

Full Length Research Paper

# An Assessment of Service Quality and Customer Satisfaction regarding Solid Waste Management in Addis Ababa Ethiopia

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Abstract

Customers were sensitive to service quality and their expectation was high for the money they paid in exchange for the service. They were said to be satisfied if their perception about the service was equal to or greater than their expectations. Solid waste collection, handling and disposing the waste in proper place plays a vital role in the development of a country. Every organization from manufacturing to service and home appliances require solid waste management at different levels. Provide adequate and quality collection, transportation and disposal of solid waste management, through continuous improvement of utility management practices respective to the socio-economic development and environmental protection need of the public. This paper uses simple random sampling probabilistic method as the whole sample unit has equal chance of selection or probability. The total size of the population was 34,000. This means 30333 customers and 700 employees. The researchers conducted the analysis based on the total of 3000 returned questionnaires from both respondents (employees and customers). According to employees handle customers problem, majority of customers were not get fast response. The other problem of the service that given at this center was the collection and transportation system was not appropriate for customers. Cleansing management office responsiveness to become low was in ability to maintain their failed solid waste collection, transportation and disposing from household to landfill. Majority of the customers said the service of solid waste management system and the transportation of the solid waste were not proportion.

**Keywords:-**service, quality, customers, solid waste management, transportation, collection

Introduction

Solid waste management and service delivery systems can make critical contributions to public health, environmental sustainability, economic development and poverty reduction. Effective solid waste management systems can contribute to improving public health outcomes through reducing opportunities for disease spreading vermin to thrive, such as occurs at unregulated local dumpsites. They contributed to enhancing environmental quality by protecting watercourses, ground water and preventing illegal dumping and littering. Well-designed solid waste management systems support both higher levels of economic activity and can contribute directly to poverty alleviation through job creation. Conversely, a failure to provided effective solid waste systems was felt most severely by poor households. It noted that municipalities in developing countries usually spend between 20 to 50 percent of municipal expenditure on solid waste management service delivery which ultimately results in low level of service provision (3). Traditionally, solid waste management, collection and disposal, is handled on the municipality level. In the absence of environmental legal frameworks, the sector operated solely under municipal law that defines municipal responsibility for waste management services and which provides for municipalities to establish through which they may collaborate in the delivery of municipal services, including waste management; an increasing number of municipalities are participating in such initiatives (1).The concept of customer care was concerned with customer satisfaction putting; the customer first anticipating and meeting the need and problems. Moreover, it concerned tailoring products and services to meet need and being "Nice" to customer through creating and maintaining harmonious relationship with customers.

Every organization from manufacturing to service and home appliances require solid waste management at different levels. The sole provider of collection of solid waste in our Addis Ababa was that collect, transport and disposes solid waste to all users across the city. Although there were many phases from generation to disposal; the collection and transportation phase was highly associated with customers and hence require critical attention

The emerging approach recognized that differing service standards were appropriate in different settlement types and densities. Moreover, issues of affordability, municipal capacity, the quality and nature of waste generated, climate, availability of storage,

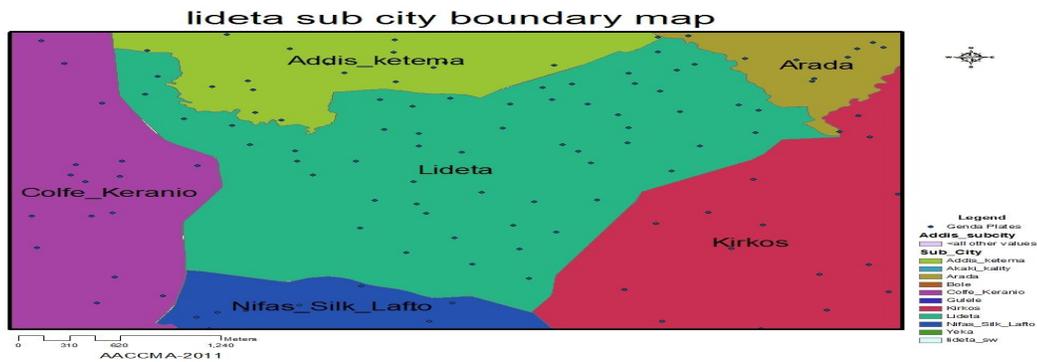
topographic conditions, road conditions (width and quality) all impact on the nature of the service that can be provided in an area. Importantly, standards were not limited to collection services alone, but must also deal with waste regulation, minimization, storage, transport and treatment. Perhaps the most important finding of the research is that municipalities themselves must accept and take ownership of the appropriate set of standards for their areas. Although a single set of national standards was desirable, they will need to differentiate between the levels and kinds of service expected in different areas of the country. Household waste generation characteristics vary considerably by settlement type and income. A comparison of the waste generated by urban residents in different settlement types demonstrates the point that wealthier consumers were predominantly located in low density suburbs. (4)

The cleansing management office as public utility agency was established for indefinite duration by regulation No, 15/2001, and conferred the collection, transportation and disposing of solid waste management in their Authority. The purpose of the corporation was to engage in the business of producing transmitting, distributing and selling electrical energy in accordance with economic and social development policies and priorities of the government and carry out any other activities that would enable it achieve its purposes. The vision of solid waste management a first utility in providing quality service for collection, transportation and disposal connected or a competitive service delivery for city people. The mission of cleansing management office is provide adequate and quality collection, transportation and disposal of solid waste management, through continuous improvement of utility management practices respective to the socio-economic development and environmental protection need of the public.

Also attempted to evaluate the extent to which the objective of service was met in practice-effectiveness (quality of service rendered) evaluated the efficiency in production of the employee and direct service operators in waste management of the selected areas, examined the factors influencing the production efficiency of the employee and direct service operators, and highlight constraints associated with effective operations of the quality and service of solid waste management system

**Materials and Methods**

*Study area*



**Fig 1:** The boundary of the subcity from Addis 5 subcity surrounding



**Fig 2:** 10 woreda of the subcity and the study place boundary

Selected the sample from 10 woreda from the study boundary of the subcity in the service satisfaction the solid waste service delivery

*Population*

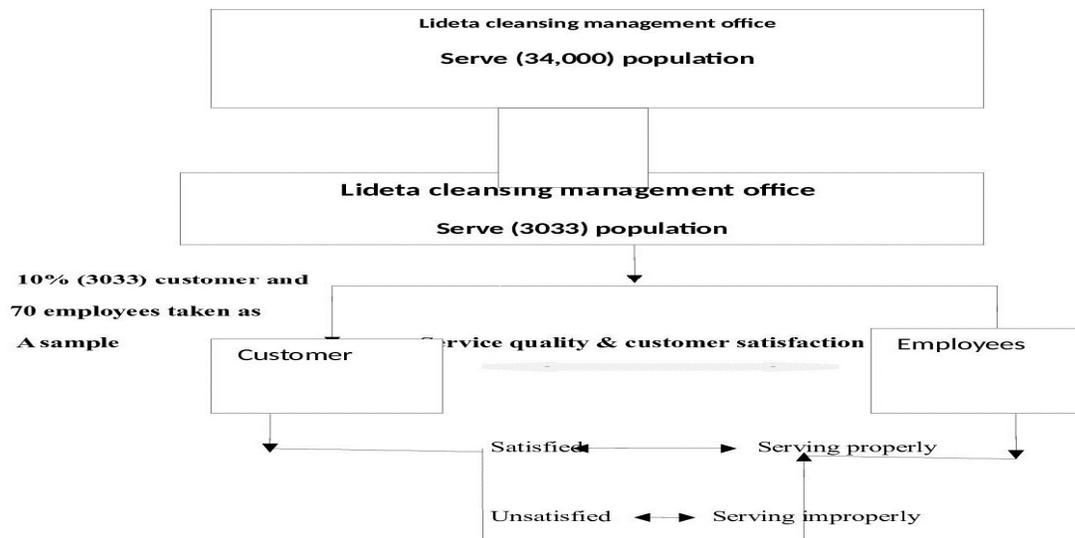
In order to achieve the objective of the study, the researchers consider all customer and employees of cleansing management agency workers. The total size of the population was 34,000. This means 30333 customers and 700 employees.

*Study unit/target group*

In our case our study unit which we could be taken our sample size was from cleansing management Addis Ababa which were 3033 customers and 70 employees of cleansing management agency

*Research design*

The researcher has used to descriptive type of study that tries to describe the service quality and customer satisfaction cleansing management Addis Ababa.



**Fig. 3.** Service Quality and Satisfaction flow chart.

From the above figure 3 was stated that flow chart (study design) which shown about service quality and customer satisfaction in solid waste management service delivery for collection, handling, transportation in Addis Ababa.

*Sample and sampling method/ techniques*

The study undertakes a total of 3103 sample respondents out of the population. Moreover, the following table 1 shown 3103 the distribution of sample respondents among the three classifications; Managers, Employee and customers.

**Table 1:** Sample size and types of population

No	Sampling unit	Number of sampled
1	Employee	70
2	Customer	3033
<b>Total</b>		<b>3103</b>

From the above table 1 that was selected the above sample by using simple random sampling probabilistic method due to have been known sampling frame as well as the whole sample unit has equal chance of selection or probability

*Data collection Instrument (Tools)*

Questionnaires and interviews were conducted to collect information from primary source.

*Source of Data*

There were two sources of data for the study. These were primary and secondary sources. Primary data:-includes those data through questionnaires gathered from manager, employees' and customers. Secondary data: - collected from relevant documents from magazine, brusher, internet etc.

**Result and Discussion**

*Data analysis and Interpretation*

This section deals with the data analysis and interpretation. The first section of the chapter presents analysis of data collected from employees and the 2<sup>nd</sup> section from customers respectively.

*Questionnaire distribution to employees and customers and returned:* The researchers conducted the analysis based on the total of 3000 returned questionnaires from both respondents (employees and customers) as shown in the below table

Table 2. Questionnaire Distributed to employees and customers of returned

	Number of distributed Questionnaire	Number of returned Questionnaire
Employee	70	70
Customers	3033	2930

General Characteristics of employee's respondents

Table 3. Assessment made on the modernity of working material in cleansing management worker.

Question 2

The working material in cleansing management office is totally up to date

Strongly Agree		Agree		Strongly disagree		Disagree		Total	
N0	%	N0	%	N0	%	N0	%	N0	%
20	29	20	29	5	7	23	33	70	100

From the above table 3 was shown that 20(29%) Strongly Agree, 20 (29%) Agree, 5 (7%) Strongly Disagree 23(33%) Disagree. Therefore as we understood from the table the working material was totally up to date (Strongly disagree)

Table 4. Assessment made on of cleansing management office employees understand the specific needs of Customers

Question 3

Cleansing management office Employees understand the specific needs of Customers

Strongly Agree		Agree		Strongly disagree		Total	
N0	%	N0	%	N0	%	N0	%
20	29	47	67	3	4	70	100

From the above table4 was Shown that 20(29%) Strongly Agree, 47 (67%) Agree 3(4%) Strongly Disagree. Hence the majority of them were agreeing.

Table 5. Assessment regarding how quickly service is delivered after payment and reasons of delay

Question 4

How long did Customers wait to get the service, after paying the necessary amount?

3 day		1 week		2 weeks		>2weeks		Total	
N0	%	N0	%	N0	%	N0	%	N0	%
2000	66	1000	33	33	1	0	0	3033	100

According to table 5 was stated that majority of them said they got the service 2 time in 1 week of them got in 3 day, (66%) of them get in 1 week and (33%) of them got in 2 weeks .As the table above shown that the customers were gotten the service on time.

Table 6. Reason for delays in service delivery

Question 5

What do you think is the reason of dalliance

Lack of working materials		Lack of worker		Other		Total	
N0	%	N0	%	N0	%	N0	%
1000	33	1000	33	1033	34	3033	100

From the above table 6 it is clear as what cause delays. 1000 (33%) shortage of working materials, 1000 (33%) lack of workers special drivers of the cars and collectors of solid waste 1033 (34%) other (disposal problem, transportation and health problem of workers). Hence, from the above table we can infer that the majority of employees said that lack of disposal and transport problem was the major reasons of dalliance. The failure to consider parameters peculiar to a particular location has led to unreliable waste collection service and infrequent collection.

Table 7. Assessment of employee's satisfaction to their salary

Question 6

Do you think that your salary attractive with your work

Yes		No		Total	
N0	%	N0	%	N0	%
5	7	65	93	70	100

Table 7 shows that majority of employees 65 (93%) were unsatisfied, whereas the remaining 5 (7%) of employees were satisfied because of higher salary.

**Table 8.** Assessment of employees benefit

**Question 7 Do you think that employee benefits are provided in a good manner in cleansing management office**

Yes		No		I don't know		Total	
N0	%	N0	%	No	%	N0	%
20	29	20	29	30	42	70	100

**Table 9.** Assessment of leadership style

**Question 8**

**How do you feel about the leadership style of the organization**

Excellent		Very Good		Fairly		Bad		Total	
N0	%	N0	%	N0	%	N0	%	N0	%
0	0	10	14	20	29	40	57	15	100

Data analysis collected from customers

**Table 11.** Assessment made on how operators react when the workers collect the waste from household

**Question 10**

**In case of solid waste collection and transportation, when you make a collect the waste from the coustour household?**

With warm welcome		Aggressively		Carelessly		Total	
N0	%	N0	%	N0	%	N0	%
2500	82	200	7	333	11	3033	100

From the above table it is clear that service delivery stated in Institutional arrangement challenges contribute to poor waste management service delivery. In order to resolve these institutional challenges, municipal waste service delivery should ensure that individual municipal waste service staff took responsibility for specific actions and duties assigned to them.

**Table 12.** Assessment of customer satisfaction

<b>Question 11</b>	Yes		No		Total	
	N0	%	N0	%	N0	%
<b>Are you satisfied with the service in cleansing management office provides?</b>	2500	82	533	18	3033	100

Above table shows that majority of the customers (82 %) said that they were satisfied, where as the remaining (18%) of customers were not satisfied Hence, the service gave by in cleansing management office was satisfactory.

**Discussion**

From the above table and general explanation of the result the people expect to manage the solid waste management system. The assembly has prioritized solid waste; formerly people were dumping their solid waste anywhere around the house and even in the gutter and others took it to the communal dust bin in the market. Many people complain that they were not satisfied with the services provided. Normally, the collectors refuse to repeat collection twice a week, but sometimes they come after two weeks to collect the refuse, so most times in such situations many people depend on the central containers. The extent of satisfaction with solid waste management services in the community was low; only the customers (82 %) of them said that they were satisfied, where as the remaining (18%) of customers were not satisfied Hence, the service gave by in cleansing management office was satisfactory and the services gave attention in the future provided. Then, the effectiveness of solid waste handling, collection, transporting and disposing in the subcity was to a large extent hampered by twice a weak monitoring and sanctioning by the subcity.

**Conclusion**

Municipalities were facing the challenge of rising unit costs and falling per capita revenues associated with expanded access to services. This may slowdown the pace at which services were expanded to unservice households and a growth in uncontrolled dumping, and littering that will inflate operating costs for municipalities or exacerbate environmental damage. It was also possible that efforts to bring down the unit cost of the service will result in greater mechanization that may reduce jobs in the sector. Already there was evidence that larger municipalities had significantly mechanized their operations. Municipalities were also seeking ways to reduce subsidy leakage through improved targeting.

As cleaning was the most vital and dominant factor to the development of a country, the growth of its production and distribution should be anonymous to the economic growth of a country. Though it was not fully exploited, Ethiopia was rich in natural and man made resources, which in turn could help in the expansion of solid waste disposing interest to meet the growing demand of clean city. So, where was in cleansing management office towards the achievement of the country's millennium development goals of sustainable sanitation? Were customers of in cleansing management office feel they were provided with quality service?

In the case of service delivery after payment majority of the customers said it would take >3 days. All those which took more than the indicated time were taken as unreliability of service delivery. According to employees handle customers problem, majority of customers were not get fast response. The other problem of the service that given at this center is the collection and transportation system was not appropriate for customers. In addition to this employees are negligence of customers. When the solid waste dispose open space and the worker to live to collect the waste. By looking the questions under responsiveness we can conclude that in cleansing management office Responsiveness is low. From the listed questions that made in cleansing management office Responsiveness to become low is in ability to maintain their failed solid waste collection from household. Majority of the customers said the service and the transportation system are not proportion. A relatively less important than reliability and responsiveness was assurance. The one that contributed great percentage is the confidence customers develop when meeting the employees. Generally the customers were not satisfied at the service that given at in cleansing management office.

There was a need to establish differentiated targets on basic access to services that take account of varying municipal contexts and capacities. Greater differentiation and improved specification of the targets for municipal service provision will provide an important focus to their strategies to expand access and improve the quality of service delivery.

### Recommendations

Considered in the future for quality and service delivery as real improvements as those will be achieved:

- Extension of service coverage.
- Closure or rehabilitation of existing open dumps.
- Introduction of adequate user charges and collection mechanisms, along with needed cost accounting and management information systems.
- Gradual involvement of the private sector considering that solid waste departments in most municipalities still have to improve much on many fronts.
- Deliberate assessment of the roles and responsibilities of numerous actors, including: households, and other service users, local and national government authorities, NGOs, formal and informal private sector enterprises, as well as external support subcity.

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