The Effect of Customer Satisfaction on Sustainable Cash Flow in Urban Water Supply and Sanitation Authorities; A Case Study of Arusha Urban Water Supply and Sanitation Authority (AUWSA)

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Abstract- The study investigates the effects of customers' satisfaction on sustainable cash flow in Urban Water Supply and Sanitation Authorities particularly Arusha, Urban Water Supply and Sanitation Authority. The main objectives of the study are: to examine the effect of customers' satisfaction on sustainable cash flows in Arusha Urban Water Supply and Sanitation Authority. The study was conducted within Arusha Urban Water Supply and Sanitation Authority. The study involved 110 respondents and will adopt a generic design, and data will be collected through questionnaires; interviews and documentary review. AUWSA should team up with the village programs so that they cover a large area. The study found some wards like Muriet and Olasiti to have established their own water source and supply.

INDEX
i. Customer
   It is a person who buys something from a tradesman, shop etc (Oxford Advanced Leaders Dictionary, 1992).

ii. Satisfaction
   Satisfaction can be defined as a customer’s afterthought. The customer may think back on the experience and realize how pleasant or unpleasant it was (Harris, 2013). It is to provide a sufficient service to a customer (Langton & Robbins, 2007).

iii. Customer satisfaction
   Customer satisfaction is the customer’s overall feeling of contentment with a customer interaction. Satisfaction may be a customer’s afterthought. The customer may think back on the experience and realize how pleasant or unpleasant it was. (Harris, 2013). Customer satisfaction is the extent to which a firm fulfills a customer’s needs, desires and expectations (Perreault & McCarthy, 2005).

iv. Cash flow
   This is the amount of cash that will be available after paying expenses (Perreault & McCarthy, 2005).

I. INTRODUCTION
You and I are customers. We are all customers in one way or another. We get satisfaction differently. Customer satisfaction is an important facet in marketing of goods or services. Indeed if customers are satisfied they have a tendency of repurchasing and telling others about the goods and services, received from a particular organization. If this goes repeatedly the customers will create loyalty to the organization which serves them. The study focuses on the examination of the relationship between customer satisfaction and the cash flows. It intends to establish the rationale for customer satisfaction to the total well-being of any organization and the society at large.

In today’s competitive environment delivering high quality service is the key for a sustainable competitive advantage. Before proceeding further, it is best that one fully understands the definition of the phrase ‘Customer Satisfaction’. The phrase does not only express a happy customer, but rather complex than that. Customer satisfaction is actually a term most widely used in the business and commerce industry. It is a business term explaining about a measurement of the kind of products and services provided by a company to meet its customer’s expectation. To some, this may be seen as the company’s key performance indicator (KPI). In a competitive marketplace where businesses compete for customers, customer satisfaction is seen as a key differentiator and increasingly has become a key element of business strategy. Customer satisfaction does have a positive effect on an organization’s profitability. Satisfied customers form the foundation of any successful business because customer satisfaction leads to repeat purchases, brand loyalty, and positive word of mouth. There are numerous studies that have looked at the impact of customer satisfaction on repeat purchases, loyalty and retention. Many researchers point out the fact that satisfied customers share their experiences with other people to the order of perhaps five or six people.

On the contrary, dissatisfied customers are more likely to tell another ten people of their experience with product or service. Customer satisfaction is the outcome felt by those that have experienced a company’s performance that have fulfilled their expectations. Many researchers and academicians highlight the importance of customer satisfaction, and indeed see that customer satisfaction has a positive effect on organization’s profitability. Much empirical evidence also shows the positive connection between customer satisfaction, loyalty and retention. Nowadays all companies are realizing the significance of delivering and managing service quality, which leads to customer satisfaction. Service quality that is delivered can meet or exceed customers’ expectations are mainly influenced by customer’s prior...
expectations. There is a substantial body of empirical literature that establishes the benefits of customer satisfaction for firms. It is well established that satisfied customers are key to long-term business success (Kristensen et al., 1992; Zeithami et al., 1996; McColl-Kennedy and Scheider, 2000). It also defined as a global issue that affects all organizations, regardless of its size, whether profit or non-profit, local or multi-national. Companies that have a more satisfied customer base also experience higher economic returns (Aker and Jacobsson, 1994; Bolton, 1998; Yeung et al., 2002). Consequently, higher customer satisfaction leads to greater customer loyalty (Yi, 1991; Anderson and Sullivan, 1993; Boulding et al., 1993) which in turn leads to higher future revenue (Fornell, 1992; Bolton, 1998). For that matter, many market leaders are found to be highly superior-customer-service orientated. They have been rewarded with high revenue and customer retention as well. For that matter, organizations in the same market sector are compelled to assess the quality of the services that they provide in order to attract and retain their customers. According to Hansemark and Albinson (2004) “satisfaction is an overall marketplace. (Anderson & Kerr, 2002). The purpose of this study is to examine the effect of customer satisfaction to the sustainability of cash flow. Throughout the 1980’s the water sector in Tanzania had been re-organizing, in line with the civil service reform programme, parallel with this approach, the Urban Water and Sewerage Departments (UWSDs’) were established. These were operated as (UWSDs’) until declared Urban Water Supply & Sewerage Authorities (UWSAs’) by the Minister of Water in accordance with Act. No. 8 of 1997, starting from the 01st of January, 1998. These UWSAs’ were officially inaugurated from 1999 replacing the former Water Supply Department which was operating under Regional Administration. Tanzania has got several Urban Water Supplies and Sanitation Authorities operating in every capital town of the region. These Authorities were declared fully autonomous entities by order of the Minister responsible for Water Affairs in January, 1998. Arusha, Mwanza, Tanga and Moshi were selected as pilot areas to operate commercially. They were mandated to provide supply of water and sewerage disposal services in the towns. They were ranked in Class A, while other towns were ranked from B to D in which still were not capable of operating themselves to meet their mature obligations from the billings revenue. The Arusha Urban Water Supply and Sewerage Authority (AUWSA), is a legally established entity responsible for the overall operation and management of water supply and sewerage services in Arusha Municipality. AUWSA was established under the Water Works Act. CAP 272 and declared a fully autonomous entity by order of the Minister responsible for Water Affairs in January 1998.

AUWSA is governed by the Board of Directors and headed by the Managing Director. Under the Managing Director there are four departments namely: - Technical Services, Customer Services, Finance Services and Human Resources & Administration. There are ten Sections under these three Departments. Also there are four Units namely Internal Audit, Public Relations, Procurement Management Unit (PMU) and Information, Communication and Technology (ICT) reporting to the Managing Director.

The Arusha Urban Water Supply and Sewerage Authority (AUWSA) together with the other Class A towns started to serve their customers when they were declared fully autonomous, however their level of customer satisfaction was very poor. It was very difficult for these Authorities to satisfy their customer due to the “monopoly handover”. The study is therefore, intending to examine how is customer satisfaction techniques can be used to facilitate AUWSA’s operations in providing services to the customers while raising the cash flow in a sustainable manner.

Customer satisfaction can be the single strongest weapon you have as a manager to ensure that customers become and remain loyal. Great employees are, and always will be, the backbone of any business. But employee performance can be enhanced or hampered by the strategy you set and by the tools that you give employees to get the job done. Done right, Customer Relation Management (CRM) is both a strategy and a tool, a weapon, if you will. In your hands, and in the hands of your employees, CRM comes to life, keeping you and your team on course and able to anticipate the changing landscape of the marketplace. (Anderson & Kerr, 2002). It has been said that if the world is not keen the world war three will be associated with the struggle for water, for example in central Tanzania we don’t have sufficient water and our people have to walk long distance to get hold of water every day, while we have Lake Victoria which is used by Egypt as a source of water to its people, worse still there are some agreement which is favoring Egypt.

In many developing countries like Tanzania, Customer satisfaction has been one of the main problems facing various sectors of the economy, including the supply of clean water and sanitary services sector. In Tanzania we have water Authorities in almost every capital town of each region, but access to clean water is still a problem that has yet to be implemented fully hence posing a risk to the Tanzanian community, for example a report given in the Guardian Newspaper dated, March, 9th 2015, which shows that 22.3 million people have no access to clean and safe water, it was further reported that in rural areas only fewer than 50 percent of the communities have access to clean water and proper sanitation. The report further report that nearly 42 million people in the World don’t have access to adequate sanitation and over ten thousands children die every year from diarrhea.

Arusha Urban Water Supply and Sanitation Authority is facing problem in attaining sustainable cash flows. It is found that customer satisfaction might be one of the issues that are contributing to the problem. Arusha Urban Water Supply and Sanitation Authority is said to be the biggest service provider in the region. But, many competitors are mushrooming. For example
The Dissonance Theory suggests that a person who expected a high-value product and received a low-value product would recognize the disparity and experience a cognitive dissonance (Cardozo, 1965). That is, the disconfirmed expectations create a state of dissonance or a psychological discomfort (Yi, 1990). According to this theory, the existence of dissonance produces pressures for its reduction, which could be achieved by adjusting the perceived disparity. This theory holds that "post exposure ratings are primarily a function of the expectation level because the task of recognizing disconfirmation is believed to be psychologically uncomfortable. Thus consumers are poised to perceptually distort expectation-discrepant performance so as to coincide with their prior expectation level" (Oliver, 1977, p. 480).

For instance, if a disparity exists between product expectations and product performance, consumers may have a psychological tension and try to reduce it by changing their perception of the product (Yi, 1990). If the Dissonance Theory holds true, then companies should strive to raise expectations substantially above the product performance in order to obtain a higher product evaluation (Yi, 1990).

The Contrast Theory

The Contrast Theory suggests the opposite of the Dissonance Theory. According to this theory, when actual product performance falls short of consumer's expectations about the product, the contrast between the expectation and outcome will cause the consumer to exaggerate the disparity (Yi, 1990). The Contrast theory maintains that a customer who receives a product less valuable than expected, will magnify the difference between the products received and the product expected (Cardozzo, 1965). This theory predicts that product performance below expectations will be rated poorer than it is in reality (Oliver & DeSarbo, 1988).

In other words, the Contrast Theory would assume that "outcomes deviating from expectations will cause the subject to favorably or unfavorably react to the disconfirmation experience in that a negative disconfirmation is believed to result in a poor product evaluation, whereas positive disconfirmation should cause the product to be highly appraised" (Oliver, 1977, p. 81).

If the Contrast Theory were applied to a consumption context, then the poor performance would be worse than simply poor, and good performance would be better than a rating of good would suggest (Oliver, 1997). Under the dissonance theory, the opposite effects occur, perceived performance, whether it is less or more favorable than the consumer's expectations, is drawn to the original expectation level. It is important to note that these theories have been applied and tested in laboratory settings where the customer satisfaction was tightly controlled, situation specific and individually focused.

The Expectancy Disconfirmation Paradigm

Drawing on the shortcomings of the above early theories of consumer satisfaction, Oliver (1977; 1980) proposed the Expectancy-Disconfirmation Paradigm (EDP) as the most promising theoretical framework for the assessment of customer satisfaction. The model implies that consumers purchase goods and services with pre-purchase expectations about the anticipated performance. The expectation level then becomes a standard against which the product is judged. That is, once the product or service has been used, outcomes are compared against...
expectations. If the outcome matches the expectation confirmation occurs. Disconfirmation occurs where there is a difference between expectations and outcomes. A customer is either satisfied or dissatisfied as a result of positive or negative difference between expectations and perceptions. Thus, when service performance is better than what the customer had initially expected, there is a positive disconfirmation between expectations and performance which results in satisfaction, while when service performance is as expected, there is a confirmation between expectations and perceptions which results in satisfaction.

The Comparison Level Theory

A number of authors criticized the Expectancy-Disconfirmation Paradigm on the grounds that this approach posits that the primary determinant of customer satisfaction is the predictive expectations created by manufacturers, company reports, or unspecified sources (Yi, 1990). For instance, La Tour & Peat (1979) argued that the EDP ignores other sources of expectations, such as the consumer's past experience and other consumer's experience with similar constructs. They proposed a modification of the Comparison Level Theory (Thibaut & Kelley, 1959). In contrast to the Expectancy-Disconfirmation Paradigm which uses predictive or situationally-produced expectations as the comparison standard, the Comparison Level Theory argues that there are more than one basic determinants of comparison level for a product: (1) consumers' prior experiences with similar products, (2) situationally produced expectations (those created through advertising and promotional efforts), and (3) the experience of other consumers who serve as referent persons. Applying the Comparison Level Theory to the confirmation/disconfirmation process, LaTour & Peat found that experience based standards or norms play a role as a baseline for comparisons in consumer's satisfaction judgments. They found that situationally induced expectations had little effect on the customer satisfaction, while expectations based on prior experiences were the major determinant of customer satisfaction. This finding suggests that consumers may give less weight to manufacturer-provided information, when they have personal experience and relevant information about other consumer experiences (Yi, 1990).

The Value Percept Theory

Similar to LaTour and Peat's argument, Westbrook and Reilly (1983) argue that the Expectancy-Disconfirmation Paradigm may not be the most appropriate model to explain customer satisfaction, as customer satisfaction/dissatisfaction is more likely to be determined by comparative standards other than expectations. They proposed a Value-Percept Disparity theory, originally formulated by Locke (1967), as an alternative to the Expectation-Disconfirmation paradigm. Criticizing the predictive expectations used as a comparison standard in the traditional Disconfirmation Paradigm, Westbrook and Reilly argue that what is expected from a product may or may not correspond to what is desired or valued in a product. Conversely, that which is valued may or may not correspond to what is expected. Thus, values have been proposed to be a better comparative standard as opposed to expectations in explaining customer satisfaction/dissatisfaction. According to the value-percept theory, satisfaction is an emotional response that is triggered by a cognitive evaluative process in which the perceptions of an offer are compared to one's values, needs, wants or desires (Westbrook & Reilly, 1983). Similar to the Expectancy/Disconfirmation paradigm, a growing disparity between one’s perceptions and one's values (value-perception) indicates an increasing level of dissatisfaction.

The Attribution Theory

Research of the Attribution Theory is primarily developed from the Weiner, Frieze and Kukla’s (1971) work. It is important to note that the Attribution Theory has been mostly used in dissatisfaction/ complaining behavior models than in satisfaction models per se. According to this model, consumers are regarded as rational processors of information who seek out reasons to explain why a purchase outcome, for example dissatisfaction, has occurred (Folkes, 1984). This model argues that when the delivery of a service does not match customers’ prior expectations or other standards, customers engage in an attributional process in order to make sense of what has occurred (Bitner, 1990). More specifically, this model assumes that consumers tend to look for causes for product successes or failures and usually attribute these successes or failures using a three dimensional schema (Folkes, 1989; Oliver & DeSarbo, 1988; Pearce & Moscardo, 1984; Weiner et al, 1971):

Locus of Causality (internal or external): This means that the purchase outcome, for example, is cause of dissatisfaction and can be attributed either to the consumer (internal) or to the marketer or something in the environment or situation (external).

Stability (stable/ permanent or unstable/ temporary): Stable causes are thought not to vary over time, while unstable causes are thought to fluctuate and vary over time.

It is argued that under some conditions, for example, when a number of consumers find themselves in agreement about the cause of their dissatisfaction, when the same establishment repeats their mistake over and over again (consistency), and when only this establishment commits error (distinctiveness of the behavior is high), external attribution process takes place. On the other hand, when the agreement is low, consistency is low and distinctiveness is low, consumers are assumed to relate their negative reactions (dissatisfaction) to themselves (i.e., just having an "off" day) (Pearce & Moscardo, 1984).

The Equity Theory

According to the Equity Theory, satisfaction exists when consumers perceive their output/input ratio as being fair (Swan & Oliver, 1989). Equity models are derived from the Equity Theory (Adams, 1963), and are based on the notion of input-output ratio, which plays a key role in satisfaction (Oliver & Swan, 1989). According to this theory, parties to an exchange will feel equitably treated (thus, satisfied), if in their minds, the ratio of their outcomes to inputs is fair (Oliver & DeSarbo, 1988). Whether a person feels equitably treated or not may depend on various factors including the price paid, the benefits received, the time and effort expended during the transaction and the experience of previous transactions (Woodruff et al, 1983). This implies that comparative baseline may take many different forms. This theory shares similarities with the Comparison Level Theory which posits that bases of comparison used by consumers in satisfaction judgments may be more than just expectations.
Equity models of consumer satisfaction appear to be different from the other models, in that satisfaction is evaluated relative to other parties (people) in an exchange and the outcomes of all parties sharing the same experience are taken into consideration. Erevvels and Leavitt (1992) argue that equity models can provide a much richer picture of consumer satisfaction in situations that may not be captured using traditional satisfaction models. For example, they may be especially useful in modeling situations where satisfaction with the other party is considered to be an important element of the transaction.

III. METHODOLOGY

To carry out this study, a qualitative cross sectional design was adopted in order to assess the research objectives dealing with assessment of the stability of water supply, examine some factors hindering stability of water supply, finding out how sustainable cash flow is associated with customer satisfaction and to suggest the best ways for sustainable water supply in Arusha Urban Water Supply and Sanitation Authority. In its execution, qualitative research methods will mostly be used.

The study will be conducted in Arusha Region, specifically in Arusha Urban Water Supply and Sanitation Authority. The region is purposefully selected to be a case study for a number of reasons, including: having a big number of customers who are likely to use the AUWSA service. Likewise, AUWSA is specifically chosen due to the fact that it is lacking sustainable cash flow. The income of the Authority has been fluctuating always.

The sample of the study was 60 respondents. The purposive sampling technique will be applied to assess the water stability areas that are used by AUWSA to supply water to its customers. For the purpose of this study, sources of water will be identified in relation to stability water supply. The number of satisfied customers and stability of water supplied per day.

To arrive at the desired sample, the “representation basis” will be considered, particularly the Non-Probability Sampling procedure, which is also known by different names such as: Deliberate sampling; Purposive sampling; and Judgment sampling (Kothari, 2004:127). Non-probability sampling is a sampling procedure which does not afford any bias for estimating the probability that each item in the population has to be included in the sample. In this type of sampling, items for the sample are selected deliberately by the researcher; his choice concerning the items remains supreme.

The table below shows the intended sample size and category of respondent

<table>
<thead>
<tr>
<th>CATEGORY OF RESPONDENT</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board Members (BM)</td>
<td>5</td>
</tr>
<tr>
<td>Managing Director (MD)</td>
<td>1</td>
</tr>
<tr>
<td>Managers (MG)</td>
<td>4</td>
</tr>
<tr>
<td>Heads of sections (HS)</td>
<td>10</td>
</tr>
<tr>
<td>Meter readers (MR)</td>
<td>10</td>
</tr>
<tr>
<td>Customer Care staff (CR) / Public Relations staff (PR)</td>
<td>10</td>
</tr>
</tbody>
</table>

IV. DATA ANALYSIS AND PRESENTATION

AUWSA Customers

Seven (7) wards were visited and information below collected. Eighteen (18) respondents were asked whether they are customer of AUWSA. Fourteen (14) out of eighteen (18) equivalent to 22% said No meaning they are not customers of AUWSA. Eleven (11) respondents out of 18 which is equivalent to 61.1% are customers of AUWSA in the category of domestic customers while 7 respondents are customers of AUWSA in the category of commercial customer. It was established that 4 respondents were not the customers of AUWSA. This is equivalent to 22% when asked the reasons as to why they don’t want to be customers of AUWSA they said that AUWSA network has not reached there. It was also observed that only one respondent out 18 had water connection in a period between six month to one year. This is equivalent to 6% percent. This means that AUWSA is not proactive or rather it is not planning ahead to capture the new market. The study wanted to establish those who receive AUWSA, water service. It was found that 8 (44%) people out of 18 get water services form AUWSA, while 10 (56%) do not use water service form AUWSA.

Customer Satisfaction on Water Sewerage Provided By AUWSA

The study found that most of the customers are not satisfied with water service provided by AUWSA for instant eight (8) customers out of 18 said that they satisfied with water services provided by AUWSA. This is about 44% while 10 customers which equivalent to 56% said they are not satisfied with the service provided. When asked to give reasons which make them unsatisfied, they said water installation is expensive to them.

Uses of AUWSA Water

They study found that about eleven (11) customers use AUWSA water for domestic purpose, this is equivalent to 60% while seven (7) customers use AUWSA water commercially. This is equivalent to 39%. This implies that since 61% of the uses of AUWSA, water is domestic then is means that the revenue generated is minimal because the rate charged to domestic customers is lower than the rate charged to commercial customers.

Cost of Water Service

The researcher wanted to examine the way customers perceive cost of water services, received from AUWSA. The research wanted to examine the way customers perceive cost of water services, received from AUWSA. The findings showed that 10 customers which is equivalent to 71 percent perceived the cost for those who said the cost are fair because they are charged for what they have used. That is to say the meter readings and billings
are equal to the amount paid for. The findings showed that 10 customers which is equivalent to 29 percent said the costs are unfair.

**Percentages of Water Services Satisfaction**

The study wanted to establish the extent to which water services satisfy customers. It was found that 4 customers said that they get satisfaction to the tune of 21% to 40%, 2 customers said the satisfaction is between 41% - 60%, 5 customers said they get satisfaction to the June of 61% - 80% while 7 customers said they got 0% percent of satisfaction on top of that three out of seven of customers who perceived zero satisfaction are AUWSA customers that means they were supposed to receive services from AUWSA.

**Producers Taken by Customers to be Connected to AUWSA Services**

The findings showed that 8 (57%) customers see the procedures to be normal or straight forward. For those who said the procedures are complicated had the following reservations.

(i) The demand is high and there is shortage of materials which necessitate delay in water connection.

(ii) It is costly to be connected with AUWSA, water services so many people fail to be connected.

(iii) The procedure is not straight forward, there is go and return and worse still they don’t consider you as a customer

(iv) The procedures are complicate due to the fact that the service line (pipes) where constructed long- time.

(v) The procedure involves high cost, due to the distance from where AUWSA pipes are.

(vi) The procedures of water service connection is too tough due to long process of filling forms and to pass though different steps and waiting time for certification.

For those who said the procedures are normal had the following reservation, relating the procedures.

They said it is normal for a customer to be connected with AUWSA service to undergo such as procedures. They are not complicated, because it takes almost five days from the requisition day up to connection with water services. Procedures are easy and less cost because there are a lot of branches from other channels to get connection.

**Meter Reading and Billing**

The study wanted to investigate on the accuracy of meter reading and billing exercise. The findings defected that 12(86%) customers said the two exercise are accurate, since the customers are charged according to what they consumed or used and not otherwise. However 2(14%) customers expressed their concern that the two exercises are not accurately since sometimes you may find billing exceeds meter reading.

**Factors That Affect Water Services Satisfaction**

The study investigated on the factors that affect water services satisfaction: The results showed amongst other things to be the factors. Leakages that happens in main pipes, distance from the source, presence of many channels which water mingle and sometimes bring difficult to trace which like is from a while and poor maintenance /care of the water sources.

**AUWSA Water Service Reliability**

The researcher wanted to check on how reliable is the water service. The result defected that 11(69%) customer said the water service is reliable and they had the following reason:-

i. The water service is reliable because they have connected to the main pipes

ii. The water service is reliable because they are not far from the source of water channels and sometimes the gravitational force is high this is backed by the theory of hydrostatic pressure increases with depth.

iii. AUWSA reaction to the water problem

iv. Distance from the station of water supply

v. Rain seasons increase reliability

On the other hand 5(31%) customers said they devil receive reliable services from AUWSA. When asked to give reasons or causes for not receiving reliable services they said.

i. During rainy season floods may destruct the water system.

ii. Distance from the source or main pipes

iii. Low pressure and leakages

iv. Road constructions my cause leakages

v. AUWSA networks is not connecting a big area

vi. Cost of connection is high in such a way that not every person can afford

vii. Frauds which leads to water leakages.

**The Frequency with Which Customers Get Water from AUWSA**

The researcher examined the frequency with which customers get water since from UWSA in their area. The result detected the following. 9 (50%) of customer get water service daily. This means whether they get it for some hours but there is assurance that water will be there every day. Seven (7) customers out of nine (9) customers above are business customers and two (2) customers are domestic customers. It was further revealed the business customers are found in the areas around Town Centers such like, Kaloleni, Mjini kati, Ngarenaro, Themi and Sombetini. The two domestic customer who get water service daily are from, Sokon I and Olasiti areas. Five (5) customers who get water service weekly are domestic customer Osunyai, Muriet, Sokon I, and Ngarenaro areas, and 1 customer is a business customer from Muriet area.

However the study found that there were three people from Sokoni I and Muriet areas who said they are not customers of AUWSA. The researcher thought this one of the potential areas from AUWSA to invest one (1) of four (4) respondents though he/she is not a customer but he is getting water service daily from village programme.

**Problems Faced by AUWSA Customers in the Course of Accessing Water Services.**

The study wanted to examine problems faced by AUWSA customers in the course of accessing water services. The results reflected that most of the respondents said there is shortage of

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water which is caused by leakages all over the areas. This was said by 4(22%) customers and the same mentioned about low water pressure all over the place without proper attention by UWSA. The findings five showed that water services demand is very higher companied to what can be provided by AUWSA for example the population is somehow high for instance when AUWSA stiffs are field of water leakages as they don’t respond or take necessary actions.

Water Leakage
The researcher investigated the issues of water leakages and the result reflected that 10(67%) of the respondents said there is high water leakages and 5 (33%) of the respondents said there is no water leakages. Now basing on the percentage of water leakage reported by the respondents said there is no water leakage. Now basing on the percentage of water leakage reported by the respondents, the study further asked the respondents on the impact of water leakage to water supply and the following points were mentioned by customers. Water leakages lead to not getting enough water which can satisfy our consumption as expected. Water leakages cause shortage of water in the companies which necessitated companies to buy water from other suppliers which is an additional cost to the companies. This sometimes affected the quality of products to be produced if may be companies are manufacturing ones. Loss main decide to drill their own water lead AUWSA loss of revenue on other hands if it is domestic customers, some of the customers will effect for water drilling, which are not commensurate to consumption, this is not good to the side of customers because they know for sure they have not used leaked water, thus they will feel that AUWSA is putting burden to them. It was also found that there is severe water rationing which may be caused by day season or hush rate water leakages.

Things that AUWSA can do to improve water services provision to its customer
- AUWSA should do repair of and maintain infrastructures
- Visit customers to see their problem and assist them
- Customer case should be improved.
- Should make water service reliable to all area
- AUWSA should make size that they provide may branches (tapes) as possible to different villages so that they cover their service to many people
- AUWSA should do research for the area where they did not cover so as to cover them
- AUWSA should increase many channels (source) of water which can increase water supply effectively
- Educate the customer on how to effectively use water
- Provide education to its employees (customer care)
- After repairing the leakages they have to make sure that they cover the area properly so as to be near.
- They should open call centers for customer case.
- They should employ enough experts who will operate the service effectively periodically
- Should improve the general cleanliness of water infrastructure
- They should increase the generally cleanliness of water infrastructure during dry season not run shortage of water
- Visit large users and tackle the challenges

Factors Hindering Water Supply Stability
- Geographical location
- Electricity supply
- Climatic condition-dry season
- Limited of water sources
- Dilapidated infrastructures
- Low capacity of water pumps
- Low coverage of infrastructural network
- Poor settlement planning/poor urbanization which leads to unclear water distribution network
- Population growth which leads to high water demand
- Exceed of leakages
- Illegal and by-pass connection
- Lack of standby generators to some water sources
- Lack of reliable water sources of water
- Lack of critical research on water sources i.e as where to drill boreholes
- Poor designing of water network/spaghetti
- Poor infrastructures-old pipes
- Lack of participatory water sources protection approach
- Lack of land planned for new water sources
- Lack of enough capital to drill bore holes
- Willingness of customers to pay their bills

V. RECOMMENDATIONS
AUWSA should team up with the village programs so that they cover a wider area. The study found some wards like Muriet and Olasiti to have established their own water source and supply. If AUWSA will team them it will increase its revenues. AUWSA might contribute to some equipment, drilling and paying worker. The wards make maintenance, security and protection. About 22% of respondents are potential customers. AUWSA should take immediate measures to exploit this opportunity. AUWSA should also establish Public-Private Partnership. This will help water service exercise provision to be easy and manageable to the Authority.

REFERENCES


[100] Zeithaml, V. A. (1981) How consumer evaluation process differ between goods and services, Advances in Consumer Research, 186-190

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