



CAPABILITY OF METRO COTABATO WATER DISTRICT IN THE DELIVERY OF WATER SERVICES

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Abstract

This study was conducted to assess and evaluate the level of capability of Metro Cotabato Water District in providing good services to its concessionaires.

Specifically, this study aimed to determine the extent of capability of Metro Cotabato Water District in the delivery of water services in terms of manpower, infrastructure and water facilities, capacity of water supplies, application process, installation, repair, and maintenance of pipes, and water distribution to household in MCWD service area.

This study used descriptive design. Fifty five (55) respondents were randomly chosen wherein thirty (30) came from concessionaires of Metro Cotabato Water District from different service areas and twenty five (25) employees from MCWD specifically assigned in the Engineering Department and Administration Services Department.

The findings of the study resulted into the capability of MCWD in the delivery of water services which were described by the respondents as “agree” and “moderate”. This indicates that the conditions were observed to a greater extent.

The recommendation were mainly about the additional water sources to meet the water demand of the growing population, improvement of the equipment and billing system, and accessibility of water meters to households.

Keywords: Delivery of Water Services, Capability, Water District, Metro Cotabato

INTRODUCTION

The statement “Water is life” is known by many. Water is an essential resource for life on earth. It provides habitat for many organisms and necessary for sustaining human civilization. Water is one of the most important substances on earth that sustains life. Its utilization can be categorized into industrial, agricultural and domestic. According to Pielou (1998), water is the principal source for the economy of a country and it has significance in the climate regulation of that country (Richardson, 2017).

A minimum of 7.5 liters per capita per day will meet the requirements of most people under most conditions but this water should be of quality. However, in emergency situations, the required minimum amount is fifteen (15) liters per capita per day. Twenty (20) liters per capita per day is the higher quantity needed by a person to be assured of taking care of the basic hygiene needs and basic food hygiene (World Health Organization, 2013). Butler stated in his blog that the world will be needing a 19% increase in agricultural water consumption in meeting the demands of estimated 9 billion people that will be on earth in 2050 (“20 Surprising Facts on Water Consumption”). The global lack of abundance of usable water is an issue that presents a dangerous problem to our future. Limited water supply is a major constraint on the development and agricultural activities in many parts of the world.

Meanwhile, the Metro Cotabato Water District (MCWD) has a vision to be a water utility responsive and committed to provide adequate, safe and affordable supply of potable water to its

concessionaires. It aspires to attain corporate viability, maintain organizational efficiency and pursue technological dynamism and consciousness in environmental protection and to uphold a highly reliable system for the benefit of the populace within its service area (Aliuden, 2018). In its mission, MCWD's main focus is the quality of service to be delivered to the concessionaires.

In the present, the management has four (4) operating departments: Administrative Services, Finance Services, Commercial Services, and Engineering and Operations. These departments are continuously working hand-in-hand to achieve the vision and mission of MCWD.

Despite the unity and perseverance among the employees in each department of MCWD in achieving their vision and mission, there are still lapses and unwanted happenings that the management encounters. Complaints from different barangays and individuals are always present. Among the common problems are water low pressure in some areas, illegal connections, leaks and water losses, unnecessary water interruptions, and delayed project implementation of water systems, are expected to arise.

According to a study on understanding water issues and challenges in water service delivery, governance and accountability, human resources, lack of planning, and infrastructure are some of the major reasons for dissatisfaction of customers (Toxopeus, 2019).

In another study, significant problems and challenges include incompetent staff, financial sustainability of service providers, lack of service providers, and the problems of proper maintenance and sustainability of water resources lead the survey to result a low customer satisfaction in the water service delivery (Wellfield, 2011).

With this, the researcher come up with the idea of making an assessment on the capability of MCWD on the delivery of water services to its service area. This study intends to serve as a relevant information as recommendation for Metro Cotabato Water District for the future improvement to be more effective and efficient water utility rendering excellent service to the community.

METHODS

A descriptive quantitative method of research was utilized in this study. As defined by Robin Hubbard, PhD (2016), descriptive research is the collection of data describing some phenomenon that may or may not be quantifiable such as close-ended scales, open-ended survey questions, observation, and interviews. It is a scientific method which involves observing and describing the behavior of a subject without influencing it in anyway (Shuttleworth, 2008). This was also the appropriate method in the analysis and interpretation of the data on the level of capability of Metro Cotabato Water District in the water service delivery.

The respondents of the study were the 30 concessionaires of Metro Cotabato Water District and the 25 employees of MCWD who were assigned in the Engineering Department and Administrative Services Department. The respondents were randomly selected from the different barangays of Cotabato City and nearby Municipalities served by the MCWD during the academic year 2019-2020.

This study was conducted in Cotabato City where the MCWD is located. By virtue of Republic Act No. 2364 dated June 20, 1959, Cotabato City was created as chartered city. It is politically subdivided into thirty seven (37) barangays.

Cotabato City has a total land area of 176.0 square kilometers and with a population of 299,438 as of 2015 population census of Philippine Statistics Authority. Majority of the inhabitants of Cotabato City are Maguindanaoan, comprising of 66% of the city's population. There are sizable ethnic populations of Maranaos (8%), Tagalog (9%), Cebuano (8%) and Ilonggo (6%). The remainder of the population belongs to other ethnicities (e.g. Iranon, Tausug, Chavacano). The

main language is Maguindanao. Other languages spoken in Cotabato City are Cebuano, Ilonggo and Chavacano, spoken by both Christians and Muslims as well as Tagalog, Maranao, English and Arabic. The dialect evolved from Chavacano native to Cotabato City is called Cotabateño. Today, the majority of the city's population is Muslim, comprising about 80% of the population. Majority of the Muslims in Cotabato City are Sunnites and majority of Christians in Cotabato City are Roman Catholics. (https://en.wikipedia.org/wiki/Cotabato_City).

The study included some parts of Sultan Kudarat and Datu Odin Sinsuat Municipalities where Metro Cotabato Water District water sources are situated at the same time services are expanded.

RESULTS AND DISCUSSION

I. The Socio-Demographic Profile of the Respondents

Table 1. Frequency Distribution of the Respondent's Profile in terms of Age, Gender, Occupation and Address

	<u>MCWD Personnel</u>		<u>MCWD Concessionaires</u>	
	F	%	F	%
<u>Age</u>				
21-25	3	12	9	30.00
26-30	5	20	3	10.00
31-35	3	12	2	6.67
36-40	6	24	3	10.00
41-45	4	16	7	23.33
46-50	0	0	1	3.33
51-55	3	12	3	10.00
56-60	1	4	2	6.67
Total	25	100	30	100
<u>Gender</u>				
Male	17	68	14	46.67
Female	8	32	16	53.33
Total	25	100	30	100
<u>Position</u>				
Engineering	15	60		
Admin	10	40		
Total	25	100		
<u>Occupation</u>				
Gov't Employee			13	43.33
Self-Employed			9	30.00
Unemployed			8	26.67
Total			30	100
<u>Address</u>				
North	6	24	6	20.00
East	4	16	6	20.00
South	7	28	8	26.67
West	8	32	10	33.33
Total	25	100	30	100

Table 1 represents the distribution of age, gender, position/occupation, and address of the respondents. The first column contained the data for the MCWD Personnel. For the ages of the respondents, it showed that six (24%) of the respondents were within the age group of 36 to 40 years old. Five (20%) of the respondents belonged to ages 26 to 30 years old. Four (16%) of the

total respondents were at the ages 41 to 45 years old. Only three (12%) respondents were within the range of 21 to 25, 31 to 35, and 51 to 55 years of age. 1 respondent (4%) belonged to ages 56 to 60 years old. The oldest among the respondents was 57 years old and the youngest is 24 years of age. The mean of ages is 36.92 years old. The result implies that most of the respondents are matured and reliable in perceiving things.

In addition, the MCWD Personnel garnered 17 (68%) male respondents and 8 (32%) female respondents. 15 (60%) of these respondents were from Engineering and 10 (40%) were from Administration Department. The number of respondents in the north area is 6 (24%), in the east area was 4 (16%), in the south area was 7 (28%), and in the west area was 8 (32%). The data on MCWD Personnel showed that most of them were male who came from the technical personnel of engineering department.

In the second column, it revealed the data for MCWD Concessionaires. For the age distribution, it showed that nine (30%) of the respondents were within the age group of 21 to 25 year old. Seven (23%) of the respondents belonged to ages 41 to 45 year old. Three (10%) of the total respondents were at the ages 26 to 30, 36 to 40, and 51-55 year old. Only two (7%) respondents were in the range of 31 to 35, and 56 to 60 year of age. 1 respondent (3%) belonged to ages 46 to 50 year old. The oldest among the respondents was 57 years old and the youngest was 24 years of age. The mean of ages was 36.92 years old. The result implies that most of the respondents are matured and reliable in perceiving things.

On the other hand, the MCWD Concessionaires obtained the frequency of 14 (46.67%) male respondents and 16 (53.33%) female respondents. There were 13 (43.33%) of these respondents as government employee, 9 (30%) were self-employed, and 8 (26.67%) were unemployed. The number of respondents in the north area was 6 (20%), in the east area was 6 (20%), in the south area was 8 (26.67%), and in the west area was 10 (33.33%). The data on MCWD Concessionaires showed that males and females have almost the same number of respondents and most of them are government employee who usually pays the bill in a household.

II. Level of Capability of Metro Cotabato Water District in the Delivery of Water Services according to MCWD Personnel

Table 2, 3 and 4 present the extensiveness of the level of capability of Metro Cotabato Water District in the delivery of water services in terms of manpower, infrastructures and water facilities, and capacity of water supply respectively. The level of agreement of the respondents on each statement describes extensiveness of the MCWD capabilities.

Table 2 shows that all statements were described by the respondents as “moderate” with the means of 3.24 and 3.32. The indicator Statement 2 garnered a mean of 3.32 indicates that there were sufficient number of manpower in the construction to avoid the possible delay in the implementation of the projects. Moreover, the indicator statements 1, 2, 3, 4 and 5 have the same means of 3.24 which implied that there were sufficient number of manpower in the planning section. Technical personnel had undergone training and seminars for the improvement of their skills. High end equipment were provided and motivational incentives were given to all personnel.

Table 2. MCWD Personnel Evaluation of Adequacy and Capacity of MCWD Manpower

Indicators	Frequency				Mean	Description
	4	3	2	1		
1. Sufficient number of manpower in the planning section.	10	11	4	0	3.24	Moderate

2. Sufficient number of manpower in the construction section to avoid delay in the implementation of the projects.	10	13	2	0	3.32	Moderate
3. Technical personnel had undergone training and seminars for the improvement of their skills.	9	13	3	0	3.24	Moderate
4. High end equipment are provided to all personnel.	8	15	2	0	3.24	Moderate
5. Motivational incentives are given to all personnel.	8	15	2	0	3.24	Moderate
Overall Mean					3.26	Moderate

n = 25

Legends:	Scale	Mean Range	Description
	4	3.5 - 4.00	Very High
	3	2.5 - 3.49	Moderate
	2	1.5 - 2.49	Low
	1	1.0 - 1.49	Very Low

In general, the MCWD Personnel's capability obtained the overall mean of 3.26 which described by the respondents as "moderate". This implies that there is an extensive level of capability of Metro Cotabato Water District in the delivery of water services in terms of manpower.

Table 3. MCWD Personnel's Evaluation of Infrastructure and Water Facilities

Indicators	Frequency				Mean	Description
	4	3	2	1		
1. No leakages encountered on transmission lines and distribution lines.	3	11	11	0	2.68	Moderate
2. Plans and details are well designed in accordance with LWUA standards.	12	13	0	0	3.48	Moderate
3. Projects are implemented in accordance with the plan.	12	12	1	0	3.44	Moderate
4. Facilities at the pumping stations are well functioning.	18	6	1	0	3.68	Very High
5. No substandard materials are used during implementation.	16	9	0	0	3.64	Very High

Overall Mean	3.38	Moderate
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n = 25

Table 3 shows that two (2) statements were described by the respondents as “very high” and three (3) statements were described as “moderate”. Statements 4 and 5 garnered a mean of 3.68 and 3.64 respectively which indicates that the facilities at the pumping stations of MCWD are well functioning and no substandard materials are used during the implementation. Statements 1, 2, and 3 has a mean of 2.68, 3.48, and 3.44 respectively. These indicates that no leakages were encountered on transmission lines and distribution lines, plans and details were well designed in accordance with LWUA standards, and projects are implemented in accordance with the plan.

Generally, the overall mean of 3.38 which described by the respondents as “moderate” implies that there is an extensive level of capability of Metro Cotabato Water District in the delivery of water services in terms of infrastructure and water facilities.

Table 4. MCWD Personnel’s Evaluation of Capacity of Water Supply

Indicators	Frequency				Mean	Description
	4	3	2	1		
1. Computed volume for each household are estimated correctly.	12	13	0	0	3.48	Moderate
2. Sufficient pressure of water during peak hours.	5	13	6	1	2.88	Moderate
3. Water resources can accommodate the water supply needed by the current number of concessionaires.	7	11	7	0	3.00	Moderate
4. Projects future volume of water to be consumed by future number of population.	10	13	2	0	3.32	Moderate
5. Currently meets the water demand of the growing population.	5	13	7	0	2.92	Moderate
Overall Mean					3.12	Moderate

n = 25

The results reveal that all statements were described by the respondents as “moderate” with an overall mean of 3.12. Statement 1 garnered the highest mean of 3.48 which implies that computed volume for each household are estimated correctly. It followed by statement 4 which has a mean of 3.32 which projected that future volume of water to be consumed by future number of population are being projected. Statement 3 has a mean of 3.00 which indicated that water resources can accommodate the water supply needed by the current number of concessionaires. The statement 5 obtained the mean of 2.92 which stated that it currently meet the water demand of

the growing population. Lastly, the statement 2 got the least mean of 2.88 which indicated that there is a sufficient pressure of water during peak hours.

Generally, the overall mean of 3.12 which described by the respondents as “moderate” implies that there is an extensive level of capability of Metro Cotabato Water District in the delivery of water services in terms of capability of water supply.

III. Level of Capability of Metro Cotabato Water District in the Delivery of Water Services according to MCWD Concessionaires

Table 5, 6 and 7 present the extensiveness of the level of capability of Metro Cotabato Water District in the delivery of water services in terms of application process, installation, repair, and maintenance of pipes, and water distribution to household respectively.

Table 5. Concessionaires Evaluation of Application Process for Water Connection

Indicators	Frequency				Mean	Description
	4	3	2	1		
1. Information are provided clearly and understandably.	12	13	5	0	3.23	Moderate
2. Applications are processed efficiently.	8	20	2	0	3.20	Moderate
3. Front liners create a sound value formation in dealing with customers.	8	15	6	1	3.00	Moderate
4. Customer care and relations are emphasized.	8	18	3	1	3.10	Moderate
5. Front liners provide clear explanations on applicant's concerned issues.	12	12	5	1	3.17	Moderate
Overall Mean					3.14	Moderate

n = 30

Legends:	Scale	Mean Range	Description
	4	3.5 - 4.00	Very High
	3	2.5 - 3.49	Moderate
	2	1.5 - 2.49	Low
	1	1.0 - 1.49	Very Low

The data in table 5 shows that all statements were described by the respondents as “moderate” with a general mean of 3.14. Statement 1 obtained a mean of 3.23 which is agree that information are provided clearly and understandably. Statement 2 garnered a mean of 3.20 which was indicated that the applications were processed efficiently. The statement 5 got a mean of 3.17. This means that the front liners provided clear explanations on applicant's concerned issues. In addition, the statement 4 garnered a mean of 3.10 described that the customer care relations are emphasized. Further, the statement 3 revealed a mean of 3.00 which stated that the front liners create a sound value formation in dealing with customers.

In general, the Table 5 garnered the overall mean of 3.14 which was described by the respondents as “moderate” implies that there is an extensive level of capability of Metro Cotabato Water District in the delivery of water services in terms of application process.

Table 6. Concessionaires Evaluation of Installation, Repair, and Maintenance of Pipes

Indicators	Frequency				Mean	Description
	4	3	2	1		
1. Speedy inspection of the site after the application process.	8	18	4	0	3.13	Moderate
2. Immediate installation of water meter, pipes, and fittings after the inspection.	9	14	7	0	3.07	Moderate
3. Quick response of personnel during emergency repairs.	10	11	8	1	3.00	Moderate
4. Quick response of personnel during reported leakages on pipes.	8	15	5	2	2.97	Moderate
5. Main lines and distribution lines are inspected regularly.	11	9	6	4	2.90	Moderate
Overall Mean					3.01	Moderate

n = 30

Based on the result, table 6 shows that all statements were described by the respondents as “moderate” with a general mean of 3.01. Statement 1 got the highest mean of 3.13 which was agree that there is a speedy inspection of the site after the application process. Statement 2 garnered a mean of 3.07 which was indicated that there is an immediate installation of water meter, pipes, and fittings after the inspection. The statement 3 obtained a mean of 3.00, it described that there is a quick response of personnel during the emergency repairs. Furthermore, the statement 4 garnered a mean of 2.97 which was indicated that there is also quick response of personnel during reported leakages on pipes. In addition, statement 5 got the lowest mean revealed as 2.90 which was stated that the main lines and distribution lines are inspected regularly.

Finally, the MCWD’s Concessionaires’ capability garnered the overall mean of 3.01 which was described by the respondents as “moderate”. This implies that there is an extensive level of capability of Metro Cotabato Water District in the delivery of water services in terms of installation, repair and maintenance of pipes.

Table 7. Concessionaires Evaluation of Water Distribution to Household

Indicators	Frequency				Mean	Description
	4	3	2	1		
1. Water supply is sufficient most of the time.	10	15	5	0	3.17	High
2. Water meter connections are placed near the houses of the consumers.	9	18	1	2	3.13	High
3. Sufficient water pressure on the water faucets.	14	9	5	2	3.17	High
4. Provides odorless and colorless water at all times.	12	13	4	1	3.20	High

5. Provides tasteless water at all times.	10	15	4	1	3.13	High
Overall Mean					3.16	High

n = 30

Table 7 reflects the level of MCWD Concessionaires' capability in water distribution to household. It clearly shows that all statements were described by the respondents as "moderate" with the overall mean of 3.16. The statement 4 garnered the highest mean of 3.20 which was indicated that the MCWD provides odorless and colorless water at all times. Hence, statements 1 and 3 have the same mean of 3.17 which stated that there is a sufficient water supply most of the time and sufficient water pressure on the water faucets. On the other hand, the statements 2 and 5 obtain the same mean of 3.13 which was also indicated that water meter connections are placed near the houses of the consumers and MCWD provides tasteless water at all times.

To sum up it all, the water distribution to household garnered the overall mean of 3.16 which described by the respondents as "moderate". This implies that there is an extensive level of capability of Metro Cotabato Water District in the delivery of water services in terms of water distribution to household.

Summary of Tables

In this section, it summarizes the findings presented in tables 2 to 7 to provide comparative analysis of the responses from the MCWD personnel and concessionaire who served as respondents of this study.

Table 8 reflects the grand means of the MCWD Personnel and Concessionaires. The MCWD Personnel respondents garnered the grand mean of 3.25 and the MCWD Concessionaires got the grand mean of 3.10. Both were described as "moderate". This implies that more extensive service capability of the MCWD personnel than the MCWD concessionaires. This indicates that MCWD Personnel have a higher confidence in their performance in providing good service than the concessionaires receiving the good services. On the other hand, MCWD concessionaires are also satisfied with the service given by the MCWD.

Table 8. Summary of Means

Personnel Respondents			Concessionaire Respondents		
MCWD Service Capability	Overall Mean	Description	MCWD Service Capability	Overall Mean	Description
a) Manpower	3.26	Moderate	d. Application Process	3.14	Moderate
b) Infrastructure and Water Facilities	3.38	Moderate	e. Installation, Repair, and Maintenance of Pipes	3.01	Moderate
c) Capacity of Water Supply	3.12	Moderate	f. Water Distribution to Household	3.16	Moderate
Grand Mean	3.25	Moderate	Grand Mean	3.10	Moderate

As shown in the results of the computed mean, MCWD have sufficient number of personnel manning the planning and implementation of the projects with adequate training appropriate to their profession. The result also shows that the personnel are confident enough with

the services they are giving to the consumers by following the standard set by the Local Water Utilities Administration. Lastly, it illustrates that the technical personnel properly designs water systems in the MCWD service area to avoid water leakages, and to have enough pressure to be built up in each household.

On the other hand, MCWD concessionaires as the respondents also gave a favorable result to the set of questions given to them. The result explains that the concessionaires were satisfied by the services of MCWD in accommodating them in the district office for whatever purposes they intent. Also, the result shows that MCWD's response to emergencies were fast and the concessionaires see that pipes on water systems in the service area are properly maintained. Lastly, concessionaires also observes sufficient water supply to their households with a good quality of water.

IV. Problems encountered by Metro Cotabato Water District Personnel and Concessionaires

Table 9. Problems Encountered by MCWD Personnel

Problems and Challenges	F	Percentage	Rank
1. Water interruptions due to weather	18	72	1
2. Outdated materials and equipment that causes stoppage of producing water supply	5	20	4
3. Complaints on water interruptions	18	72	1
4. Water pollution and/or contamination	6	24	3
5. Insufficient water sources	11	44	2
6. Difficulty in finding future water sources	11	44	2

The statements 1 and 3 got the first rank which implies that most of the MCWD personnel encountered water interruptions due to weather and complaints on water interruptions. These was followed by statements 5 and 6 which tied as the second rank which states that MCWD personnel encountered insufficient water sources and difficulty in finding water sources. Next in rank was the statement 4 which is water pollution and/or contamination. Lastly, the problem on outdated materials and equipment that causes stoppage of producing water supply falls as the fourth rank.

Table 10. Problems Encountered by MCWD Concessionaires

Problems and Challenges	F	Percentage	Rank
1. Murky or unclear water	20	66.66	2
2. Water interruptions	24	80	1

3. Information regarding water interruptions don't reach the public	18	60	3
4. Unapproachable MCWD personnel	9	30	4
5. MCWD personnel requesting gratuity	3	10	5
6. Unaccommodated applicants due to high demand of water supply	9	30	4

As shown in the Table, problems encountered by the MCWD concessionaires experienced water interruptions which ranked first. Statement 1 falls as rank 2 wherein concessionaires experienced murky or unclear water. Next in rank was the statement 3 which says that information regarding water interruptions don't reach the public. Statements 4 and 6 falls as rank 4 stated that the problems they encountered were unapproachable MCWD personnel and unaccommodated applicants due to high demand of water supply. Hence, the statement 5 falls at the last rank which states that there are MCWD personnel requesting gratuity.

Summary of Findings

The following are the results of the study:

1. The demographic profile of the respondents in terms of age, most of them are matured and reliable in perceiving things. In terms of gender, the MCWD personnel outnumbered the females and the concessionaires outnumbered the males. Most of the respondents were in the engineering department and government employees. The respondents were residing at the North, East, South and West municipalities of MCWD.
2. The level of capability of MCWD personnel in the delivery of water services in terms of: manpower garnered the overall mean of 3.26, infrastructure and water facilities obtained the overall mean of 3.38, and water supply got the overall mean of 3.12. On the other hand, the MCWD concessionaires in application process got the overall mean of 3.14, installation, repair and maintenance of pipes obtained the overall mean of 3.16. All of these were moderately described.
3. The results on the comparative analysis of responses from the MCWD personnel and concessionaires obtained the grand mean of 3.25 and 3.10 respectively. Both were described as "moderate".
4. The problems encountered by the MCWD personnel were: water interruption due to weather and complains to water interruption ranked as number one (1) while the MCWD concessionaires was water interruption ranked as number one (1).

Conclusion

Based on the findings of the study, it is concluded that the capability of Metro Cotabato Water District in the delivery of water services to its service area is moderately observed. It is also concluded that the MCWD personnel have moderately fulfilled their services and MCWD concessionaires have received the services moderately from the water district.

Recommendations

Based on the foregoing findings and conclusion of the study, the following are recommended to attain the level of capability of Metro Cotabato Water District in the delivery of water services to its service area.

1. The MCWD management should focus on developing the skills of the younger employees by providing them trainings and seminars that is appropriate to their profession. These are

opportunities which motivates them to be a better employee and will contribute to a better water service provider.

2. MCWD should also continue on exploring additional water sources to meet the water demand of the growing population. It is also important to consider the quality of water comes from the sources by regularly checking the water quality especially on affected areas where water becomes murky or unclear.

3. The district should improve their equipment and technology such as leak detection procedure and billing system to avoid adding the paid monthly bill to the next bill. In order to reduce water leakages, Galvanized Iron Pipes are also highly recommended to be used in distribution lines that are located in busy roads. Dissemination of information especially during water interruptions shall also be regularly posted to avoid massive complaints from the consumers.

4. Water meters are suggested to be placed near the house of the consumers. The designers of the distribution lines should consider the placement of the water meters where it can be accessible to the owner.

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