Effect of Pricing Methods and Public Paying Fee on Cleaning & Sanitation Service in Zanzibar: A Case of West B Municipality

Ali Abdallah Natepe[1*]   Abdalla Ussi Hamad[2]   Saleh Said Mwinyi[3]

1.MBA Student, Zanzibar University

2.Lecturer, Faculty of Arts and Social Science, Zanzibar University, P.O. Box 2440, Zanzibar

3.Lecturer, Faculty of Business Administration, Zanzibar University, P.O. Box 2440, Zanzibar

Abstract

The main objective of the study was to assess the effect of pricing methods and public paying fee on cleaning and sanitation services in West B Municipality, Zanzibar. The survey questionnaire was distributed to the business owner with sample size of 150 and data were collected and analysed based on both descriptive and inferential statistics through Pearson correlation using SPSS version 23. The study results through descriptive the study shows that about 98 respondents which made 65.3% replied that there is no impact brought by pricing methods and public paying fee on cleaning and sanitation services. Although the result from person correlation state that there is no significant positive relationship between pricing methods and public paying fee on Cleaning Service & sanitation services. The study recommends that the municipality should establish a specific model for pricing municipality services including cleaning and sanitation services.

Keywords: Pricing Methods, Public Paying Fee and Cleaning and Sanitation Service

1. Introduction

Price sensitivity is the degree to which the price of a product affects consumers purchasing behaviours (Assael and Henry, 2004). In economics, price sensitivity is commonly measured using the price elasticity of demand. Price elasticity of demand is a measure of the relationship between a change in the quantity demanded of a particular good and a change in its price (Sarah et al., 2015).

Sanitation and cleaning services have commonly been provided by state-owned, monolithic water organizations. As part of a general move to market-led systems in the 1980s and 1990s, a new paradigm emerged to transform utilities into more modern service delivery organizations that emphasize operational and financial sustainability (Foret and Procházka, 2007).

In Tanzania, especially Zanzibar, price sensitivity can choose a wide variety of optional pricing plans, including flat rates, pay-per-use tariffs, or two-and three-part tariffs because consumers' tariff choice affects their usages, the billing rate, and the company's revenues (Nesaee, 2009). The best examples are telecommunication, online information. Consumers pay only an access price for a flat-rate tariff, whereas pay-per-use tariffs charge only a usage price (Prameela and Husain, 2007). In a two-part tariff, consumers pay both an access price for having access to the service and a usage price for the quantity used. Consumers get a usage allowance for paying the access price in a three-part tariff, e.g., free minutes on a cell-phone plan, and then pay a usage price only when their usage exceeds the allowance (Sanga, 2007).. It is assumed that consumers prefer the tariff that minimizes their billing rate, given their expected usage when choosing among menus of those tariffs.

2. Research Problem

More interesting, in every financial year West B Municipal Council which is formally was West Municipal, adjust the prices of its services by increasing the prices from internal Sources of Revenue to meet its Budgets, but five years statistics have shown that numbers of hold and Business venture who pays Cleaning Service & sanitation fees voluntarily were decreasing at increasing rate, from 5,780 in 2010 to 3,457 in 2015(Municipal Annual Report-2015).

Even though Council increases prices of its services to meet the Budgets, yet it is not benefited from the adoption of this method. West B Municipal Council wants to find out current sources of the problem if it is caused by the Price changes or other factors facing these challenges, several times the Council have been hired teams of Experts for assistance in the strategies for institutional strengthening and capacity building programs that involve undertaking assessment and situation analysis in the council.

However, planning pricing strategy merely to happen is insufficient: ignoring planned strategy following its creation needs to avoid explicitly. Planned pricing strategy must have a significant presence in organizational attention, cognition, and interpretation.

Therefore, the main objective of this paper is to examine the effect of pricing methods and public paying fee on cleaning service & sanitation in west b municipality in Zanzibar.

3. Literature Review

The infrastructure services concentrated by municipalities are different from the goods and services produced by industrial or business firms; they are not private goods services by nature (Ajam, 2001). In the case of private goods, market acts as an instrument of competition and regulation, and the prices are determined by supply-demand conditions; in efficient and competitive markets, the price of good and service is arrived at from the market clearing operations (Bond, 2000). Based on these prices, the individual firm takes production decisions and how much and when to produced.

The pricing methods enables the civic authorities to provide these services from a demand perspective, the authorities will respond to demand by providing appropriate service with the costs being fully recovered (Botes & Pelser, 2001). They discipline people at large since policies can be framed in such a manner that they can discourage any wastage of Municipal Infrastructure Services. User charge can also be used as a redistributive mechanism in order to address some of the social/economic issues like concerns of the poor (Centre for Development Support (CDS). 2001).

The pricing policies were not seen as an instrument of redistribution but now user charges can be made non-regressive by using either differential or progressive tariffs or through means testing, with reduced tariffs or exemptions for the old and the poor (Craythorne, 2006). User charge enables allocate efficiency, by fully recovering the operational costs of the municipal infrastructure service, the government or government agency does not consume resources meant for other services or sectors (Fjeldstad & Semboja, 2001). In essence, the rationale for the levy of user charges is not only to generate revenues but also to promote economic efficiency.

While fixing the user charges, it is also important to examine the feasibility of cost-recovery, which may vary with respect to the type of service, provided (Mabotja, 2002). The extent of cost recovery from civic infrastructure services also depends upon the nature of benefits that accrue from a given service and the extent and nature of the subsidy likely to be available (Moses, 2002). Pricing is an important component of user charge system and tariffs are normally used to the consumers for the services provided. A user charge system needs to adopt an appropriate pricing mechanism after taking into account current practices in the urban local body.

There are instances where a municipality might feel that instead of providing the service directly, it would be better to hire someone else (service provider) to do it (VTPI, 2007). Reasons why a municipality would choose this route include the fact that other municipalities, Nongovernmental Organizations (NGOs) or Community-Based Organizations (CBOs) or private companies might have better resources and management skills to provide the service than the municipality itself (Todd 2007). Whatever method a municipality chooses, it must always be in line with the overall goals of improving the quality of services, extending services to residents who do not have them and providing services at an affordable cost. It is important to provide services that are affordable, but municipalities must do so without compromising on their ability to operate and maintain existing services (Donald, 2004).

4. Conceptual Framework

The figure below is used to present the diagrammatic representation of the logical paths of this study. With the aid of the single head arrows, the interconnections among the dependent and independent variable are shown. There is only one dependent variable, cleaning service and sanitation fees and two independent variables, pricing methods and public paying fee. The figure illustrate that how these two independent variables (pricing methods and public paying fee) could led to better performance of cleaning and sanitation services in West B in Zanzibar.
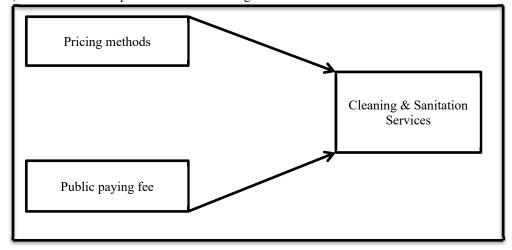

Figure 1: Conceptual Framework

5. Research Methodology

This area shows how the paper conducted in order to capture the information easily. In terms of design, a quantitative research design was used in this study in order to explore a phenomenon, explain and interpret the data widely and easily. The rationale of choosing this research design was to enabled the researcher to solve the issue at hand and to show the magnitude of the pricing methods and public paying fees on cleaning and sanitation services .

The target population was household, business venture, West B Municipal's Staffs and Ministry responsible for LGAs Staffs. The rational of this selection is because there is a huge discussion on pricing methods and paying for municipality Cleaning Service and sanitation fees in this area. Although, the households and business venture are the main victims in paying this services.

A total of 150 respondents were involved to provide information about the study investigation using multistage cluster sampling techniques. Primary data was collected using questionnaire survey from the targeted respondents in order to know the reality of what is happening to them at a point in time is preferred. The questionnaire is developed based on a Likert scale (from 1 to 5) because it includes question which require the respondents to indicate how much or to what extent they agree or disagree with the given statement on each construct

Descriptive statistics such as frequencies mean and standard deviation as well as inferential statistics such as standard and hierarchical linear regressions was used for data analysis. The data were analysed by the assistance of a statistical package of social sciences (SPSS) software version 23.

6. Result and Discussion

6.1 Demographic of the Respondents

Characteristics of respondents are very important in a social science research as far as the study use primary data as a source of data collection. To show that significant, the researchers prefer to use the following demographic variables such as, age, gender, education, marital status and occupation of the 150 respondents have been examined and presented below.

Table 1 Demographic of the respondents

Variable	Category	Percentage (%)
Gender	Male	52.7
	Female	47.3
Age	20-30	15.3
	31-40	16.7
	41-50	21.3
	51-60	32.7
	61 and above	14
Marital Status	Married	48.7
	Single	23.3
	Divorced/widow	28
Occupation	Government	40.7
	Non-government	59.3
Education	Degree & above	23.5
	Diploma	20
	Secondary	5.5
	Primary	36
	No formal education	15

From the table 1 above summarises the demographic information about the respondents. The number of male respondents are greater compared to female. This is because, in West B municipality, male are the most business owner and taking care of their family. Although, the age of the respondents in the social research is the one of the most important characteristics in capturing their views about a particular problem (Abideen 2010). The result in the table above it seems to suggest 68 percent of the respondents are the ages of 41 and above, which is more than half of the total respondents. This indicates that most of business man and women are matured and economically active labor force and they can manage well their business and taking the responsibilities to their family.

Furthermore, 48.7 percent of the total respondent were married which is almost half, 28 percent were divorced and only 23.3 percent were single. This implies that the researcher include all kind of marital status so as to avoid the act of discrimination and to have the perception from these status. More impressive, on the area of occupation, 59.3 percent were from non-government or private sector and the remaining were from government sector. This means that the private sector were the main victims of municipality services and that why to get their view were very important. Finally, the level education attainment seems to vary in to different level. Most of the respondent were attained their primary education which represent 36 percent and 23.5%, 20%, 5.5% and 15% attained their

degree, diploma, secondary and no formal education respectively. Due to the nature of this study it must to have respondent who own business regardless their education background. This aspect helps the research during the data collection to identify the level of education of interviewee in order to choose the best language style.

6.2 Descriptive Statistics
The descriptive statistics was conducted in order to determine the people's responses on the pricing methods and public paying fees used by West B Municipality in Zanzibar. The following results below were obtained.

Table 2. Descriptive statistics for pricing methods and public paying fee on cleaning & sanitation service

OPTIONS	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Western B municipality has modern looking equipment	14.7%	5.3%	8%	24%	48%
Materials associated with the service are clear and attractive	12.0%	15.3%	7.3%	26.0%	39.3%
The WEST B municipality provides their services on time	12.0%	15.3%	7.3%	24.7%	40.7%
The services provided by West B municipality are good and interesting	10.7%	18.0%	6.0%	38.0%	27.3%
The price of services provided by municipality is reasonable	18.0	10.0	5.3	20.7	46.0
Effective in handling customer's service problems	10.7	18.7	6.0	24.0	40.7

The table 2 above shows how the respondents reactions on the pricing methods and public paying fees used by West B Municipality in Zanzibar. The result indicates that, the equipment used by Municipality to price cleaning services and sanitation is not up to date since more than 50 percent of the respondents disagree with the statement. On the issue of material associated with the services, almost 40 percent of the respondents they are strongly disagree that materials are not good and strong enough for the cleaning services of the Western B Municipality. Regarding to the punctuality, more than 50 percent of the respondents they are against the statement that the municipality provide their services on time. This indicate that people they are not comfortable with the method used by Municipality office.

Much interesting, the services provided by municipality seem are not and not interesting. In this aspects the respondents were much disagree compared to strongly disagree. It means that if the municipality will improve their services automatically the result on this area will be something else. In addition to that, the price charged by Municipality for cleaning and sanitation fees are not reasonable where 69 out of 150 of the respondents represent 46 percent were strongly disagree with the statement. This implies that the office they don't have price base for charging these services. Lastly but not list, the result indicate that the West B Municipality are not able to handle the customer's services problem because more than 50% of the total respondents were strongly disagree.

6.3 Inferential Statistics
Apart from descriptive statistical techniques, the inferential analysis techniques such as standard and hierarchical multiple regressions were used in order to determine the relationship between pricing methods and public paying fee on Cleaning Service & sanitation in West B Municipality Zanzibar. All assumptions aligned for this technique were meeting and the following result was obtained.

Table 3: Relationship between pricing methods and public paying fee

Correlations		CBPM	DBPM	COBPM	ME	GSMACS	GS
CBPM	Pearson Correlation	1	1.000**	1.000**	-.046	-.099	-.046
	Sig. (2-tailed)		.000	.000	.573	.230	.573
	N	150	150	150	150	150	150
DBPM	Pearson Correlation	1.000**	1	1.000**	-.046	-.099	-.046
	Sig. (2-tailed)	.000		.000	.573	.230	.573
	N	150	150	150	150	150	150
COBPM	Pearson Correlation	1.000**	1.000**	1	-.046	-.099	-.046
	Sig. (2-tailed)	.000	.000		.573	.230	.573
	N	150	150	150	150	150	150
ME	Pearson Correlation	-.046	-.046	-.046	1	-.019	1.000**
	Sig. (2-tailed)	.573	.573	.573		.816	.000
	N	150	150	150	150	150	150

Correlations		CBPM	DBPM	COBPM	ME	GSMACS	GS
GSMACS	Pearson Correlation	-.099	-.099	-.099	-.019	1	-.019
	Sig. (2-tailed)	.230	.230	.230	.816		.816
	N	150	150	150	150	150	150
GS	Pearson Correlation	-.046	-.046	-.046	1.000**	-.019	1
	Sig. (2-tailed)	.573	.573	.573	.000	.816	
	N	150	150	150	150	150	150
**. Correlation is significant at the 0.01 level (2-tailed).							

KEY:

CBPM = Cost –Based Pricing Methods
DBPM = Demand –Based Pricing Method
COBPM = Competition –Based Pricing Method
ME = Modern Equipment
GSMACS = Good and Strong Material Associated with Cleaning Services
GS = Good Services

So as to accomplish this objective, correlation was conducted using Pearson's correlation coefficient (r). The results indicate that *there is no significant positive relationship between pricing methods and public paying fee on Cleaning Service & sanitation.* According to Sedgwick, and Philip (2012) correlation analysis is basically applied to explain the strength and direction of the linear relationship between two variables. In line with this explanation, correlation analysis was specifically carried out in order to see the strength and direction of the study variables like pricing methods on: modern equipment used, good services provided, good and strong materials used.

Generally, Pearson's correlation coefficients (r) take only values for -1 to +1 in which the sign indicates whether there is a positive correlation – this means that when one variable increases, the other also increases or a negative correlation which means that when one variable increases, the other one decreases, though when the value of zero (0) is obtained, this indicates that two variables do not have any relationship (Schober et al., 2018).

According to Cohen (1988), Person's correlation coefficient is classified into three sizes namely small, medium and large as seen in Table 4.14

Table 4 Interpretation of Person's correlation coefficient (r)

Values of Pearson's correlation coefficient	Interpretation
r = 0.10 to 0.29	Small correlation
r = 0.30 to 0.49	Medium correlation
r = 0.50 to 1.0	Large correlation

Source: Cohen (1988, pg 79 – 82)

The results of the Pearson's correlation coefficient (r) of the present study show that most of the variables positively not correlated, means they did not show any relationship between them. For example, in looking the strength of the relationship between Cost –Based Pricing Method, Demand Based Pricing Method, and Competition – Based Pricing Method with Modern Equipment used, Good and Strong Materials used and Good services were provided is clearly seen that there is no relationship since all values of correlation coefficient of variables are larger than the critical values (p > 0.01). For example Cost – Based method with modern equipment used (-.046, p > 0.01), Cost –Based Method with materials used to provide services (.099, p> 0.01) and Cost – Based Method with general service provided (-.046, p> 0.01). Generally, this is total indicated that the pricing methods and public paying fee used in West B Municipality have no significant effects on the services provided like cleaning services and sanitation services. Therefore there is the need the Authority to establish the best model to be used so as to clear these problems.

This is supported by the study conducted by Ajam, (2001) who he said that the infrastructure services concentrated by municipalities are different from the goods and services produced by industrial or business firms; they are not private goods services by nature. In the case of private goods, market acts as an instrument of competition and regulation, and the prices are determined by supply-demand conditions; in efficient and competitive markets, the price of good and service is arrived at from the market clearing operations. Based on these prices, the individual firm takes production decisions and how much and when to produce on their own

7. Conclusion

The study assessed the effect of price methods and public paying on cleaning and sanitation services in West B Municipality, Zanzibar. Most of the respondents agreed that there are the impacts like low quality services, low quality of the equipment services and high paying fee of the services provided. In addition to that after being told to rate the impact more than 50% of the respondents replied low and very low impact of the services provided. Also about the quality of equipment used by Municipality most of the respondents almost 70% of the total were

disagree and said that the equipment's used most of them are old and not modern. About the quality of the materials used by West B Municipality most of the respondents in the field disagree that materials are not good. Most of the respondents also disagree that West B Municipality are not providing services on time as planned by the authority. This is noted that they are not full responsible on providing services like cleaning and sanitation. Even though more than 50% of the respondents disagree that the services provided by West B Municipality are not good and not interesting to the customers on the organization of the services, West B Municipality are not well organized since most of the respondents were strongly disagree.

8. Recommendations

It can be said undoubtedly that some time there are a lot of studies about price sensitivity and Municipality services. But, most of the researches are related with the products not with the impact of the price methods and services sensitivity. It is recommend that Municipality authority should emphasize on the service provided to the consumers such as clearing services, improve the consumers environment for the business, medical or clinical service and sanitation services.

Not just only an amount that customers pay for utilizing a product or having a service. Price is most influencing factor for buying a product and for earning profit from selling the product. It is most influencing factor for buying because consumers are rational; they have limited income as well as limited budget therefore Municipality authorities should stick and plan affordable and specific price to the consumers.

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Biodata of the authors

Ali Abdallah Natepe, born 1982 in Zanzibar. He promoted to current position as a Director in West B Municipal Council in October 2018, before that he wa appointed as a Deputy Director in Urban Municipal council from November 2016 to October. He graduated in Zanzibar University 2009 with a Bachelor Degree in Business Administration optional Marketing. Also he take some Other short courses in Management and Administration such as Managing Meeting in Public Institution provided by Central for good governance and Economic Development (2015), NAPS- InfoBridge (2013) and Research for Education and Democracy in Tanzania from University of Dar es Salaam (2007). With eleven years of experiences working alongside with the executive teams of Local Government Authorities I use to encourage other to work hard and succeed the goals and objectives.

Abdalla Ussi Hamad born and raised in Zanzibar 1985, till now lives in Zanzibar. He holds a PhD in Islamic Banking and Finance (International Islamic University of Malaysia, 2018), an MSc Finance (International Islamic University of Malaysia, 2013) and Bachelor of Business Administration (BBA) majoring in Accounting and Finance (Zanzibar University, 2010). His academic accomplishments include some articles in professional journals. Dr. Abdalla's research and consulting services concern Islamic banking operations, social finances mechanisms as well as poverty alleviation issues, economics modeling, financial and managerial accounting etc

Saleh S. Mwinyi has been a Lecturer and former Dean of Faculty of Business Administration at Zanzibar University, Tanzania. He received his MBA (Marketing) from Annamalai University and BCom from Rajasthan Vidyapeeth University, India in, respectively, 2001 and 1999. He has more than seventeen years of teaching and professional experience in market analysis and development, international trade and organizational behavior. Currently, he is an entrepreneurship professional mentor for small and medium enterprises in Tanzania, East Africa. He is in thesis stage of his PhD programme.