

## **ACCESSIBILITY AND AVAILABILITY OF DRINKING WATER IN KUBU RAYA REGENCY (STUDY OF DISTRIBUTIVE JUSTICE BY ARISTOTELES)**

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### **ABSTRACT**

The society in Kubu Raya Regency face the accessibility and availability of drinking water for daily needs. There were some several influenced factors, including demographic factor involved by the type of groundwater was unsuitable for consumption due to its high iron content. The rain water and mineral water are the option used these days. But, the availability of rain water is limited, while mineral water require high cost. The Government of Kubu Raya Regency established Tirta Raya Regional Drinking Water Company through a Regional Regulation followed by a Regent's Regulation related to the operation of this regional company. This study aims to analyze the realization of fairness in accessibility and availability of drinking water in Kubu Raya Regency. The study used socio-legal research methods, found that the vast area of Kubu Raya Regency did not match the service capacity that the Tirta Raya Regional Drinking Water Company could provide. Adequate and equitable accessibility and availability of drinking water for all people in Kubu Raya Regency could be achieved equitably through improve services by a capacity building. Drinking water is part of the mandatory basic services of the local government, so this should be one of the development priorities at the Kubu Raya Regency level.

**Keywords: Distributive Justice, Drinking Water, Accessibility, Availability**

### **A. INTRODUCTION**

The unavoidable need for drinking water in daily activities makes it a vital part of human life. Water is used not only for household needs but also for economic and environmental purposes. It is not surprising that the fulfillment of water is regulated in the Indonesian constitution in Article 33 paragraph (3) of the 1945 Constitution of the Unitary State of the Republic of Indonesia which states "The land and water and the natural resources contained therein are controlled by the state and used for the greatest prosperity of the people".

While the meaning of the right to water is not explicitly stated, as a state governed by the rule of law, Indonesia guarantees human rights,

including the right to a decent standard of living and the right to health. This indirectly leads to water regulation as a vital component of people's lives, ensuring good health through the provision of safe drinking water..

While some regions in Indonesia may not face significant challenges in securing clean water, this is a crucial issue in Kubu Raya Regency, which is characterized by swamps, coastal areas, and small islands. For residents of Kubu Raya Regency, water use is generally traditional, relying on rivers/lakes and rainwater..

Using river water has negative health impacts, as it can cause various infectious diseases, including skin diseases, and even chronic ones due to the possibility of water

contamination with hazardous chemicals. Meanwhile, using rainwater also faces issues such as water quality and initial contamination, inconsistent availability, and the substantial initial cost of providing rainwater storage tanks. Consequently, drinking water demand in Kubu Raya Regency is very limited, despite the government's establishment of Regional Drinking Water Company of Tirta Raya since 2008 (formally as a Regional Public Company since 2019). However, access and availability of drinking water in Kubu Raya Regency is still an unresolved issue.

Only a small portion of the area has been supplied by the Tirta Raya Drinking Water Company. The Annual Report of the Tirta Raya Drinking Water Company and the Kubu Raya Central Statistics Agency (BPS) in Figures show that the total amount of clean water distributed in 2024 reached 4,949,166 m<sup>3</sup>, with most of it used for households and a small portion for general social purposes. Distribution is uneven and concentrated only in the border areas with Pontianak City. This is what attracted the author's attention to further examine the realization of fairness in accessibility and availability of drinking water in Kubu Raya Regency.

## B. RESEARCH METHOD

This research is a qualitative research with dogmatic legal research, namely seeking the truth

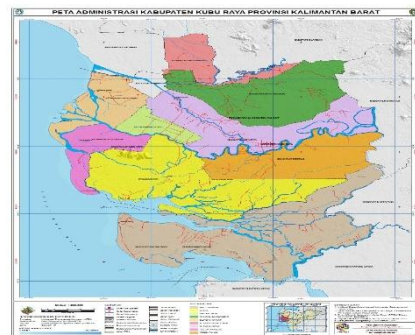
in legal science by looking at written regulations as the main object of study (Suratman, 2013). The descriptive method is a problem-solving procedure investigated by describing or depicting the current state of the research object based on visible facts. Next, an analysis is conducted through applicable regulations linked to legal theories and scholarly opinions regarding the realization of justice, accessibility, and availability of drinking water in Kubu Raya Regency.

## C. RESULT AND ANALYSIS

### 1. The Wide Administrative Area Coverage of Kubu Raya Regency

Kubu Raya Regency is one of 14 regencies/cities in West Kalimantan Province with an area of 6.985,20 km<sup>2</sup> as shown in the following image:

**Map of Kubu Raya Regency**



Source: Kubu Raya Regency in Figures, 2024

Kubu Raya Regency consists of 9 (nine) sub-districts, with 123 villages and 39 small islands as shown in the table below:

**Table 1. District Capital of Kubu Raya Regency**

| Sub-District  | Capital       | Villages | Area                     |
|---------------|---------------|----------|--------------------------|
| Batu Ampar    | Padang Tikar  | 15       | 2.431,36 km <sup>2</sup> |
| Terentang     | Terentang     | 10       | 677,20 km <sup>2</sup>   |
| Kubu          | Kubu          | 20       | 1.562,46 km <sup>2</sup> |
| Teluk Pakedai | Teluk Pakedai | 14       | 409,38 km <sup>2</sup>   |
| Sungai Kakap  | Sungai Kakap  | 15       | 587,33 km <sup>2</sup>   |

|                 |                |    |                          |
|-----------------|----------------|----|--------------------------|
| Rasau Jaya      | Rasau Jaya     | 6  | 209,18 km <sup>2</sup>   |
| Sungai Raya     | Sungai Raya    | 22 | 1.190,33 km <sup>2</sup> |
| Sungai Ambawang | Ambawang Kuala | 15 | 1.180,75 km <sup>2</sup> |
| Kuala Mandor B  | Kuala Mandor   | 6  | 320,02 km <sup>2</sup>   |

Sumber: Data Olahan Peneliti, 2025

Of the nine sub-districts in Kubu Raya Regency, only 3 sub-districts have been supplied with clean water, including:

- Sungai Kakap Sub-districts, as much as 35.318 m3, with value Rp. 166.977.800;
- Sungai Raya Sub-districts, as much as 3.687.286 m3, with value Rp. 23.404.241.200;
- KSungai Ambawang Sub-districts, as much as 1.226.562 m3, with value Rp. 6.907.690.600.

This is due to the relatively difficult reach of the area. Approximately 70% of Kubu Raya Regency consists of swamps and peatlands.

Building a peatland pipeline network requires specialized techniques (such as planting the pipe at a specific depth or using special supports), which makes the investment cost of a meter of pipe very expensive.

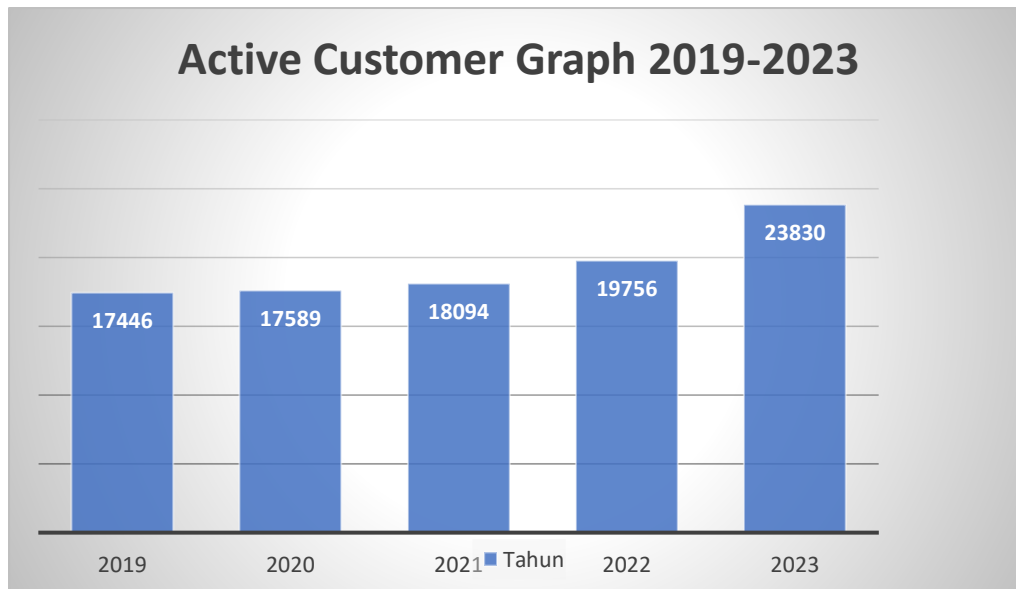
## 2. Limited Services of Tirta Raya Drinking Water Company

The Tirta Raya Regional Drinking Water Company (PDAM) has served 23,830 customers. The company also regularly replaces customer meters as part of its efforts to control water loss. By the end of December 2023, 2,677 water meters had been replaced, covering the following customer groups:

**Table 2. Tirta Raya Drinking Water Company Services**

| Description              | Code | WM Replacement |
|--------------------------|------|----------------|
| General Social           | 1A   | 0              |
| Special Social A         | 1B   | 22             |
| Special Social B         | 1C   | 1              |
| Special Social C         | 1D   | 2              |
| Semi-Permanent Household | 2A   | 8              |
| Permanent Household      | 2B   | 2.257          |
| Household Shops          | 2C   | 4              |
| Luxury Household         | 2D   | 35             |
| Government Agencies      | 2E   | 8              |
| Embassy Consultant       | 2F   | 0              |
| Small Business           | 3A   | 108            |
| Medium-sized Enterprises | 3B   | 223            |
| Large Business           | 3C   | 6              |
| Small Industry           | 4A   | 1              |
| Medium Industry          | 4B   | 0              |
| Large Industry           | 4C   | 2              |
| <b>TOTAL</b>             |      | <b>2.677</b>   |

Source: Data Report from Tirta Raya Regional Drinking Water Company, 2023



Meanwhile, active customers increase from time to time as shown in the graph above.

The limited service provided by Perumda Air Minum Tirta Raya is influenced by high service disparities (Ridwan Naway, 2013). This is evidenced by the fact that services are concentrated in certain areas bordering Pontianak City, meaning that not all areas bordering Pontianak City have been served, such as in Kota Baru Ujung, which is still considered an urban area. Therefore, if we want to compare it with remote areas like Batu Ampar District, which is very difficult to reach, even Kubu District, which borders Pontianak City, does not have access to and available drinking water.

Perumda Air Minum Tirta Raya was established with the vision of helping realize a happy and beneficial Kubu Raya Regency with leading-edge, high-quality water services in a religious work environment (Prima Apriyana, 2010). This vision is still far from reality and has

not yet been realized based on the facts on the ground, as it is known that the stated mission has not been achieved, including:

- a. There is no good corporate governance so that quality and sustainable services cannot be realized;
- b. The principles of continuity, quantity and sustainability do not yet exist considering that water distribution is still only found in 3 (three) sub-districts;
- c. The coverage of drinking water services is not yet in line with the rapid development of the Kubu Raya Regency area.

### **3. The Urgency of Capacity Building to Improve Services**

Aristotle through his work entitled *Nicomachean Ethics* outlines the theory of distributive justice by stating: "And justice is that in virtue of which the just man is said to be a doer, by choice, of that which is just, and one who will distribute either between himself and another or between two others not so as to give

more of what is desirable to himself and less to his neighbour (and conversely with what is harmful), but so as to give what is equal in accordance with proportion; and similarly in distributing between two other persons” (Aristoteles, 350 B.C.E).

This statement indicates that justice is achieved when everyone receives what they deserve. In relation to the services provided by the Tirta Raya Regional Drinking Water Company, justice can be achieved through the accessibility and availability of drinking water for all residents of Kubu Raya Regency. Drinking water distribution is not concentrated in a small area, but rather throughout Kubu Raya Regency.

This issue is crucial because drinking water services are considered a mandatory part of the regional government's basic services. Therefore, the Kubu Raya Regency government must increase its capacity by providing piped drinking water services and expanding its coverage to the entire Kubu Raya Regency community.

#### D. CONCLUSION

Accessibility and availability of adequate and equitable drinking water for all residents of Kubu Raya Regency can be achieved through capacity building to improve services. This is because drinking water is part of the basic services required by the local government, so it should be a development priority at the Kubu Raya Regency level.

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