

Assessment of Customer's Level of Satisfaction On Water Supply Service Delivery at Debre Markos Town: A Case of Debre Markos Town Selected Condominium Sites, Community Based Cross Sectional Study, Debre Markos Ethiopia

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Received: 06 March, 2024, Manuscript No. BEJ-24-128950; **Editor assigned:** 11 March, 2024, PreQC No. BEJ-24-128950 (PQ); **Reviewed:** 26 March, 2024, QC No. BEJ-24-128950; **Revised:** 06 May, 2024, Manuscript No. BEJ-24-128950 (R); **Published:** 14 May, 2024, DOI: 10.37421/2151-6219.2024.15.513

Supplementary

Annex 1: Information sheets

Questionnaire for sample condominium household respondents (Water Consumers)

Dear respondents: This questionnaire is prepared as an instrument to conduct academic research for the partial fulfillment of the degree of Master in Project Planning and Management from Department of Economics, College of Business and Economics, DMU. The main objective of this questionnaire is to get information about the socio-economic characteristics of households and the water supply service delivery opportunities of condominium housings in your area. The research aims to assess the challenges and opportunities of water supply service and water utilization, and customer satisfaction in Condominium housings at 'Hospital, Abayikuno and Getermenged sites. The information supplied by you will be held strictly confidential and is used for academic purpose. You will not be held responsible for anything arising thereof.

Title of the research project: Institution based cross-sectional study determine the level of Customers satisfaction on water supply service delivery at Debre Markos town selected condominium sites, Northwest Ethiopia, 2023.

Principal investigator: Netsanet Temesgen Ayenew (Msc student in PPM, Economics Department)

Name of the organization: Debre Markos University

Sponsor: Debre Markos University

Introduction

This information sheet is prepared with the aim of explaining the research project that you are asked to join by the group of research investigators. The main aim of the study is to determine the level of Customers satisfaction on water supply service delivery at Debre Markos town selected condominium sites.

You are kindly invited to take part in our project. If you are reluctant to participate you will have the full right to withdraw. All of your responses, your name and data taken from the chart are kept confidential by a coding system.

Risk and discomfort

You might be asked some questions in the intraoperative period times while your child is getting operated, you may not be comfortable and you might feel that this is not worth it. If you participate in this research you will give a valuable data for future scientific practice.

Incentive

You will not be given anything as a promotion in participating in this research.

Confidentiality

Except the principal investigator and data collectors, no one will have access to your collected data, name or anything taken from your chart. The data will be kept coded and locked with no labeling specifying you or anyone participating in the research.

Right to refuse

You have full right of refusing at or during the conduct of the research. You will not be benefited from or injured in any way by refusing to participate in the research. You can rejoin the research at any time when you feel comfortable in the intraoperative period. If you do not want to participate with this study, this will not have positive or negative impact on the care you will be provided during your stay here in our hospital

Annex 2: For more information

If you have anything that you want to get more information about it and you are interested to give any feedback, you can contact the people whom their address is described below.

Principal investigator

Netsanet Temesgen Ayenew: Department of Economics, College of Business and Economics, DMU.

Cell Phone: +2519 20 50 57 00, +2519 13 13 35 60, Email:Netsanettmsgn@gmail.com

Annex 3: Informed consent form

Written informed consent before conducting interview

Hello greeting, my name is _____.

I am a member of the research team, which is undergoing in this study, so I am kindly asking you some questions relevant to our study.

The purpose of this study is to assess the level of Customers satisfaction on water supply service delivery at Debre Markos town selected condominium sites. By participating in this research, you will contribute a valuable data for the future scientific practice in the study area. You will be asked the necessary information's by the data collectors to measure the level of Satisfaction on water supply service delivery and other correlated questions. Some data will be taken from you and your name, your responses or nothing describing you will be mentioned to anyone. Everything will be kept confidential; you will have the full right to refuse or not to participate in the research at any time you want. You will not be given any incentives or be benefited or injured in all ways. The results that we can find will be used as a base line data for further action plans to solve problems and for future scientific studies in the area. The interview will take maximum of 15 -20 minutes.

Do I have your permission to continue?

1. If yes, thank participant's _____ and continue to the next page.

2. If no, skip to the next participant.

Informed consent Certified by interviewer

Date of interview _____

Name of interviewer _____ Signature _____

Supervisor _____ Signature _____ Date of check
in _____

Debre Markos University
College of Business and Economics
Department of Economics

Information and voluntary request form

Research to study the level of stress and related factors of parents and guardians when children are operated on in Gondar University Hospital.

Introduction: The main purpose of this Research Explanation and Consent Form is to explain the nature of the research we are now asking you to participate in and to obtain your consent.

Principal researcher: Saberant Temesgen is a graduate student at the University of Gondar.

The purpose of the study: It is about the level of satisfaction of the customers about the water availability at the condominiums located in the city of Debre Markos. Therefore, studying these things scientifically is the main objective of this research.

Disadvantages of participating in the study: The only thing that you may harm or waste by participating in this study is that you will probably waste no more than 15-20 minutes of time to answer this data collection questionnaire. We think, we believe.

The significance of the study: You may not benefit directly by participating in this study, but the importance of studying this scientific research, which is the first of its kind in our university and in our country, will be significant. Furthermore, we firmly believe that the

results of the study will be used as a resource to reduce this painful level of stress and improve the service further by identifying the extent of the problems and identifying related causes.

Protection of the confidentiality of the information: - Any information you provide for the success of this study, as well as the child's medical records and other information, will be kept confidential; Apart from the fact that neither your name nor your identification number will be written, the paper on which you answered will be given its own secret code and will be kept only in the hands of the main researcher.

The right not to participate in the study: If you do not feel comfortable or do not participate in this research, you can stop at any time and do not answer some questions. We want to assure you that your refusal to participate will not affect your child's medical care or yours.

Are you willing to participate in the study?

1. Yes 2. I'm not

If you are willing to participate in the research study, thank them, read what is written below, and after confirming their willingness verbally, conduct the interview.

If they are not willing to participate, thank them and move on to another participant.

For more information, you can contact the principal investigator at the following address.

Name: Freedom, thank you

Phone number: +251-920 50 57 00/+251-913 13 35 60

E-mail: Netsanettmsgn@gmail.com

Volunteer request form:

Peace and health! My name is

The main reason I came here with you is to collect data for a research study being done by a student studying for his master's degree in the economics department of Debre Markkos University.

This has its own important role in the tireless efforts and efforts to improve the service after the research paper is done and the reasons are identified. Since you have been selected for this study and we have prepared questions for this research, we respectfully ask you to cooperate with us by answering these questions.

You do not record your name and patient number in this interview. Your answers do not identify the identity of you or the child. You are not required to answer any of the questions you are asked or if there is an uncomfortable situation. In addition, if you feel uncomfortable, you have the right to interrupt the entire interview whenever you want. Finally, I would like to express to you that the interview will not take more than 15 minutes, while I sincerely thank you in advance for your answer.

The expert who conducted the interview

Name: Signature.....

day.....

Annex 4: Questionnaires

Part I: Socio-demographic profile of the respondent (Household head)

Respondent Number: _____

Site Name _____Block numberHousing floor.....House number.....

1. Household head Sex: A. Female B. Male
2. Age: A. 18-29 B. 30-39 C. 40-59 D. 60 & Above
3. What is your house ownership status in the condominium?
A. House Rent B. Privately owned C. Government D. Others.....
4. Religions: A. Orthodox B. Muslim C. Protestant. D. Catholic E. Others
5. Educational level:
A. Unable to wright and read B. Read and Wright only C. Primary education
D. Secondary education E. Diploma F. Degree & above
6. Marital status: A. Single B. Married C. Divorced D. Widowed
7. Family Member (size): A. 1-3 B. 4-6 C.7-9 D. Above 9
8. Occupation:
A. Merchant B. Government employee C. Private Employee D. Retired E. Other....
9. Where has been your previous residence before coming to this condominium site?
A. Sub city B. Woreda C. kebele D. No house
10. Average monthly Income:
A. Less than 2000-birr B. 2000-5000 birr C. 5000-10,000 birr D. Above 10000birr
11. How long did you live here in the condominium?.....

Part II: Condominium housing water supply situation

1. Did you have pipe connected to your condominium?
A. Yes B. No
2. How many days does your tap water flow in a week?
A. All days B. 1-2 C.3-4 D.5-6 E. None F. Others.....
3. On average, how many liters of water do you need for your household per day?.....
4. On average, how much do you pay as water bill per month?
A. <50 birr B.50-100 birr C. 101-150 D.151-200 E.201-250 F.>250
5. For what purpose do use the water?
A. Drinking B. Cooking C. Bathing/washing D. Toilet flashing E. Others
6. In which floor do you live in your condominium?
A. Ground B. First C. Second D. Third E. Forth and above
7. Is there variation in the amount of water supply and flow in each floor?
A. Yes B. No

8. Do think that there are problems in water supply and delivery in your condominium as compared with other villages in the city?

A. Yes B. No C. Don't know

9. Did dwellers of condominium house get support from NGOs in relation to water Supply?

A. Yes B. No C. Don't know

10. Do you think that Budget is properly allocated to run the whole Water Program?

A. YES B. NO

Part III: Selected Condominium site water Supply Service delivery and customer satisfaction related questionnaire.

Please select the appropriate answer for the questions below using a 5 Likert scales Where;

5→Strongly agree 4→Agree 3→Neutral 2→Disagree 1→Strongly Disagree

→Indicate a (√) mark in respect to your response(s)

No	Items	5	4	3	2	1
A	Continuous water supply service					
1	The Branch always maintains broken water pipe lines timely/quickly					
2	The Branch always offers all materials that are needed for the customer service					
3	No blackout of electric light for the water supply service					
4	There is no water interruption					
5	When water supply problem occurs the Branch announce early to the customers					
B	Customer handling					
1	There are brochures to educate new users					
2	Customers' complaint always gets solution					
3	Customer staffs communication is very good when serving customers					
4	Employees are always ready to help customers					
5	Employees are fast when serving customers					
6	When customers need any information they can use communication instruments instead of coming to office					
7	The tap water is always pure and clean					
8	When the tap water comes after interruption there is no any change in its quality					
9	Bill paying services are good for the customers					
10	Water meter readers monthly read the water meter of the customers					
C	Water Supply Service delivery and customer satisfaction related questionnaire					
1	There are pipes connected to your condominium unit					
2	Your condominium tap water flows weekly					
3	There are other sources to fetch water around your residence					

4	You pay much (on the average) for water bill per month					
5	The water you are getting is sufficient to meet your household requirements					
6	The average daily water flow is enough for consumptions such as drinking, cooking, bathing, toilet flashing					
7	You use the same source of water throughout the year the one provided by the municipality to your condominium unit					
8	During water interruption of the municipal pipe, you pay more to buy water outside your house					
9	The water price per liter is affordable to your condominium site					
10	There is an interruption/irregularity in the water supply in the condominium					
11	There are Insufficient water sources for the resident site					
12	Frequently broken down of pipe lines are observed in the condominium site					
13	The reason for water interruption at condominium sites is few pipe lines cannot support fast expansion of township and Poor quality of scheme construction					
14	There is variation in the amount of water supply in each floor of the building					
15	A good quality of water is supplied to your Condominium unit					
16	The resident's association in your locality will be helpful in solving some of your water supply problems					
17	You are satisfied with the water supply service delivery provided to the site					
*What can be done to overcome water supply problems or to improve water supply services delivery in the selected condominium housings of Debre Markos town?.....						

Annex 5: Diagnostic results for assumption of logistic regression.

1. The response variable is Binary/Categorical

In the study the outcome/Dependent variable is Binary: Satisfied Vs Dissatisfied.

Dependent variable encoding: Satisfied=0, Dissatisfied=1

2. The Observations are independent

Observations shouldn't come from repeated measurements of the same individual.

3. The sample size is sufficiently large

The squared test shouldn't have 0 cells and the Hosmer and Lemeshow test result should be >0.05 for better goodness of fit (No cell count have 0 counts and 0.370 is > 0.05).

Hosmer and Leme show Test

Chi-square	df	Sig.
8.682	8	0.37

4. There are no extreme outliers

Extreme outlier is the issue in the case of continuous variables.

In our study our predictor variables are categorical and Likert, so that there will never be outlier.

5. There is a linear relationship between explanatory variables and the logit of the response Variable (Box-Tidwell test)

It is to mean that there should no linear relationship between explanatory and Dependent variable in the case of binary logistic regression, but there should be a linear relationship between the explanatory variables and the log odd of outcome variable.

In our study there is no continuous explanatory variable and we don't have to do the Box-Tidwell Test at all.

6. There is No Multicollinearity among the explanatory variables

Model	Tolerance	VIF
You are satisfied with the water supply service delivery provided to the site	0.879	1.137
The resident's association in your locality is helpful in solving problems	0.889	1.125
A good quality of water is supplied to your Condominium unit	0.914	1.095
There is variation in the amount of water supply in each floor of the building	0.902	1.108
The reason for water interruption at condo sites is few pipe lines cannot support fast expansion of township and Poor quality of scheme construction	0.894	1.119
Frequently broken down of pipe lines are observed in the condominium site	0.891	1.123
There is sufficient water source for the residents in the condominium site	0.901	1.11
There is no an interruption/irregularity of water flow	0.9	1.112
The water price per liter is affordable to your condominium site	0.887	1.128
During water interruption of the municipal pipe, you pay more to buy water	0.936	1.068
You use the same source of water throughout the year the one provided	0.9	1.111
The average daily water flow is enough for consumptions	0.916	1.092
The water you are getting is sufficient to meet your household requirements	0.881	1.135
You pay much (on the average) for water bill per month	0.9	1.111
There are other sources to fetch water around your residence	0.905	1.105
Water meter readers monthly read the water meter of the customers	0.867	1.081
Bill paying services are good for the customers	0.924	1.121
When the tap water comes after interruption there is no any change in its quality	0.892	1.176
The tap water is always pure and clean	0.85	1.086
When customers need any information they can use communication instruments	0.921	1.119
Employees are fast when serving customers	0.894	1.124

Employees are always ready to help customers	0.889	1.155
Customer staffs communication is very good when serving customers	0.866	1.098
Customers' complaint always gets solution	0.911	1.194
There are branches in the office to educate new customers	0.838	1.16

Dependent variable: Customer satisfaction