalam memenuhi akses kebutuhan air bersih di Kampung kedungringin. Metode Penelitian yang digunakan dalam penelitian ini adalah metode penelitian kualitatif deskriptif dengan pendekatan studi kasus. Hasil penelitian ini menunjukkan bahwa upaya yang dilakukan PDAM Tirta Bhagasasi dalam memenuhi kebutuhan air bersih bagi masyarakat Kampung Kedungringin belum terealisasi. Hal ini dikarenakan PDAM Tirta Bhagasasi dalam pembangunan saluran pipa air bersih baru sampai ke wilayah perumahan/cluster di Desa Sukaringin. Air bersih belum bisa mengalir ke Kampung Kedungringin karena PDAM Tirta Bhagasasi lebih memprioritaskan Kawasan perumahan cluster bekerjasama dengan pengembang. Itu artinya kelompok masyarakat yang mempunyai uang akan lebih diprioritaskan daripada kelompok masyarakat yang tidak mempunyai uang.

Article History

Send 8th June 2022
 Review 30th June 2022
 Accepted 24th August 2022

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Introduction

This paper will examine the Politics of Clean Water Management: A Critical Review on the Clean Water Shortage in Kedungringin Village. This study is important to be conducted as it is related to the politics of clean water management which is associated with the accessibility perspective. The accessibility perspective is used to see the role of PDAM in providing clean water from various aspects of convenience in providing facilities and infrastructure. Empirically, the problem occurred in Kedungringin Village is the crisis of clean water experienced by the villagers for years. This problem becomes serious since the role of the local government and PDAM as the supplier for clean water is proven insignificant by providing no clean water to Kedungringin village. The problem in the scarcity of clean water should become the concern of the village as well as the district government. Yet in fact, up to this day, Kedungringin Village only receives financial assistance from donors in providing the clean water. Thus, it is interesting to see why this happens and how the clean water in Kedungringin Village is managed so far.

A previous study discussing the accessibility perspective is not related to the politics of clean water management, yet it is related to the water security (Eloise M. Biggs, 2013). The next study is a research on the role of village women in providing clean water. The results of this study indicate that it is important to consider gender issue in the management of clean water (Kathleen Kevany, 2013). Other study is about the public participation in the water management. The results of this study show that the public participation in the management of resources is considered as the main pillar in sustainable development. Water management is a primary example, and women globally are the main users as well as protectors of water. However, the effectiveness of participatory water management practices is rarely examined from a feminist perspective. This article sets out a methodological framework for such investigation, based on the theory of ecofeminism and the Brazilian concept of 'feminist transformative leadership' by considering gender, racial and class aspects of the participatory water management in Brazil (Andrea Moreas, 2007).

Water has a highly strategic role and must remain available in a required quantity, thus it can support the human's life and the implementation of development both in the present and the future. The fulfillment in the need of clean water for a particular community becomes a reference in determining whether the community in one location or village experiences a shortage or not. In the chain of life, water is very important. The need for water certainly continues to increase from time to time. This is not only caused by the increasing population, but also due the use in the industrial, agricultural and fishery activities. The United Nations has

reported that in 2002, there were more than one billion people having no access to clean water. This indicates that the clean water crisis is a serious issue, as water is not evenly distributed in the world (Endaryanta, 2007). The Regional Drinking Water Company (PDAM) as the organizer of Water Supply System (SPAM) (sihotang, 2018) must provide maximum service both in the terms of water quantity and quality for the community, especially the customers, both in providing water for the community needs and ensuring the water quality in accordance to the water quality standards. This is for the reason that people have the right to enjoy a clean and healthy water to fulfill their daily lives. The scarcity of water in some regions become a leading source in the economic and political instability.

The problem of water, both in terms of quantity and quality, is not a new thing in big cities, for example in Bekasi including Bekasi City and Bekasi Regency. Bekasi Regency is located in the northern part of West Java Province with some areas, including the coastal areas, undergo a problem in providing resources for clean water. Water is a scarce and precious commodity in the arid Western states. Unsurprisingly, water policy making is such a great challenge due to a number of reasons (Davis, 2001). The availability of water in Bekasi Regency comes from two sources, including the ground water and and the surface water from rivers. However, a problem occurs regarding the availability of clean water in Bekasi Regency area, especially in Kedung Ringin Village, Sukawangi District, Bekasi Regency. Clean water is considered as a luxury item in the area since the villagers has experienced water crisis for years. Moreover, in some areas of Babelan District, the availability of clean water is also insufficient, such a great lacking compared to the basic need, due to the good housing for residents resourcing from the PDAM water. Additionally, the water quality is still far from the standard of clean water quality as the water is muddy. Therefore, the problem in providing clean water should become a concern for the state as well as the local governments since these actors are primarily responsible for contributing the wastewater (Morris, 2022). The problem in managing clean water for consumption is also an issue in many countries, such as in Germany. In Germany, clean water management involves the role of government and the political relationship with local authorities. The existence of political relationship between the local mayor and the regional drinking water company (PDAM) has resulted in a higher price of clean water for drinking in the city. Although this is not the main cause for the increasing price of drinking water in the city, but it still contributes to the expensive price of the water in the city (Michael Hellwiga, 2021).

The supplier of clean water in Bekasi Regency is called as PDAM Tirta Bhagasasi. Tirta Bhagasasi is known as a supplier of clean water services for industrial, business and

residential areas in Tirta Bhagasasi's operational territory, covering Bekasi Regency and some parts of Bekasi City. Tirta Bhagasasi always strives to provide the best service by providing water for the public needs guaranteed in terms of quality and quantity. This is a part of Tirta Bhagasasi's small steps to make the Indonesian people healthy. All these efforts are performed by Tirta Bhagasasi to meet the customer satisfaction.

The scarcity of clean water in Kedungringin Village is certainly a big question for researchers since Bekasi Regency, as the category of urban areas and having easy access to various public facilities, is still lack of clean water. In urban areas, access to clean water should be easy, yet what happened in Kedungringin Village is just the opposite. This condition will become the problem raised in this study, to realize the politics of clean water management in Kedungringin Village, Bekasi Regency.

Method

This research applies descriptive qualitative research method combined with a case study approach. A case study approach is used in order to explore the problems studied (Dr. Drs. Imail Nurdin, 2019). The data sources used are the primary data sources in the form of in-depth interviews and observations to obtain data in the field. The secondary data sources are obtained through various literatures relevant to the research focus. There are two interviewees from PDAM Tirta Bhagasasi, from the Department of Research and Development of PDAM Tirta Bhagasasi and the Head of KCP Tambelang. Both informants are selected for the reason that these two people are the people in charge and realize the issues raised in this study. For example the Head of KCP Tambelang, he is the person in charge of providing clean water services to Kedungringin Village through a pipeline connected from KCP Tambelang. In the other side, the Head Department of Research and Development of PDAM Tirta Bhagasasi is interviewed as he has the understanding in the clean water management policy at PDAM Tirta Bhagasasi. Additionally, other research informants are the villagers of Kedungringin, including Mr. R and Mr. A as the representatives of youth leaders, as well as Mrs. I and Mrs. Y as the residents of Kedungringin Village. These informants are selected for the reason that they are the residents of Kedungringin Village who experience the clean water crisis directly. Moreover, the Karang Taruna (the youth community) representatives are the representatives of the clean water source's management in Kedungringin Village. They are the organizers who manage and take care of the clean water sources in the form of drilled wells in Kedungringin Village. Based on the research objectives mentioned above, this research is conducted at the PDAM Tirta Bhagasasi Office, Jalan Kalimalang BTB 25 Kp. Tegal Danas, Central Cikarang, Bekasi

Regency, as well as in Kedung Ringin Village, Sukawangi District, Bekasi Regency. The time period for this research is three months, from January to March 2022. The obtained research data from the field is processed by using data analysis techniques with data reduction stages, by simplifying the data, thus it can fit the needs and make it easy to obtain the required information. The next step is the data presentation, as the researcher presents data that has been reduced or simplified in the previous stage, and the last one is drawing conclusions (Sugiyono, 2006).

In this research, the validity test used is the triangulation technique to verify the validity of data by checking or comparing the data obtained with other sources or criteria outside the data, to improve the data validity. The triangulation technique conducted in this research is the source triangulation, by comparing what is said by the subject with what is said by the informant. The intention is to make the obtained data be trusted, since the data is not obtained only from one source of research subjects, but also from some other sources including the neighbors or the subject's friend. The triangulation method is performed by comparing the observation data with the data resulted from interview combined with the contents in the relevant documents. In this case, the researchers are trying to find back the data obtained through interviews (Moleong, 2014).

Results and Discussion

Kedungringin village is one of the areas that since 8 years ago experiencing drought and lack of clean water both in terms of quantity and quality. In dry season, people must line up in a very long queue if they want to get clean water. The only source of clean water owned by the villagers of Kedung Ringin comes from the drilled wells by the help of satellites from donations through *waqf* land and clean water.

The water quality in Kedungringin Village, Sukawangi District is yellow, smelly, and even black, thus it is unfit for consumption. According to the information obtained from the research informants, people are accustomed to using poor quality water to meet their daily needs such as bathing and others. If they use the water for bathing, their fingernails and toenails will turn yellow and their bodies will experience itching (Suryati, 2022). Sometimes, due to urgent needs, some people are forced to filter the black colored water by using very simple tools such as white sand, foam and used clothes placed in buckets that have been perforated and connected with pipe. This process must be repeated three times to obtain clear water. However, even though it has gone through a filtering process, the water still smells. Looking at this condition, the people of Kedungringin Village have also tried to dig wells in their

respective homes. Yet, according to them, digging deeper wells is also not an option as the water quality remains poor. Likewise, groundwater is pumped through a pumping machine. The depth of 100 meters did not produce water with a good quality. Only with the deep of 120 meters, clean water can be obtained (Baskoro, 2022).

The scarcity of clean water in Kedungringin Village has touched the heart of one benefactor coming from the outside of Bekasi Regency. The benefactor provides two drilled wells for the people in Kedungringin Village, especially for the residents of RT 03 RW 05. Each of the two drilled wells in RT 03 RW 05 has a water reservoir (torn) resulting from generous *waqf* (Islamic charity). Each drilled well drains 40 houses, thus up to now, only 80 houses have the access to clean water or around 251 residents hold this clean water access from a total of 884 residents. This counts only 28% of the total residents of Kedung Ringin Village RT 03 RW 05. The management of clean water involves donors that visited the Kedungringin Village. Jordan is also one of the countries that involving donors in the management of clean water sources with the help of the Association of Non-Water Users (P3A) in the Jordan Valley (Mustafa, 2016).

The scarcity of clean water in Kedungringin Village is occurred due to the difficulty in accessing clean water caused by the far distance of clean water channels. Heretofore, clean water pipes were still far enough from the Sukaringin Village and only in 2021, KCP Tambelang submitted a request for additional water pipe installations for the Sukaringin area by sourcing the pipelines from KCP Tambelang. PDAM Tirta Bhagasasi then developed a pipe installation in the Sukaringin Village area with the pipe connections coming from KCP Tembalang. Thus, when Kedungringin Village have this pipe installation later, the access will be closer. In terms of easy access to infrastructure for the clean water supply in Kedungringin Village, PDAM Tirta Bhagasasi has tried to provide clean water, although in its implementation, not all areas in Sukaringin Village have the access to clean water, including Kedungringin Village. The cause of clean water scarcity in Kedungringin is certainly different from what happened in Syria. Syria's water scarcity is a consequence of the ruling Ba'th party's continuous promotion on water-intensive agriculture (Barnes, 2009). Meanwhile in Sao Paulo, Brazil, the state implements the reduction of pressure in water pipes as opposed to formal rationing (Millington, 2018).

Accessibility is the ease and convenience of getting or reaching a location/goods/other thing desired. Furthermore, the accessibility perspective in this research is related to the availability of clean water realized as the ease in providing the access to clean water. Referring to the explanation related to accessibility, it can be seen that the scarcity of clean water in

Kedungringin Village is due to the difficulty in accessing clean water caused by the far distance of the clean water channel. Heretofore, the clean water pipes were still far enough from Sukaringin Village and only in 2021, KCP Tambelang submitted a request for additional water pipe installations in the Sukaringin area by sourcing the pipeline from KCP Tambelang. PDAM Tirta Bhagasasi then developed a pipe installation in the Sukaringin Village area with pipe connections coming from KCP Tambelang, thus when Kedungringin Village have this pipe installation later, the access will be closer. In terms of easy access to infrastructure for the clean water supply in Kedungringin Village, PDAM Tirta Bhagasasi has tried to provide clean water, although in its implementation not all areas in Sukaringin have access to clean water, including Kedungringin Village.

Considering the distant location of Kedungringin Village from the water source of PDAM Bhagasasi, PDAM Tirta Bhagasasi conducts a collaboration with PT. BST in providing clean water in Sukaringin areas. This collaboration is carried out in the provision of pipe connector installations. The cooperation with private sector is conducted since the capital participation for PDAM Tirta Bhagasasi from the Government of Bekasi Regency and Bekasi City has never been realized since the last six years, from 2016-2021. In the other hand, clean water services for the residents can't be stopped, even the service continues to be improved by relying on innovation and own capabilities.

According to the research informant, Mr. Hasanudin, the Head of KCP Tambelang, KCP Tambelang as part of PDAM Tirta Bhagasasi is committed to adding water pipe installations in response to the consumer demand for clean water in Sukaringin areas. In improving clean water services, his party continues to adjust targets in line with the Regional Medium-Term Development Plan of the Bekasi Regency Government. Currently, PDAM Tirta Bhagasasi has more than 300,000 customers and is the largest PDAM in West Java. Every year, the number of customers increases by an average of 30,000 SL. Even in 2022, it is estimated that there will be additional new customers of up to 50,000 SL more, although the capital participation from the two regional governments is full of uncertainty.

The commitment of PDAM Tirta Bhagasasi through KCP Tambelang in adding clean water pipelines in Sukaringin Village, turns out to be only responding to the consumer requests from housing developers in Sukaringin Village. Cluster/complex housing developers submit a request for clean water to PDAM Tirta Bhagasasi as the availability of clean water for their housing is one of their marketing strategies in selling their housing. In this case, the developers use the availability of clean water from the PDAM as a promotional tool for housing that will be offered to consumers. The developers include information related to the availability of clean

water from PDAM in their advertising brochures, thus it may attract the consumers to buy the houses offered in the brochure. Most of the cluster/complex housing in Bekasi Regency include the availability of clean water from the PDAM in their promotional media, therefore in this case, PDAM Tirta Bhagasasi prioritizes the availability of clean water for the cluster/complex housing rather than for the domestic area settlements or non-cluster/complex housing. In response to the developer's request, PDAM Tirta Bhagasasi through KCP Tambelang has added a clean water pipeline in Sukaringin Village. The additional Water Pipe Installation (IPA) in Sukaringin is still in progress and its affordability is limited to the cluster/complex housing areas. PDAM Tirta Bhagasasi prioritizes the cluster housing due to the direct request from the developers for the availability of clean water.

Kedungringin Village itself, even though it belongs to the Sukaringin areas, has not been able to get access to clean water since the Village is included in the criteria of domestic housing area. Hence, Kedungringin village has no access to clean water from PDAM Tirta Bhagasasi. It is necessary to submit a collective proposal through the local authority to PDAM Tirta Bhagasasi. Nevertheless, the required support from the local authority cannot be seen yet as up to this day, there has been no proposal from the Sukaringin local authority regarding the clean water supply from PDAM to Sukaringin areas, especially for the domestic housing. This support is required in accordance with the procedure from PDAM Bhagasasi stating that PDAM water will flow to Kedungringin Village if there is a request from the local authority. This is due to the status of Kedungringin Village as a non-cluster/ domestic housing area, thus the request for clean water to PDAM Tirta Bhagasasi must through a collective submission from the local authority. However, until now, the proposal on the need of clean water for Kedungringin Village has not yet been submitted to PDAM Tirta Bhagasasi. This becomes another factor influencing the poor availability of clean water in Kedungringin Village that resulted in the scarcity of clean water, as well as the reason why PDAM water is unable to flow in the Kedungringin area.

The unresponsive act of the local authority in providing clean water for Kedungringin Village has caused the villagers to only rely on the donors in providing clean water. This is different from what happened in China as the rural water management in this country involves the role of local authority. The local authorities in China build the China Rural Drinking Water Safety Project (RDWSP) as an effort to control the water, and it works as a force tool to push the rural populations towards the national goals (Qinhong Xu, 2022). Then, in the highland province of southern Caar, CENAGRAP, there is an intention to provide clean water there. The existence of this drinking water association is assisted by the local political alliances and the

local authorities to improve the clean water services (Geoff Goodwin, 2022). For the sake of providing clean water, the government in Sao Paolo, Brazil, even implements an incentive system for the upstream farmers producing clean water (Teresa Cristina TarléPissarra, 2021). Thus, it is necessary to have a good performing management from the government agencies, thus the problem of clean water scarcity in Kedungringin Village can be addressed immediately (PekkaLeviäkangas, 2021). In this case, the need for cooperation and coordination between the local authorities and stakeholders in providing clean water is really emphasized (Eko NurSurachman, 2022).

The clean water policy in Bekasi Regency still prioritizes the cluster housing compared to the domestic housing. The reasons are as the following: 1) The far distance of the resident settlement to the clean water pipeline. The settlements in Kedungringin Village gain no access to clean water. The main cause is the distant location of the clean water pipe from PDAM Tirta Bhagasasi to Kedungringin Village, with the closest location of the clean water pipe is in Tambelang; 2) The low ability in paying for the clean water services. Some of the people in Kedungringin Village are still classified as poor. This can be seen from their ability to get clean water services. Having no access to clean water from PDAM, they are even incapable to dig their wells deeper to obtain clean water. This causes the clean water unable to flow in Kedungringin Village. Furthermore, PDAM Tirta Bhagasasi prioritizes the cluster/complex settlements since their ability to pay for clean water services is higher than the domestic settlements. Hence, the accessibility of clean water to domestic housing is still low. Based on the explanation above, the politics of clean water management in Bekasi Regency is considered as unfair. The public policies should contain multiple objectives, including a fair and balanced policy in encouraging the life progress of all people (Rahmawati, 2017).

Thus, in preserving accessible and available water sources, a superior administration system is required. Commonly, water problems occur because of poor water administration. Data on water consumption shows that the demand for water in various countries is increasing day by day. The rapid expansion of urban areas, insufficient water conservation, population growth and climate change are the main causes of clean water scarcity. As a result, urban water management becomes a major challenge. A sustainable approach is necessary to address water security and offer better services to residents (Richa Saxenaa, 2022), since the need for clean water is part of human rights (Leite, 2022). Therefore, clean water management must be sustainable (Yuksel, 2015).

Conclusion

The politics of clean water management, as viewed from the accessibility perspective, prioritizes the complex/cluster housing over the domestic housing, leading to the low accessibility of clean water to the domestic housing. Furthermore, the causes of low accessibility in clean water to domestic housing in Kedungringin Village are due to the far distance of the clean water pipe installation, the ability to pay for the clean water services, and the expensive price to get the clean water.

The challenges faced by PDAM Tirta Bhagasasi in providing clean water to Kedingringin Village are related to the distance between Kedungringin and the Water Treatment Plant (IPA), the lack of capital owned by PDAM Tirta Bhagasasi since the funding is only supported by the private sector heretofore, rather than by the Regional Government of Bekasi. Moreover, the raw materials for water treatment at PDAM Tirta Bhagasasi are still limited, as they are only rely on Kalimalang. Hence, the low accessibility of clean water to domestic housing in Kedungringin Village indicates a thesis that clean water can only be enjoyed by the well-financed people. Thus, it is expected that PDAM Tirta Bhagasasi can be more righteous and fair by reaching all levels of society in determining clean water management policies in Bekasi Regency. By this way, water crisis is primarily caused by the institutional designs and political decisions that prevent equitable and sustainable usage of the limited water resources. The first step of analysis suggested is to identify the governance structure, in other words, conducting an ‘institutional mapping’ of the actors and organizations involved as well as their mutual relations (Sehring, 2009).

Acknowledgments

The author would like to thank the Polgov Fisipol of Gadjah Mada University for giving the opportunity to contribute to the studies on water politics. Hopefully, this research may become a consideration for PDAM Tirta Bhagasasi in making the clean water management policies that can be enjoyed by all levels of society.

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