

Public Satisfaction on Water Utility Services in Makassar Urban Community

Hamsinah Djaing¹, Sangkala², Muhammad Rusdi³, Andi Ahmad Yani⁴

¹²³⁴Faculty of Social and Political Science, Hasanudin University
¹hamsinahdjaing@gmail.com ²sangkalarewa@gmail.com ³rusdi.uh1970@yahoo.com
⁴aayani@unhas.ac.id

Recieved: March 3 2020; Revised: April 17 2020; Accepted: May 4 2020

Abstract: Water utility service is a fundamental service in urban society. Urban citizens expect a high quality of service that made the service provider company should be responsible to provide it. This study aims to examine service quality of water utilizes services which are delivered by the Regional Water Supply Company (RWSC) in the City of Makassar, Indonesia. The method used in this research is the quantitative method through a customer satisfaction survey. The research conducted in the Regional Water Supply Company (RWSC) of Makassar, precisely in four regions. The study employs a stratified sampling method based on regions and the number of the population is 163,549 customers. This study applies 95 percent and margin error is 5 percent which means the number of samples is interviewed not lower than 384 respondents. The data was collected through face to face interviews with questionnaires. The data obtained from the field is processed using a technical analysis of descriptive statistical data. The result shows that the customers of water utility services have moderate satisfaction where technical services are far better than non-technical services.

1

Introduction

The concept of good corporate governance has been known over the past two decades, the issue of good corporate governance is increasingly aggressive to be enforced. This is due to the dynamics of change that require a more efficient company on the one hand but the other hand still able to gain profits that continue to increase.

One effort to maintain and even a sustained increase in corporate profitability is only when the quality of service provided by the company that is viewed by its customers as satisfying, even exceeding consumer expectations. The Regional Water Supply Company (RWSC) of Makassar City in daily activities using the pattern and ways of business management in running the company.

But one differentiator compared with other companies is the majority shareholders of the RWSC of Makassar owned by the government. The government established this company as a form of government responsibility in providing basic services to the

DURNAL OF GOVERNANCE

community, especially in the provision of clean water. The hope is only one so that the basic public services that become the responsibility of the city government can be held properly and more optimally through the RWSC of Makassar.

The concept of public service is a very simple concept that is only in the provision of services. The recipients of the services only want to be treated appropriately by the needs they need for public service (Dwiyanto, 2002). This is difficult for service providers who make stains in the implementation of public services.

The public service provided by the government, in this case, the RWSC is a weakness so that it has not been able to meet the quality of service expected by the community, despite various improvement efforts. It is marked by the existence of various public complaints submitted through the mass media, so it can cause a bad image of the performance of the RWSC. Given the government's primary function is to serve the community, the government should continue to improve the quality of services, especially in the provision of clean water.

One effort to improve the quality of public services, as mandated in the Law of the Republic of Indonesia Number 25 Year 2009 on public services, needs to prepared index of community satisfaction benchmark as а to assess the performance of public services. Besides, the data of the community satisfaction index will be an assessment material to the service that still needs improvement and becomes the driving force of every unit of a service provider to improve the quality of service.

Satisfaction or dissatisfaction itself can be conventionally conceived as the difference between expectation and perceived performance Oliver (1996). This approach confirms that when the performance of an attribute increases greater than the expectation of the attribute, then the satisfaction will increase.

Kotler and Keller (2006) state customer satisfaction is the level of one's feelings after comparing perceived performance expectations. with In addition, Tse and Wilton (1988) argue that satisfaction or dissatisfaction is when the customer's response to the evaluation of the perceived mismatch between previous expectations and the actual performance of the perceived product after its use. As Blackwell et al. (2006) say customer satisfaction is represented evaluation where the chosen alternatives at least deliver the same results or exceed customer with the expectations, while dissatisfaction arises if the results obtained do not meet customer expectations. Also, in more specific perspective, Lovelock (1992) cited by Widodo (2001) suggests five principles that must be considered for public servants, so that the quality of service can be achieved, including:

- 1. Tangible, such as physical ability, equipment, personnel, and material communication.
- 2. Reliable, the ability to form the promised service appropriately.
- 3. Responsiveness, have a sense of responsibility for the quality of service.
- 4. Assurance, knowledge, behavior, and ability of employees



5. Empathy, individual attention to the customer.

Besides. water utilities and sanitation services are basic services that must be provided by the government by ensuring all citizens can access it with good quality. To ensure water and sanitation services, based on the National Policy on the Development of Community-Based Water Supply and Environmental Sanitation (WSES), the Government of Indonesia decentralize water and sanitation management to local at the district governments level. However, according to McIntosh (2014) there are no policies that consolidate water policies in urban areas.

Policies such as Government Act 16/2005 and Ministerial Decree 23/2006 focus more on the development of the water supply system and the application of tariffs. This condition generates lack of quality in water utilities and sanitation management in the urban community. According to data from Water.org states that there are about 28 million Indonesian citizens are difficult to access safe water and nearly 71 million experience low quality of sanitation facilities.

Several studies have been conducted relating to water utility services in urban areas (Rizani, 2010; Apriyana, 2010; Awaluddin and Setiawan, 2014: Yuliani 2012: Natalia. and Rahdriawan, 2014; Astuti, 2014; and Survani, 2017). Some studies which were conducted by Astuti (2014) in Sangata City, Suryani (2017) in Tarakan City, Natalia (2014) in Malang City and Rizani (2010) in Semarang City indicated that the low quality of water utilities services in urban areas is due to the management of regional water utilities that are not responsive in dealing with customer complaints.

In a more specific analysis by Rizani (2010) study which shows the large disparity in water utility services for urban poor groups. This group is vulnerable having lack of access to sanitation and clean water services. However, other studies show good quality water utility services in urban areas (Aprivana, 2010: Awaluddin and Setiawan, 2012; Yuliani and Rahdriawan, 2014). One of the factors that contributed to the improvement in the quality of the service, based on Apriavana (2010) and Yuliani and Rahdriawan (2014) studies, was the active involvement of the community in ensuring the quality of water received by customers following with good standards.

Based on above discussion, this study attempts to measure quality of services in water utilities services in Makassar City as urban society. This study provides comprehensive approach which not only measure delivery service quality also technical services which but provided by RWSC.

Methods

Customer satisfaction survey on service quality of RWSC was conducted in 4 regions of Makassar Regional Water Supply Company (RWSC) covering zone 1 to zone 43. This research was conducted for 3 months, starting from January to March 2016. Although this study was conducted in 2016, the authors argue that this study is still relevant which contributes to the discourse of public service studies in the urban areas, particularly in the water utility service

.....

sector. Also, this study provides a new approach that not only measures service satisfaction in the managerial (nontechnical) aspect but also the technical component of services.

Data collection used in this research is by conducting direct interviews with customers based on the questionnaires. Sampling is randomly stratified. The frame population of this study is all costumers of Makassar RWSC which is 163,549 customers.

The study employs a stratified sampling method according to the zone of services. According to Slovin's formula based on confidence level is 95 percent and margin error is 5 percent, the number of samples should be 384 respondents. This study successfully interviewed 400 respondents.

Based on two categories of questions in the questionnaire, it is analyzed in two types of data ie technical service data and nontechnical service data. The collected data is processed by using descriptive statistical data analysis. This analysis technique is a frequency crossable measurement in analysis. Furthermore, the average analysis method of the respondent's answer is used in each question category.

Result and Discussion

Customer satisfaction in water services in the urban communities is one of the focuses on serving the local government. Water is the main need of all communities and the government is responsible for ensuring the quality and quantity of water utility services to all communities. This study conducted a customer satisfaction survey of water



utility services in Makassar City by dividing two service categories.

The first category is technical services that include the quantity and quality of water received by customers with a focus on clarity, odor, taste, and water pressure both during the rainy season and the dry season. The second service category is non-technical which focuses on complaint, installation, and payment services at RWSC Makassar City service offices.

Water utility services are divided into 4 regions to facilitate the management and maintenance of water installations that are built to serve all areas of Makassar. Each region serves several service zones. In the next section, the author will explain the survey results in each region and the final section will close the analysis of all regions that cover all City of Makassar's.

a. Region 1

From the research results based on 10 indicators of technical aspect there are 2 indicators which according to "verv satisfied" customers are ie indicators of water continuity assessment in the rainy season (index 4.26) and indicators of the taste of water odor in the dry season. While there are 5 assessment indicators according to customer "satisfied".

While the technical indicator that gets the lowest rating among the ten indicators is the water pressure in the dry season (2.53). This indicates that during the dry season the water pressure felt by the customer still needs to be improved so that the future of customer assessment can change for the better. For more information can be seen in table 1 below:

T 1 ¹ .	Per	cception of I	Respondent	ts Satisfacti	on	– Indev
Indicators	Very Satisfied	Satisfied	Quite Satisfied	Not Satisfied	Very Not Satisfied	- Index
Continuity of water in rainy season	61.04	22.08	7.79	3.90	5.19	4.26
Quantity of water in rainy season	45.45	36.36	7.79	9.09	1.30	4.13
Water clarity in rainy season	16.88	42.86	28.57 11.69		0.00	3.62
Taste and water odor in rainy season	46.75	31.17	16.88	3.90	1.30	4.16
Water pressure in rainy season	22.08	38.96	22.08	6.49	10.39	3.53
Continuity of water in dry season	16.88	12.99	25.97	27.27	16.88	2.84
Quantity of water in dry season	11.69	37.66	15.58	25.97	9.09	3.16
Water clarity in dry season	11.69	55.84	23.38	5.19	3.90	3.64
Taste and water odor in dry season	58.44	22.08	10.39	6.49	2.60	4.23
Water pressure in dry season	7.79	20.78	27.27	6.49	37.66	2.53

Table 1 Level of Customers Satisfaction in Technical Aspects of Region 1

Source: obtained from primary data

5

The customer's assessment is related to the nontechnical satisfaction level indicator (see table 2) consisting of 15 indicators. The survey results show that the fifteen assessment indicators

related to nontechnical assessment in general are "satisfied" by the customer. This means that the average customer rating on non-technical services still needs to be improved.



IOURNAL OF GOVERNANCE

	Pe	Perception of Respondents Satisfaction							
Indicators	Very Satisfied	Satisfied	Quite Satisfied	Not Satisfied	Very Not Satisfied	Index			
Disciplinary of Service Officers	1.30	11.69	70.13	16.88	1.30	2.97			
Responsibilities of Service Officers	0.00	20.78	67.53	11.69	0	3.09			
Ability of Service Officers	1.30	35.06	54.55	9.09	1.30	3.29			
Courtesy and Hospitality of Service Officers	3.90	37.66	55.84	2.60	3.90	3.43			
Ability to seek, receive, and reveal information	3.90	22.08	54.55	14.29	5.19	3.05			
Fairness of Service	0.00	31.17	53.25	15.58	0	3.08			
Fairness of Cost	1.30	35.06	46.75	15.58	1.30	3.14			
Environmental Comfort	2.60	35.06	49.35	12.99	0	3.27			
Security Service	5.19	41.56	51.95	1.30	0	3.51			
Service Procedures	5.19	18.18	49.35	27.27	0	3.01			
Terms of Services	1.30	25.97	54.55	18.18	0	3.05			
Certainty of Service Officers	0.00	24.68	57.14	16.88	1.30	3.04			
Certainty of Service Charges	0.00	28.57	35.06	35.06	1.30	2.91			
Certainty of Service Schedules	2.60	10.39	53.25	29.87	3.90	2.78			
Speed of Service	0.00	11.69	59.74	28.57	0	2.83			

Table 2Level of Customers Satisfaction in Nontechnical Aspects of Region 1

b. Region 2

In table 3, it can be seen that from ten indicators of customer satisfaction level, taste and smell of water in the rain season (4.31) or with a "very satisfied" rating. It means that even during the rainy season the water will be polluted with rainwater, but customers feel that during the rainy season it is very satisfied with the quality of the RWSC.



	D	arcontion of	Responden	te Satisfacti			
Indicators	Very		Quite	Not	Very Not	Index	
	Satisfied	Satisfied	Satisfied	Satisfied	Satisfied		
Continuity of water in rainy season	51.61	19.35	8.06	4.84	16.13	3.85	
Quantity of water in rainy season	46.77	29.03	12.90	4.84	6.45	4.05	
Water clarity in rainy season	45.16	29.03	12.90	12.90	0	4.06	
Taste and water odor in rainy season	56.45	27.42	8.06	6.45	1.61	4.31	
Water pressure in rainy season	29.03	46.77	8.06	6.45	9.68	3.79	
Continuity of water in dry season	33.87	1.61	8.06	22.58	33.87	2.79	
Quantity of water in dry season	22.58	16.13	32.26	12.90	16.13	3.16	
Water clarity in dry season	43.55	17.74	27.42	9.68	1.61	3.92	
Taste and water odor in dry season	46.77	25.81	22.58	3.23	1.61	4.13	
Water pressure in dry season	20.97	27.42	30.65	8.06	12.90	3.35	

Table 3Level of Customers Satisfaction in Technical Aspects of Region 2

The customer's assessment of taste and water odor indicators in the dry season (4.13), rainy season rainwater (4.05), rainy season water quantity (4.05), dry season water clarity (3.16), rainy season continuity (3.85), get an assessment of satisfied customers, followed by dry season water pressure indicator (3.35), dry season water quantity (3.16), and dry season water demand (2.79) rated by the customers are on a satisfactory value scale.



	Р	erception of	Responden	ts Satisfactio	on	
Indicators	Very Satisfied	Satisfied	Quite Satisfied	Not Satisfied	Very Not Satisfied	Index
Disciplinary of Service Officers	0	33.87	48.39	16.13	3.2	3.15
Responsibilities of Service Officers	0	35.48	50.00	14.52	1.6	3.21
Ability of Service Officers	0	40.32	48.39	11.29	0	3.29
Courtesy and Hospitality of Service Officers	1.61	35.48	51.61	9.68	4.8	3.26
Ability to seek, receive, and reveal information	0	38.71	54.84	4.84	0	3.31
Fairness of Service	0	38.71	45.16	11.29	4.8	3.18
Fairness of Cost	0	48.39	33.87	12.90	1.6	3.25
Environmental Comfort	0	46.77	50.00	3.23	3.2	3.44
Security Service	0	53.23	43.55	3.23	0	3.50
Service Procedures	1.61	38.71	51.61	8.06	0	3.78
Terms of Services	0	45.16	48.39	6.45	0	3.39
Certainty of Service Officers	0	43.55	40.32	12.90	0	3.24
Certainty of Service Charges	0	50	32.26	11.29	4.8	2.26
Certainty of Service Schedules	0	19.35	50.00	27.42	6.5	2.85
Speed of Service	0	35.48	25.81	33.87	0	2.92

Table 4Level of Customers Satisfaction in Nontechnical Aspects of Region 2

Assessments relating to aspects of customer satisfaction especially from non-technical aspects can be concluded that customers provide ratings with a "fairly satisfied" rating. This means that the level of customer satisfaction from non-technical aspects in general still require improvement. This implies that



RWSC management is still among the non-technical indicators of RWSC that need improvement in order to achieve satisfaction level from customers in region II, especially the lowest indicator of satisfaction from customers ie service cost certainty. Indicators of certainty of the cost of this service are the principle in Djaing, Sangkala, Rusdi and Yani, Public Satisfaction on Water Utility Services in Makassar Urban Community

the organization especially in the field of public services because if there is no will reduce certaintv it customer confidence and further will harm the organization.

Region 3 C.

Table 5 shows that customer satisfaction in region 3, especially the assessment related to technical aspects, has variations in the assessment. The best judgment is given by the customer on the taste and water odor in the rainy season (4.42). Customers feel that although the rainy season, the water production of RWSC of Makassar felt by the customer has met their expectations. The secondhighest rating is the quantity of water in the rainy season (4.39).

This assessment deemed is reasonable because the raw materials of water for processed and produced to be feasibly consumed by customers are sufficiently available. The next third

appraisal that customers find most satisfying is the taste and smell of water in the dry season (4.37). This means that both the rainy season and the dry season taste and the smell of water produced by the RWSC remain consistent taste and smell so that it is viewed by the customer very well.

Another indicator that the customer considers satisfied is four indicators. These indicators are indicators of water continuity in the dry season (4.17), water quantity in the dry season (3.85), dry season water clarity (3.62), and water clarity in the rainy season (3.54).

The four indicators mentioned above are satisfactory by the customer does not mean that the management feels no need to be concerned, but the management should be kept in the future so as not to stop at the level of satisfaction but increased to the level of satisfaction.

	Perception of Respondents Satisfaction						
Indicators	Very Satisfied		Quite Satisfied	Not Satisfied	Very Not Satisfied	Index	
Continuity of water in rainy season	78.05	2.44	5.69	8.13	5.69	4.39	
Quantity of water in rainy season	51.22	25.20	4.07	15.45	4.07	4.04	
Water clarity in rainy season	3.25	67.48	9.76	19.51	0	3.54	

Table 5 Level of Customers Satisfaction in Technical Aspects of Region 3



Taste and water odor in rainy season	52.85	40.65	4.07	0.81	1.63	4.42
Water pressure in rainy season	1.63	7.32	5.69	23.58	61.79	1.63
Continuity of water in dry season	74.80	0	3.25	11.38	10.57	4.17
Quantity of water in dry season	46.34	21.95	6.50	20.33	4.88	3.85
Water clarity in dry season	6.50	68.29	6.50	17.89	0.81	3.62
Taste and water odor in dry season	52.85	37.40	5.69	2.44	1.63	4.37
Water pressure in dry season	0.81	2.44	10.57	24.39	61.79	1.56

Journal of Governance Volume 5, Issue 1, June 2020

Source: obtained from primary data.

If the overall indicator of customer satisfaction from the technical side is averaged then the level of satisfaction is at number 3.56 or on the scale of "satisfied". This means that although overall customers judge satisfaction indicators from the technical side is satisfied but there are still many customers who feel not very satisfied. Therefore, the management of RWSC in the future should continue to make every effort to make improvements, especially on the indicators that get very dissatisfied judgments namely the water pressure in both the dry season and the rainy season. Assessment from nontechnical customers shows various assessments. The diversity of values from these customers can be grouped into two major groups ie groups categorized as satisfied and satisfied scales. When compared to customers who

come from region 1, the customer in region 3, especially on the assessment of customer satisfaction from the nontechnical side 13 indicators are categorized as satisfied, and 2 groups that assess enough.

This means that in general, the customers in Region 3 are satisfied with the services provided by the RWSC. But that does not mean it is good enough because it is free from any bad judgment, but it still needs improvement because although the majority who are satisfied but not yet achieved the assessment is very satisfied. Therefore, the value is given by the customers when averaged only gets the number 3.61 or scale "satisfied". Of course, with the average value obtained from the RWSC is still working hard to make improvements with full employee involvement.



	P	erception of	Responden	ts Satisfactio	on	
Indicators	Very Satisfied	Satisfied	Quite Satisfied	Not Satisfied	Very Not Satisfied	Index
Disciplinary of Service Officers	0.81	76.42	13.82	8.13	0.81	3.68
Responsibilities of Service Officers	0	78.86	15.45	4.07	1.63	3.72
Ability of Service Officers	0.81	73.98	14.63	9.76	0.81	3.76
Courtesy and Hospitality of Service	0	78.86	18.70	2.44	0	3.76
Officers Ability to seek, receive, and reveal	0	52.85	46.34	0.81	0	3.52
information Fairness of Service	0	78.05	17.07	4.88	0	3.73
Fairness of Cost	0	73.17	21.95	4.07	0.81	3.67
Environmental Comfort	0	67.48	31.71	0.81	0	3.67
Security Service	0	72.36	26.83	0.81	0	3.72
Service Procedures	2.44	63.41	31.71	2.44	0	3.66
Terms of Services	0	78.05	20.33	1.63	0	3.76
Certainty of Service Officers	1.63	63.41	30.08	4.07	0.81	3.61
Certainty of Service Charges	0	76.42	13.01	9.76	0.81	2.65
Certainty of Service Schedules	0	66.67	21.95	10.57	0.81	3.54
Speed of Service	0.81	73.98	14.63	9.76	0.81	3.64

Table 6Level of Customers Satisfaction in Nontechnical Aspects of Region 3

d. Region 4

In Table 7, it is revealed that the average valuation given by customers in particular concerning customer ratings of technical aspects is 3.98 or equal to the "satisfied" level. This means that the ten indicators related to how customer satisfaction levels from the technical aspects still require improvement. Both when the dry season arrives and the rain season, all require careful attention.

Table 7 also revealed that among the ten indicators of customer ratings related to technical aspects, taste and



water odor indicators in the dry season is the highest score given by customers with the number 4.47 or equal to the scale of "very satisfied", followed by indicators of taste and the smell of water in the rain season (4.44) and the water continuity in

the rainy season (4.44). In addition to these three indicators, there is also an indicator that is considered very satisfied (4.29) that is the water quantity indicator in the rainy season. The more detail, can be seen in tabel 7 below:

	Pe	erception of	Responden	ts Satisfactio	on		
Indicators	Very Satisfied	Satisfied	Quite Satisfied	Not Satisfied	Very Not Satisfied	Index	
Continuity of water in rainy season	59.71	29.50	7.19	2.16	1.44	4.44	
Quantity of water in rainy season	41.01	48.92	8.63	1.44	0	4.29	
Water clarity in rainy season	21.58	50.36	15.11	12.95	0	3.81	
Taste and water odor in rainy season	66.19	17.99	9.35	6.47	0	4.44	
Water pressure in rainy season	15.11	48.92	29.50	4.32	2.16	3.71	
Continuity of water in dry season	46.76	33.09	11.51	4.32	4.32	4.14	
Quantity of water in dry season	32.37	54.68	10.07	1.44	1.44	3.15	
Water clarity in dry season	19.42	56.83	14.39	9.35	0	3.86	
Taste and water odor	66.91	19.42	7.91	5.76	0	4.47	
in dry season Water pressure in dry season	8.63	47.48	33.09	5.76	5.04	3.49	

Table 7Level of Customers Satisfaction in Technical Aspects of Region 4

Source: obtained from primary data.

Table 8 specifically shows the level of customer satisfaction from the nontechnical side, where there are 15 kinds of indicators, which is linked with assessment results from the customer it can be concluded that there are two groups of assessment results from customers. The first group is an indicator that is categorized by the customer with the predicate "satisfied". While the second group is assessed by the customers "quite satisfied". Among the assessment



indicators of this second group are service requirements (3.40), clarity of service personnel (3.37) and service personnel ability (3.37), service procedures (3.36), the discipline of service personnel (3.34), speed of service (3.22), ability to seek, receive, and convey information(3.19), and certainty of service schedule (3.17).

If both categories of assessment groups have been done by the customer

then it can be concluded that there are five indicators with satisfied assessment, and there are eight who stated quite satisfied.

When averaged from the overall assessment of customer, it can be concluded that customer satisfaction from the nontechnical side in region 4 is quite satisfied or with score 3.19. Details can be seen in table 8 below:

Perception of Respondents Satisfaction								
Indicators	Very	Satisfied	Satisfied	Quite Satisfied	Not Satisfied	Very Not Satisfied	Index	
Disciplinary Service Offic		0	52	83	3	1	3.34	
Responsibili of Service Officers	ities	1	68	65	4	1	3.46	
Ability of Se Officers	rvice	3	47	88	1	0	3.37	
Courtesy and Hospitality of Service Offic	of	8	97	34	0	0	3.81	
Ability to see receive, and reveal information		1	41	82	13	2	3.19	
Fairness of Service		0	52	86	1	0	3.37	
Fairness of (Cost	3	67	65	4	0	3.50	
Environmen Comfort	ıtal	2	63	73	1	0	3.47	
Security Ser	vice	0	0	76	63	0	3.45	
Service Procedures		2	49	85	3	0	3.36	
Terms of Services		2	53	82	2	0	3.40	

Table 8Level of Customers Satisfaction in Nontechnical Aspects of Region 4

Universitas Sultan Ageng Tirtayesa JOURNAL OF GOVERNANCE

Journal of Governance Volume 5, Issue 1, June 2020

Certainty of	2	54	77	5	1	3.37
Service Officers						
Certainty of	3	72	55	9	0	3.50
Service Charges						
Certainty of	0	35	94	9	1	3.17
Service						
Schedules						
Speed of Service	2	32	100	4	1	3.22

Source: obtained from primary data.

e. All Regions

This section explains the results of measurements of customer satisfaction in water utility services in Makassar City which covers all regions. Table 9 shows customer satisfaction on the technical factors of water services. Almost all indicators show high customer satisfaction, especially on the quality factor of water clarity both in the dry season and in the rainy season. However, there is one indicator that has a low satisfaction value according to respondents, namely water pressure in the dry season. This happens because the low availability of water in the dry season has an impact on the weak water pressure reaching the customer's homes.

	Ре	Perception of Respondents Satisfaction						
Indicators	Very Satisfied	Satisfied	Quite Satisfied	Not Satisfied	Very Not Satisfied	Index		
Continuity of water in rainy season	64.3	18.3	7.0	4.8	5.8	4.34 (very satisfied)		
Quantity of water in rainy season	46.0	36.0	7.8	7.8	2.5	4,15 (very satisfied)		
Water clarity in rainy season	18.8	51.0	15.5	14.8	0	3.73 (satisfied)		
Taste and water odor in rainy season	57.0	28.8	9.0	4.3	1.0	4.36 (very satisfied)		
Water pressure in rainy season	14.5	33.8	17.5	11.0	23.3	3.05 (satisfied)		
Continuity of water in dry season	47.8	14.3	11.0	13.8	13.3	3.69 (satisfied)		

Table 9Level of Customers Satisfaction in Technical Aspects of All Regions



Djaing, Sangkala, Rusdi and Yani, Public Satisfaction on Water Utility Services in Makassar Urban Community

Quantity of water in dry season	31.3	35.5	13.3	13.8	6.3	3.71 (satisfied)
Water clarity in dry season	17.8	54.0	15.8	11.3	1.3	3.75 (satisfied)
Taste and water odor in dry season	57.8	26.5	10.0	4.5	1.3	4.34 (very satisfied)
Water pressure in dry season	8.0	25.5	24.5	12.0	30.0	2.69 (not really satisfied)

Source: obtained from primary data.

Table 10Level of Customers Satisfaction in Nontechnical Aspects of All Regions

	Р					
Indicators	Very Satisfied	Satisfied	Quite Satisfied	Not Satisfied	Very Not Satisfied	Index
Disciplinary of Service Officers	0.5	43.8	46.0	9.0	0.8	3.34 (not really satisfied)
Responsibilities of Service Officers	0.3	50.8	41.5	6.8	0.8	3.46 (satisfied)
Ability of Service Officers	1.0	49.8	44.3	4.8	0.3	3.37 (not really satisfied)
Courtesy and Hospitality of Service Officers	3.0	61.0	33.0	2.8	0.3	3.81 (satisfied)
Ability to seek, receive, and reveal information	1.0	36.8	53.5	7.0	1.8	3.19 (not really satisfied)
Fairness of Service	0	49.0	43.8	6.5	0.8	3.37 (not really satisfied)
Fairness of Cost	1.0	53.5	37.0	7.3	1.3	3.50 (satisfied)
Environmental Comfort	1.0	50.3	45.3	3.5	0	3.47 (satisfied)

IOURNAL OF GOVERNANCE

Security Service	1.0	54.0	44.0	1.0	0	3.45 (satisfied)
Service						3.36 (not
Procedures	0.3	2.3	41.3	48.3	8.0	really satisfied)
Terms of						3.40 (not
Services	0.8	49.3	44.5	5.5	0	really satisfied)
Certainty of						3.37 (not
Service Officers	1.0	44.5	45.5	7.8	1.3	really
Certainty of						satisfied) 3.50
Service Charges	3	72	55	9	0	s.su (satisfied)
Certainty of						3.17 (not
Service Schedules	0.5	34.3	48.0	15.5	1.8	really satisfied)
Speed of Service						3.22
	0.8	38.5	44.8	14.8	1.3	(satisfied)

In Table 10 the focus is on the results of customer satisfaction assessments in the non-technical service category. Different from the technical category, this data shows a tendency for low customer satisfaction with this service. Table 10 shows five indicators that received satisfactory services namely "cost certainty", "reasonableness of costs", "service convenience", "service security" and "service speed". While five other indicators have not provided satisfactory services.

This study analyzes the quality of water utility services by measuring the service satisfaction of urban communities in Makassar City. Based on the national water utility management policy, the local government is authorized to manage water utility services in the hope that they will be more responsive in providing services. Besides, the majority of water utility management in each region in Indonesia is managed in the form of regional companies in which the majority of shares are owned bv local governments. The management of water utility services based on semi-private institutions aims to improve the effectiveness and efficiency of service to customers. The application of semiprivate institutions in the management of public services is in line with the recommendations of the New Public Management (NPM) approach in public management (See: Hood, 1991 and Hood, 1995).

The privatization of public services become а trend in public has administration in various countries. Studies conducted by Pérez-López et al. (2015) based on the application of privatization of public services in local governments in Spain shows the application of private management models in public organizations increases cost efficiency. Likewise, Alonso and Andrews (2015) study on prison



privatization in England and Wales shows improved performance. However, another study conducted by Alonso et al. (2015) related to the privatization of hospital services in Madrid did not find the impact of better management efficiency like the two previous studies. Accordingly, this study is expected to also contribute to the privatization discourse public of organizations to improve the efficiency and effectiveness of public management as promised by NPM supporters. In the study results section, we have elaborated on the satisfaction of the Regional Water Supply Company (RWSC) customers in Makassar in two main components namely technical and non-technical. In the technical component 10 variables measure the quality of technical services related to continuity, quantity, clarity, taste, and water pressure both in dry and rainy seasons. While in the non-technical component, the study examines 15 questions that measure the five main service standards, namely tangible, reliable, responsiveness, assurance, and empathy. When viewed by the service region, this study indicates that almost all zones tend to have good services in both technical and non-technical components. However, some customers in regions 1,2, and 3 have low satisfaction in nontechnical components, especially in terms of response delays, price certainty, service schedules. In the technical component, almost all regions experience problems with water pressure in dry season. This study indicates that water utility services in the urban areas of Makassar are slightly better by applying the privatization of public services. Even so, some issues have not been maximized in their services and thus require better

management improvement information to further enhance customer satisfaction.

Conclusion

Public services are the main task of the government in public management. One important public service for urban communities is water utility services. Several studies related to the quality of water utility services in urban areas show various results. some urban governments can provide good water utility services for their citizens and in some cases other urban governments have failed to provide better services. This data supports the McIntosh study (2014) which states there policy consolidation in no the is management of water utilities and sanitation services in urban areas.

This study measures the customer satisfaction of the Regional Water Supply Company (RWSC) of Makassar based on two main components. The first component is related to technical service standards for water utility management. The second component is non-technical which is a public service management standard. This study indicates that Makassar customers' water utilities have a high level of satisfaction in both components. However, several factors that have a low value are of concern to RWC to evaluate their service standards so far. This study also shows that the privatization of public services has a positive impact on the efficiency of public service management.

This study has two limitations that are expected to be considered for further research. The first limitation relates to the research methodology used by the study, which is to measure respondents' perceptions that are highly dependent on



their subjectivity or specific conditions at the time the survey was conducted. The limitations of the second study are related to the period of the implementation of this study conducted in 2016 which allows a change in the quality of customer satisfaction in the last three years. Further studies are needed to assess the service satisfaction of citizens in urban areas by considering the behavior factors of service provider employees in building personal communication and trust with customers.

About Authors

Hamsinah Djaing is an Associate Department Professor The at of Administrative Science, Hasanuddin University. Her researches mainly focus public services, gender, and on development and public organization issue.

Sangkala is a Professor on public management at The Department of Administrative Science, Hasanuddin University. His research interests relate to public management, knowledge management, and performance management.

Muhammad Rusdi is an Associate Professor at The Department of Administrative Science, Hasanuddin University. His researches mainly focus on public administration, public policy, and public organizations.

Andi Ahmad Yani is a senior lecturer at The Department of Administrative Science, Hasanuddin University. His researches mainly focus on public service, citizenship, nonwestern public administration, and postconflict governance.

Acknowledgments

The authors thank the Regional Water Supply Company (RWSC) City of Makassar for providing data and allowing



researchers to conduct a field study to their customers. The authors also thank all research team members who are students of Department of Administrative Science, Hasanuddin University. Lastly, the authors appreciate suggestions and comments from blind reviewers to improve this article.

References

- Alonso, José M.; Clifton, Judith; Díaz-Fuentes, Daniel (2015) The impact of New Public Management on efficiency: An analysis of Madrid's hospitals, Health Policy, Vol. 119 (3),pp. 333-340
- Alonso, José M. and Andrews, Rhys (2015) *How Privatization Affects Public Service Quality: An Empirical Analysis of Prisons in England and Wales, 1998–2012,* International Public Management Journal, Vol. 19 (2), pp.235-263
- Apriyana, Prima (2010) Evaluasi Kinerja Pelayanan Air Bersih Komunal di Wilayah Pengembangan Ujung Berung Kota Bandung, Journal of Regional and City Planning Vol 21 (2), pp; 95-110
- Astuti, Novitri (2014) Penyediaan Air Bersih Oleh Perusahaan Daerah Air Minum (PDAM) Kota Sangatta Kabupaten Kutai Timur, e-Journal Administrasi Negara, Vol. 3(2), pp. 678-689
- Awaluddin, Ishak and Setiawan, Margono (2012) Pengaruh Kualitas Pelayanan terhadap Kepuasan, Nilai. Kepercayaan dan Loyalitas Pelanggan Tangga Rumah (Perusahaan Daerah Air Minum Kota Kendari), Jurnal Aplikasi Manajemen, Vol. 10(4), pp. 733-740
- Blackwell, R. D., Miniard, P. W., and E., James (2006) *Consumer Behaviour*,

Djaing, Sangkala, Rusdi and Yani, Public Satisfaction on Water Utility Services in Makassar Urban Community

Mason: Thomson Business and Economics

- Dwiyanto, A. (Eds.) (2002) *Reformasi Birokrasi Publik di Indonesia*, Yogyakarta: Pusat Studi Kependudukan dan Kebijakan UGM
- Hood, Christopher (1991) *A Public Management for All Seasons ?*, Public Administration Vol. 69, pp. 3-19
- Hood, Christopher (1995) *Contemporary Public Management: A New Global Paradigm*, Public Policy and Administration Vol. 10 (2), pp. 104-117.
- Ibrahim, A. (2008) *Theories and Concepts* of *Public Services and Implications*. Bandung: Mandar Maju
- Irawan, H. (2004) *10 Principles of Customer Satisfaction*. Jakarta: PT Alex Media Komputindo
- Kotler, P. and Keller, K. (2006) *Marketing Management*. Upper Saddle River: Prentice-Hall
- McIntosh, Arthur C. (2014) Urban Water Supply and Sanitation in Southeast Asia A Guide to Good Practice, Manila: Asian Development Bank
- Natalia, Benita Merry (2014) Implementasi Program Zona Air Minum Prima untuk Memenuhi Kebutuhan Air Minum Masyarakat (Studi Pada PDAM Kota Malang), Jurnal Administrasi Publik Vol 2 (1), pp. 11-15
- Oliver, R.L. (1996) Satisfaction: A Behavioural Perspective on the Consumer. Boston: McGraw-Hill
- Pérez-López, Gemma; Prio, Diego; Zafra-Gómez, José L. (2015) Rethinking New Public Management Delivery Forms and Efficiency: Long-Term Effects in Spanish Local Government, Journal of Public Administration

Research and Theory, Vol. 25 (4)pp. 1157–1183

- Priyanto, A. (2006) *Measuring the Quality* of Public Services. Makassar: In-Trans
- Ratminto and Septi, A. (2015) *Service Management*. Yogyakarta: Pustaka Pelajar
- Rizani, Muhammad D. (2010) Rendahnya Tingkat Pelayanan Air Bersih Bagi Masyarakat (Baca : Masyarakat Miskin) Kota Semarang. Tatal Jurnal Teknik, Vol. 5(2), pp. 88-100
- Saputro, N. (2000) Measurement of Service Quality of Regional Water Companies: Case Study of PDAM Kabupaten Bandung Cimahi Branch. Central Library of Gunadarma University
- Suryani, Elis (2017) Kualitas Pelayanan Air Bersih di Perusahaan Daerah Air Minum (PDAM) Kota Tarakan. Thesis Master, Universitas Terbuka.
- Tjiptono, F. (2011) *Service Management*. Yogyakarta: Andy
- Tse, D.K. and Wilton, P.C. (1988) *Models* of Consumer Satisfaction Formation: An Extension. Journal of Marketing Research, 25, 204-212
- Widodo, J. (2001) Good Governance; Telaah dari Dimensi Akuntabilitas dan Kontrol Birokrasi pada Era Desentralisasi dan Otonomi Daerah, Surabaya: Insan Cendekia.
- Yuliani, Yani and Rahdriawan, Mardwi (2014) *Kinerja Pelayanan Air Bersih Berbasis Masyarakat di Tugureho, Kota Semarang,* Jurnal Pembangunan Wilayah dan Kota, Vol. 10 (3), PP 248-264

