

Strategy To Improve Non-Financial Performance of Regionally Owned - Enterprises in Indonesia (Study on Municipal Waterworks)

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Abstract. Municipal Waterworks is a regional company as a means of providing clean water that is supervised and monitored by regional executive and legislative officials. The purpose of this study is to analyze performance improvement strategies, performance inhibiting factors, and future strategy plans in the context of non-financial improvement in PDAMs. This research uses descriptive qualitative research methods, with data collection methods carried out using interview techniques and document review. The results of this study show that Perumda Tirta Merapi has served 10.5% of the population of Klaten Regency, while Perumda Tirta Wampu can cover 12.3% of services in Langkat Regency. Perumda Tirta Merapi targets future investment costs to expand service coverage to all regions in Klaten Regency. Similarly, Perumda Tirta Wampu has a target to achieve 34% of services from what was only 12.3% for the entire area of Langkat Regency.

Keywords: non financial performance, service, customer satisfaction

1 Introduction

PDAM or Municipal Waterworks is one of the regionally owned business units (BUMD), which is engaged in the distribution of clean water to the general public. PDAMs are located in every province, regency, and municipality throughout Indonesia. PDAM is a regional company as a means of providing clean water that is supervised and monitored by regional executive and legislative officials.

The existence of Municipal Waterworks in meeting the needs of the community for clean water services is very important, considering that it concerns the lives of many people and human life and life. All aspects of life can run well if supported by the availability of facilities and infrastructure for healthy clean water needs. In fact, the services of several Municipal Waterworks have not achieved optimal results, this condition is shown by the flow of water that has not all been 24 hours, all prospective new customer applicants have not been served and there are still some complaints about service by employees. There are several specific strategic issues in influencing the performance of Municipal Waterworks, including: (a) Improving water flow continuity and service coverage; (b) Improving the quality of employee management; and (c) Increased partnerships with villages that are sources of raw water. In this

case, it is very important to improve the performance of the Municipal Waterworks (PDAM), especially for its non-financial performance. Why? Because of non-financial performance indicated by customer satisfaction, service quality, innovation and service development, as well as human resources, which will later support its financial performance.

2 Theoretical Framework

2.1 Municipal Waterworks (PDAM)

The modern state-run drinking water company has existed since the Dutch colonial era in the 1920s under the name *Waterleiding*, while in the Japanese occupation the drinking water company was named *Suido Syo*. In the year of the issuance of OTDA Regulation No. 8/2000 concerning PDAM Accounting System Guidelines which is valid until now. The WSSLIC I program was continued this year under the name WSLIC II (Water and Sanitation for Low Income Community). In 2022, the Decree of the Minister of Health No. 907 of 2002 concerning the Requirements and Supervision of Drinking Water Quality will be issued, which will serve as guidelines in monitoring the quality of drinking water produced by PDAMs. In order to improve the performance of PDAMs and the development of drinking water supply systems, policy formulation efforts are carried out through the Policy Committee for the Acceleration of Infrastructure Development (KKPPI), to formulate policies and strategies to accelerate PDAM health through increased partnership cooperation with the private sector or investors.

Starting in 2004, this is a milestone in the issuance of regulations and laws that cover drinking water, starting with the issuance of Law no. 7 of 2004 concerning natural resources (water resources). After 60 years of Indonesia's independence, this year Indonesia only has the highest regulation in the drinking water sector with the issuance of PP (government regulation) No. 16 of 2005 concerning the Development of SPAM (drinking water supply system). With the resumption of Drinking Water development from being "region-based" to "sector-based" the Directorate General of Cipta Karya and the Directorate of Drinking Water Development came out with the "PDAM Health" policy which began with the implementation of the PDAM Health Bantek.

2.2 Non-Financial Performance of the Company

Non-financial performance measurement of an organization is an approach in relation to determining organizational goals that are closely related to the organization's strategic vision and mission. This gives the meaning of realizing the organization's strategy and organizational vision on something that can motivate performance. This non-financial performance is aimed at improving quality, innovation, markets, and reducing existing production costs, including:

- a. Closely related to long-term organizational strategy
- b. Related to innovation, management capability, and employee relations
- c. Non-financial performance can be a good indicator of financial performance

Non-financial performance is indicated in several aspects such as customer satisfaction, organizational/corporate image, and average adoption of new products launched. This can be measured by evaluating the processes and qualitative factors of existing business activity. So in this case, the evaluation of non-financial performance is vital. An organization that

prioritizes the development of factors driving the success of its non-financial performance, will have a positive impact on its financial performance. In this case, many studies suggest that some business activities in an organization, have a positive impact on financial performance through non-financial performance, or in other words, in this case non-financial performance mediates the impact of strategies implemented by the organization / company on improving its financial performance.

In other literature [1][2], it is stated that to measure the long-term success of an organization / company, both financial performance indicators and non-financial performance indicators must be included at once. In this case, non-financial performance includes innovation, markets, as well as existing production levels [3][4]. However, there is also literature that suggests that non-financial performance indicators can consist of consumer satisfaction, company reputation, existing competition, consumer experience, brand loyalty, and innovation in the organization/company, market share, increased sales, service quality, and the realization of the organization/company's strategic goals [5]. Another study suggests related to organizational or company performance, that improving the non-financial performance of an organization, both in the form of consumer loyalty and employee turnover, requires organizational or company commitment to improve its corporate strategy, whether it involves leadership factors or organizational innovation [6]. In line with this statement, in relation to supporting organizations to implement new initiatives, non-financial performance is much more supportive than financial performance [7].

The non-financial performance of the organization can be applied to both organizations or companies in the private sector and organizations or companies in the public sector. Specifically, the public sector in this case is something related to the public interest and the provision of goods or services to the public paid for through taxes or state revenues or regional revenues, which are regulated by law. One of the companies engaged in the public sector in Indonesia is a regional drinking water company or abbreviated as PDAM. PDAM is one of the regionally owned business units, which is engaged in the distribution of clean water to the general public. PDAMs are located in every province, district, and city throughout Indonesia. PDAM is a regional company as a means of providing clean water that is supervised and monitored by regional executive and legislative officials. PDAM is a type of company that is included as a regional-owned enterprise or BUMD. PDAM's activities include collecting, processing, purifying, and distributing water to communities or customers.

So far, to produce PDAMs that have healthy performance, performance evaluations have been carried out involving four aspects of assessment, namely finance, service, operations, and human resources. Each of these aspects is usually broken down into healthy, unhealthy, and sick (pu.go.id) categories. However, there has been no specific study that highlights organizational / company strategies, either to improve or improve performance, especially non-financial performance, which will be a mediator for improving financial performance.

2.3 The Concept of Non-Financial Performance of the Company

In relation to research on non-financial performance improvement strategies in one of the regional-owned enterprises in Indonesia, Municipal Waterworks (PDAM), the basis for non-financial performance measurement previously carried out in the research [8] regarding *the effect of the perceived utility of a management control system with a broad and on financial and non-financial performances in restaurants*.

Some of the aspects highlighted in the non-financial performance of the organization/company include:

- a. Customer satisfaction,
- b. The quality of goods or services provided/provided,
- c. Innovation/development of goods or services provided/provided,
- d. Human resources.

Some of these aspects need to be measured one by one to see how the non-financial performance of an organization / company, as well as the strategy that needs to be done by the organization / company in order to improve or improve existing performance.

Even so, there are several other opinions that are also considered in this study, related to the aspects involved in non-financial performance. First, *Corporate sustainability performance measurement systems: a review and research agenda*, and *corporate governance and environmental performance: is there really a link?* The aspects include:

- a. Customer satisfaction,
- b. Organization/enterprise image,
- c. The adoption rate of new products.

Second, is the opinion of regarding *the measurement of economic entities performance from the non-financial indicators' perspective*. The aspects include:

- a. Production quality
- b. *Products/service delivery*
- c. Human resources
- d. Development and research

3 Methodology

This research uses descriptive qualitative research methods, which aim to describe, describe and describe systematically, factually and accurately the facts and relationships between the phenomena investigated. Using this method, researchers attempt to analyze non-financial performance improvement strategies in depth for Municipal Waterworks. In addition, this study seeks to compare strategies to improve the performance of PDAMs in Java and outside Java.

The data collection method is carried out by interview techniques and document review. The use of the interview method essentially aims to obtain direct data from the source as a respondent/key informant about in-depth information on non-financial performance, especially in one drinking water company in Java Island and one drinking water company outside Java. Document review techniques will examine secondary data to gain an understanding of the phenomenon that is occurring. Some of the required documents include the profile of PDAMs in the area concerned.

Data processing is carried out through stages:

- a. Researchers conducted interviews with key informants using interview guides, in the relevant provinces.
- b. Researchers examine data by studying documents/notebooks, papers and articles related to research topics in related provinces.
- c. Researchers analyze the results of interviews and review documents and make tentative conclusions.
- d. Researchers revisit provisional conclusions that have been made, to supplement the

necessary data, through document review and additional interviews.

- e. If data and information are still needed to make a decision, the researcher will explore questions continuously and review the document again, until the researcher can draw a final conclusion.

4 Result and Discussion

4.1 Klaten, Central Java

Klaten is a regency in the province of Central Java, Indonesia. The center of government is in Klaten City, which is a combination of 3 districts of North Klaten, Central Klaten, South Klaten, about 36 km west of Surakarta City. The regency bordering the province of Yogyakarta Special Region has a population of 1,275,850 people. The area of Klaten Regency is divided into three plains, namely the North of the Merapi Mountain Slope Plain, the East Longitudinal of the Lowland, the South of the Limestone Mountain Plain. According to the topography, Klaten Regency is located between Mount Merapi and the Thousand Mountains with an altitude between 75-160 meters above sea level which is divided into the slopes of Mount Merapi in the northern part of the sloping area, flat areas, and hilly areas in the south.

Klaten Regency consists of 26 sub-districts, 10 urban villages, and 391 villages. These sub-districts include Bayat, Cawas, Ceper, Delanggu, Gantiwarno, Jatinom, Jogonalan, Juwiring, Kalikotes, Karanganom, Karangdowo, Karangnongko, Kebonarum, Kemalang, South Klaten, Central Klaten, North Klaten, Manisrenggo, Ngawen, Pedan, Polanharjo, Prambanan, Trucuk, Tulung, Wedi, and Wonosari.

Klaten Regency is said to be rich in springs. Among the springs it is called umbul, so Klaten is also referred to as the area of 1,001 Umbul. Klaten is known for its various water attractions, namely umbul, which is always crowded with tourists who want to feel swimming in the middle of a beautiful natural atmosphere. These water tours include umbul ponggok, umbul manten, umbul sigedang, umbul pelem, umbul cokro tulung, umbul nilo, and umbul kapilaler. Based on data collected from BPS Klaten in 2015, there are 174 springs in Klaten. The locations are spread to various sub-districts. The distribution and number of springs based on BPS data in 2015, namely Prambanan District (11 springs), Gantiwarno (5 springs), Bayat (4 springs), Trucuk (2 springs), Kalikotes (11 springs), Kebonarum (14 springs), Jogonalan (6 springs), Manisrenggo (24 springs), Karangnongko (17 springs), Ngawen (16 springs), Ceper (8 springs), Pedan (2 springs), Wonosari (1 spring), Polanharjo (6 springs), Karanganom (8 springs), Tulung (24 springs), Jatinom (3 springs), Kemalang (2 springs), South Klaten (5 springs), and North Klaten (5 springs). One of the many springs in Klaten is influenced by the topography of the Klaten region which is between mountains including, Mount Merapi. The slopes of Mount Merapi are a *catchment area or cathcment area*. in the area around Mount Merapi there are springs scattered in the Klaten, Sleman, Boyolali, and Magelang regions. Klaten is an old Mount Merapi, so the condition of the forest is enough to take root and help the availability of rainwater infiltration, which is called a *recharge area*. This is what makes the sustainability of Klaten spring discharge abundant. Furthermore, the quality of water from the spring in Klaten is high and close to drinking water. This is what makes the quality of water treated by the regional drinking water company in Klaten Regency or now Perumda Tirta Merapi including good quality in Java.

4.2 Langkat, North Sumatra

Langkat is one of the regencies in North Sumatra Province, Indonesia. The capital of this district is located in Stabat District. Langkat Regency consists of 23 districts with an area of 6,273.29 km² and a population of 1,030,202 people (2020). The name Langkat is taken from the name of the Sultanate of Langkat, a sultanate that once ruled in the area of Langkat Regency. The north is bordered by the Strait of Malacca and Aceh Nangrodarussalam Province, the east is bordered by Binjai City and Deli Serdang Regency, the south is bordered by Karo Regency, and the west is bordered by Aceh Province.

Based on the figures from the 2000 Population Census, the population of Langkat Regency amounted to 902,986 people with a population growth rate of 1.14 percent in the period 1990-2000 and a population density of 144.17 people per km². While in 1990 it was 1.07 percent. For 2008, based on the results of projections the population of Langkat Regency increased to 1,042,523 people with a population growth rate of 1.80 for the period 2005-2010. The largest population is found in Stabat District, which is 83,223 people, while the least population is in Pematang Jaya District of 14,779 people. Stabat District is the most densely populated sub-district with a density of 918 people per km² and Batang Serangan District is the district with the smallest population density of 42 people per km².

Tourism in Langkat Regency consists of Bukit Lawang, Tangkahan, Azizi Mosque, and Batu Katak. Bukit Lawang is the name of a tourist spot in Bohorok District, Langkat Regency, North Sumatra Province which is located 68 km northwest of Binjai City and about 80 km northwest of Medan city. Bukit Lawang is included in the scope of Gunung Leuser National Park which is a conservation area for orangutan awareness. The main goal is to conserve the dwindling orangutan population due to poaching, trade and deforestation. While the Azizi Mosque officially named Sultan Abdul Aziz Mosque or better known as the Sultanate of Langkat Mosque is a historical mosque relics of the Sultanate of Langkat located in Tanjung Pura Village, Tanjung Pura District, Langkat Regency, North Sumatra Province, Indonesia. The mosque was originally built in 1889, on the orders of Sultan Abdul Aziz, ruler of the late 19th century Langkat Sultanate. The architecture of this mosque became the inspiration for the architecture of the Zahir Mosque in Kedah, Malaysia.

Like most other areas in North Sumatra, Langkat Regency is a tropical climate. So this area has 2 seasons, namely the dry season and the rainy season. The dry season and rainy season are usually characterized by a small number of rainy days and the volume of rainfall in the month in which the season occurs. However, the existence of Perumda Tirta Wampu is very necessary in meeting the drinking water needs of the residents of Langkat Regency.

4.3 Discussion

4.3.1 Regional Water Company of Tirta Merapi, Klaten, Central Java

Municipal Waterworks of Tirta Merapi or better known now as Perumda Tirta Merapi, located in Klaten Regency, Central Java Province has served 10.5% of the total population of Klaten Regency. The drinking water company usually conducts periodic surveys to customers about the quality of service they provide through android-based surveys. Many complaints from customers have been handled by Tirta Merapi, including complaints about leaking pipes, one of which is caused by considerable water pressure. The survey that has been conducted by Perumda Tirta Merapi is indeed focused more on service to customers.

Municipal Waterworks of Tirta Merapi serves 4 service areas with 19 springs in Klaten Regency. In this case, as we already know that Klaten Regency is known for its many bulbs and springs with good water quality to be used as drinking water. Of course, this was decided by conducting a feasibility test of drinking water first, and it was found that the quality of drinking water in Klaten Regency with Fe and Mn levels was quite good. The local health office always assists Perumda Tirta Merapi's operations by periodically checking the quality of the treated drinking water.

Some factors that hinder the improvement of Perumda Tirta Merapi's non-financial performance in the future are the problem of investment costs that should be targeted for services throughout the region in Klaten Regency, cannot be maximized. This has become a national issue in the services of regional drinking water companies throughout Indonesia, namely the scope of their services.

4.3.2 Regional Drinking Water Company Tirta Wampu, Langkat North Sumatra

In addition to all Municipal Waterworks in Indonesia have changed to Perumda according to the latest regulations, PDAM Tirta Wampu has also changed to Perumda Tirta Wampu. In this case, almost all PDAMs in North Sumatra Province have turned into perumda (Regional Public Companies).

Forumka PDAM in Perumda Tirta Wampu manages several matters related to customer relations, engineering, legal and personnel, as well as administrative and general. Those who hold positions in the organizational structure of the customer forum have a term of office of 4 years, with all members being 23 people who are representatives from each sub-district. The regional company is organized by four section heads, an internal supervision system (SPI), 148 employees of the company, and also manages 58 contracts.

Perumda Tirta Wampu was originally a small company in the village engaged in engineering, which later changed its direction to managing drinking water, and was based in Binjai. Perumda Tirta Wampu serves 13 sub-districts out of a total of 23 sub-districts in Langkat. In this case, by serving 13 sub-districts out of 23 existing sub-districts, Perumda Tirta Wampu can only cover 12.3% of services. The source of drinking water treated by Perumda Tirta Wampu is derived from underground water and gravity water.

Perumda Tirta Wampu's performance is considered unhealthy by BPKP based on reports on company management, customer management, financial aspects, and in terms of human resources. There is often water loss in Perumda Tirta Wampu, which is caused by water theft or broken meters. Meanwhile, in the management of human resources, there is often a transfer of staff from one drinking water company to another in North Sumatra Province. Then in the financial sector, there are still many delays in payment by customers. In the event of problems in this payment arrears, Perumda Tirta Wampu provides a warning letter to customers who are included in the payment arrears list.

In terms of engineering, Perumda Tirta Wampu's performance was disrupted by the number of leaking water pipes, and customer reports were not immediately responded. Frequent blackouts in residential areas of customers can affect Perumda Tirta Wampu's clean water distribution operations, which will affect the use of water pumping machines. Pipe leaks have been temporarily overcome by the use of rubber, although actually it can be overcome more permanently with pipe replacement. Pipe age, soil contours, and tree roots are examples

of some of the common causes of pipe leaks in delivering water to customers. Old pipes need to be updated, in addition, companies also need to provide generators as one of the first aid in water distribution problems. But in this case, Perumda Tirta Wampu needs to see checking in advance about the location of the pipe damage, whether it is in the customer's installation or not. Customer complaints in this case can be submitted through social media provided by the company and processed together with the customer forum (FKP). In terms of human resources, the company's performance is disrupted by the lack of training offered by the HR Development Center, both in technical and non-technical development. Meanwhile, in the recruitment of the director of Perumda Air Minum Tirta Wampu, at this time the position is occupied by non-ASN personnel, and can be elected more than twice.

The target set by Perumda Air Minum Tirta Wampu in 2023 is, among others, for customer recruitment with a wider coverage, so that it can reach 34% from what previously only reached 12.3%. In this case, one of the causes of service that has not been maximized to the people of Langkat Regency is its mountainous area. Meanwhile, human resource training will be focused on developing technical expertise, both related to airway, pumps, and electricity. In addition, there is a future discourse to establish the Perumda Tirta Wampu Cooperative with the aim of helping provide savings and loans to those in need. In addition, there is a target in the future to be able to produce bottled water as a separate management unit at Perumda tirta Wampu which is able to contribute income to the Company.

Because the achievement of Perumda Air Minum Tirta Wampu only reached 11.5% for service to customers, Perumda Tirta Wampu has not been able to contribute local original income to Langkat Regency. In this case, Perumda Tirta Wampu must be able to contribute 85% of services to be able to contribute PAD to its region.

Target in terms of water quality provided to customers, Perumda Tirta Wampu tries to meet the wishes of people who do not want chlorine levels smelled in drinking water, even though the use of chlorine is actually to prevent the content of e-coli bacteria in drinking water. Another target in the future, it is expected that there will be many watertreatment plan developments for new customers, so as to maximize Perumda Tirta Wampu services to customers. The number of new target customers that can be processed by this company is due to the contour of the Langkat Regency area in the form of mountains so that it really needs drinking water supply services by public drinking water companies. Where in this case, drinking water can be easily accessed by the community, in addition to payments that are quite easy only through the Livin' application from Bank Mandiri, Post, and Regional Development Banks.

5 Conclusion

Based on research in the Klaten Regency area, Central Java, Perumda Tirta Merapi is said to be rich in spring water. Among the springs it is called umbul, so Klaten is also referred to as the area of 1,001 Umbul. Perumda Tirta Merapi, located in Klaten Regency, Central Java Province has served 10.5% of the total population of Klaten Regency. Meanwhile, research in the area of Langkat Regency, North Sumatra, in Perumda Tirta Wampu is needed in meeting the drinking water needs of the residents of Langkat Regency. Meanwhile, Perumda Tirta Wampu can cover 12.3% of services in Langkat. Both Perumda Tirta Merapi and Perumda Tirta Wampu often receive customer complaints about clean water services related to pipe leaks. Perumda Tirta Merapi targets future investment costs to expand service coverage to all

regions in Klaten Regency. Similarly, Perumda Tirta Wampu has a target to achieve 34% of services from what was only 12.3% for the entire area of Langkat Regency.

From this research, it is suggested that there is strong coordination between units in the Tirta Merapi and Tirta Wampu Public Drinking Water Companies, so that the targets that have been set previously can be achieved. For future research, further studies need to be carried out on the contribution of non-financial performance to the financial performance of the Tirta Merapi Drinking Water Company and the Tirta Wampu Drinking Water Company, as well as other Drinking Water Companies in Indonesia.

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