

EVALUATION OF MUNICIPAL SERVICES IN SELECTED WARDS OF DHAKA CITY CORPORATION: CITIZEN'S PERSPECTIVE

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Abstract

Dhaka city is the home of more than five million and is one of the most densely populated cities of the world. Dhaka City Corporation is responsible for providing various services to its citizen with its limited resources. 'Citizen Report Card' is one of the new methods to measure the performance of civic services provided by urban government. This study used this method to measure the performance of waste management, mosquito control and certification service offered by Dhaka City Corporation in some selected wards of Dhaka City. The performance of each of these services is ranked using The Urban Governance Indicator value. The study concluded that citizen of Dhaka ranked the waste management and certification service as fair while mosquito control service was identified as poor. The paper ended with a discussion on possible improvement of quality of services.

Keywords: Dhaka City Corporation, Citizen Report Card, Municipal Services, The Urban Governance Initiative Index (TUGI).

1. Introduction

It is not very long ago, Dhaka possessed an image as a city of green and water bodies. Within last few decades this serene and tranquil city has been transformed into one of the most polluted and crowded cities in the world. Dhaka City Corporation (DCC) is responsible for managing the city. The jurisdiction of DCC area is 154 km² and accommodates about 5.3 million people. (Bangladesh Bureau of Statistics, 2006). It is projected that the population would reach 10 million by the year 2015 (Islam and Shafi, 2004). Around 15% of the citizens live in slums and squatters which are scattered all over the city (Asian Development Bank, 2008). This is creating pressure on the services and infrastructure of the city and making the tasks of DCC more difficult to the point of unmanageable.

Dhaka City Corporation was established as the Dacca Municipality on August 1, 1864. Prior to that, a Committee for the improvement of Dacca (Former spelling of Dhaka) managed the city. The act of 1884

added the provision of elected representatives in municipalities called commissioners. In 1978, it gained corporation status. In 1982, two adjoining municipalities, Mirpur and Gulshan, were merged with Dhaka Municipality. In 1983, it was renamed as Dhaka Municipal Corporation which was again renamed as Dhaka City Corporation in 1990 (Siddiqui, 2005). DCC performed its duty through the Zonal and ward offices. DCC has 10 zonal offices situated at different parts of the city. Zonal offices are administrative units. But at micro scale every locality under 90 DCC wards are governed by respective ward commissioners. Ward Commissioners are elected by direct vote of local residents. Each of this ward commissioners are responsible for overall well being of the residents of their ward. They are also the field level supervisors of DCC activities. They maintain, operate and monitor different DCC activities within their wards.

DCC is responsible for providing some of the basic amenities to its citizen. Conservancy service and certification service are the two of the major tasks perform by DCC. Besides, DCC also runs primary health care facility, primary education program, provides certificate for various purposes to the citizens, collects taxes from the citizen and provides street lighting in Dhaka. However, there is growing consensus within the academia and media that DCC has failed to achieve desired standard in its performance (Imam, 1998; Haq, Ahsan et al., 2002; Hossain, 2002; Chepesiuk, 2003; Hossain, Wagatsuma et al., 2004; Islam and Shafi, 2004; Alam, 2005; Mercer Human Resource Consulting, 2007; Luck , 2008). Few of the studies assessed the performance of DCC in quantitative term.

The present study tried to asses the services rendered by DCC quantitatively. This is done through taking a demand side perspective through user survey. User's feedback is often considered as an important tool for improving quality of services. But it is rarely use by the public service organizations. The study used citizen feedback as a form of assessing quality of urban services.

2. Objectives and Methodology

The study aimed at assessing the delivery of services of urban government from citizen's perspective. There are lots of studies on services offered by urban governments. But there are very few work using citizen's opinion as a tool for measuring urban government's performance (Hossain, Morshed et al., 2001; Sekhar, Nair et al., 2005). Especially in case of Dhaka City, no research has yet been conducted focusing on citizen perception on urban services. Thus the research, has contributed in this unexplored field.

Public Affairs Center – an NGO in Bangalore, India conducted the pioneer works on the state of service offered by urban government (Waglé, Singh et al., 2004; Sekhar, Nair et al., 2005; Asian Development

Bank Institute, 2007). They used it as a strategy to compel urban government to improve the quality of services they offer. They introduced the term 'Citizen Report Card' as an evaluation tool. The findings act as a basis towards allocation of budget (Waglé, Singh et al. 2004; Sekhar, Nair et al. 2005).

The focus of the study is to assess the quality of the services offered by DCC from the citizen perspective. The research is based on primary data obtained by observation and questionnaire survey. The objective of the questionnaire was to measure the satisfaction level, to the extent of services offered by DCC. Citizen's were asked to measure the services in a scale of five where five stand for complete satisfaction and one stands for very much unsatisfied.

DCC offered a host of services to its citizens (Ministry of Law Justice and Parliamentary Affairs, 1983). These include ensuring public health and safety, town planning, regulating buildings, lighting the street, managing disasters, arboriculture, providing cultural, licensing and certification facilities to its citizen. Some of these services are meant for particular section of the population (for example – licensing service to businessman), some facilities for all but only used by a few (for example primary health care facility which is only used by the poor) and some of the facilities are meant for and used by all residents (for example waste management). The objective of this paper is to measure the quality of service as assessed by the citizen. However, it is not possible to assess all the services due to resource constraint. As a result, the study chose to assess the quality of those services which are meant for and used by every strata and section of the society. Waste management, mosquito control, certification service, street lighting, disaster and hazard management are some of those services. But the study limited its scope to waste management, mosquito control and certification service offered by DCC. These three are the most visible services of DCC. The quality of these services (especially first two) even has strong influence on the election campaign of ward commissioners and mayor.

For proper assessment it was desirable to get the respondent's from all over the city. Though Dhaka has a population over five million, but among the wards there is a homogenous mixture of population. The service facility provided to the citizen is also evenly distributed over the city. Thus it is understood that a small sample size would represent true picture for Dhaka. Most of the services offered by DCC is conducted by ward office. Twelve wards out of the ninety were selected. In selecting the wards, careful consideration were made so that these wards are representative of Dhaka. The selected Wards are Ward No. 5, 7, 34, 35, 37, 38, 50, 52, 56, 60, 62 and 68. As the consideration was made to have a representative samples of Dhaka – the selected wards were from old Dhaka (for example Ward no 60, 68), mix of old and new Dhaka (Ward no 56, 62) and from New Dhaka (Ward no 7, 37). The study area ranges from fully residential (Ward no 5, 35) to commercial and service sector dominated (Ward no 50,

52) to industrial sector dominated (Ward no 38). From each of these twelve wards, thirty samples of residents were randomly collected. In collecting the survey samples, consideration was made so that samples were representative of the wards. The respondents were chosen in such a way that either they are head of the family or a responsible adult. Before conducting the survey, a pilot sample survey was conducted and necessary corrections of the questionnaire were made. Once the data were collected the respective ward commissioners were interviewed to get their view on the result of questionnaire and their opinion regarding some of issues raised by their electorate.

The collected data were analyzed both qualitatively and quantitatively. In measuring the performance of service TUGI (The Urban Governance Initiative) index was used. The index developed by The Urban Governance Initiative is a ratio index. The index is a percentage ratio of total points given by the respondent divided by maximum score possible. In the point system, five is awarded for the best while for the worst, one is awarded and intermediate scores are four, three and two for good, fair and poor respectively. Following mathematical expression shows how the TUGI index is determined:

$$\text{TUGI index} = (\sum(I_i * n) / (5 * n)) * 100$$

Where I_i is the scale value of service and n is the total number of respondents.

According to TUGI index, there are five classes of services. If the value falls below 35% then it is considered very poor but it is considered to be very good if the value is over 85% (Table 1).

TABLE 1: TUGI INDEX INTERPRETATION

| Value | Indicator |
|-----------|------------|
| 85%-100% | Very good. |
| 65%-84% | Good. |
| 50%-64% | Fair. |
| 35%-49% | Poor. |
| Below 35% | Very poor) |

(The Urban Governance Initiative, nd)

3. Results and Discussion

About 360 household heads were surveyed to assess the performance of DCC in providing services on waste, mosquito control and certification. Not all respondents took all the services. Thus in all cases the total is not 360. Socio-economic data was collected through questionnaire survey for better analysis of the scenario.

3.1. Socio-economic and Demographic Information

One of the hypotheses of the research was that socio-economic status of a respondent has important implication on the way he measured the services. Age, occupation, income and education level of the respondents were collected for testing this hypothesis.

The majority of respondents are middle aged male. As Table 2 suggests, almost three fourth of the respondents were between the age of 30 to 59, thus the most active, responsible and sensible age group.

TABLE 2: AGE GROUP OF RESPONDENTS

| Age Group (in Years) | Frequency | Percent |
|----------------------|-----------|---------|
| 15-29 | 76 | 21.1 |
| 30-44 | 166 | 46.1 |
| 45-59 | 94 | 26.1 |
| Above 59 | 24 | 6.7 |
| Total | 360 | 100.0 |

TABLE 3: INCOME DISTRIBUTION OF SELECTED WARDS OF DCC (IN BDT)

| Ward No | < 2500 | 2500-4999 | 5000-7499 | 7500-9999 | 10000-14999 | Above 15000 |
|---------|--------|-----------|-----------|-----------|-------------|-------------|
| 5 | 6.9% | 10.3% | 20.7% | 10.3% | 31.0% | 20.7% |
| 7 | 7.4% | 22.2% | 3.7% | 25.9% | 25.9% | 14.8% |
| 34 | 26.7% | 23.3% | 13.3% | 6.7% | 6.7% | 23.3% |
| 35 | 13.3% | 26.7% | 20.0% | 10.0% | 16.7% | 13.3% |
| 37 | | 16.7% | 16.7% | 30.0% | 23.3% | 13.3% |
| 38 | 6.7% | 20.0% | 3.3% | 23.3% | 23.3% | 23.3% |
| 50 | 37.5% | 25.0% | 8.3% | 8.3% | 20.8% | |
| 52 | 21.4% | 25.0% | 17.9% | 32.1% | 3.6% | |
| 56 | | | | 20.0% | 13.3% | 66.7% |
| 60 | | 13.3% | 10.0% | 13.3% | 26.7% | 36.7% |
| 62 | 10.0% | 13.3% | 16.7% | 10.0% | 23.3% | 26.7% |
| 68 | 10.0% | 6.7% | 13.3% | 13.3% | 33.3% | 23.3% |

Though majority of the population of Bangladesh lives below poverty line (i.e. daily income below one US\$ or roughly 70 Bangladeshi Taka, BDT), in Dhaka's case it is not true (Hossain, 2006). However, more than 50% of the city population earns less than 10000 BDT per month according to the survey. Table 3 divulges the income group characteristics of each ward. However, twelve respondents refused to disclose their earning. The table reveals that in ward no 37, 56 and 60 lowest income group of the city do not exist while in ward no 50 and 52 highest income group is absent. It also reveals that the higher income group of the society resides in ward no 56.

On the other hand, all respondents divulge their education status. About 12% of the respondents are illiterate and more than 50% of respondents have 10 years (i.e. SSC level) or less education (Table 4).

TABLE 4: EDUCATION LEVEL OF THE RESPONDENTS

| | Frequency | Percent |
|-------------------|-----------|---------|
| Illiterate | 46 | 12.8 |
| Primary | 33 | 9.2 |
| Up to class eight | 51 | 14.2 |
| SSC | 62 | 17.2 |
| HSC | 70 | 19.4 |
| Degree and Above | 98 | 27.2 |
| Total | 360 | 100.0 |

3.2. Waste Management

Management of waste is a costly and vexing problem for most of the local authorities of developing countries. The problems are identified as (i) service coverage is low; (ii) resources are insufficient; (iii) uncontrolled dumping is widespread, with resulting environmental problems (Bartone, 2001). Amin (2000) cited examples of number of third world cities where urban waste has been turned into resources by proper management of recycling projects. Despite of large scale involvement of private sector, management of solid waste is still a crucial challenge for Dhaka City Corporation. There is limited reliable information related to quantity of wastes generated in Dhaka. It is estimated that on average 3000 M tons of waste is generated in Dhaka everyday (The Sustainable Development Networking Program, 2005). More than 50 % of the total waste amount is organic and biodegradable(The Sustainable Development Networking Program, 2005). One of the major environmental problems of neighborhoods of Dhaka was solid waste disposal system (Bartone, 1990; Enayetullah, 1995). Failure of DCC due to resource constrains left no option to the residents other than taking local initiatives to arrange for house to house collection of waste. This strategy got momentum and by 2003 about 100 communities have begun this participatory program in Dhaka City. This approach contributed for 20% increase of coverage of garbage collection. In addition to improve environment, it has also created 400 jobs (Yousuf, 2000). Willingness of local residents to pay for house to house garbage collection and voluntary services of some local residents are the two major aspects related to the success of the program. Dhaka City Corporation is responsible for collecting and managing waste from dustbin to sanitary landfill. Recently DCC privatizes this work in some of the selected wards. But the study wards are not included in such program. However, it is the responsibility of the households to put their waste in the dustbins. According to DCC charter, there should a dustbin in reasonable distance for household. In most part of Dhaka City, community base organizations collect garbage from the household. As citizens

have to pay for this, lower income group either litter the waste or put the waste themselves in the dustbin.

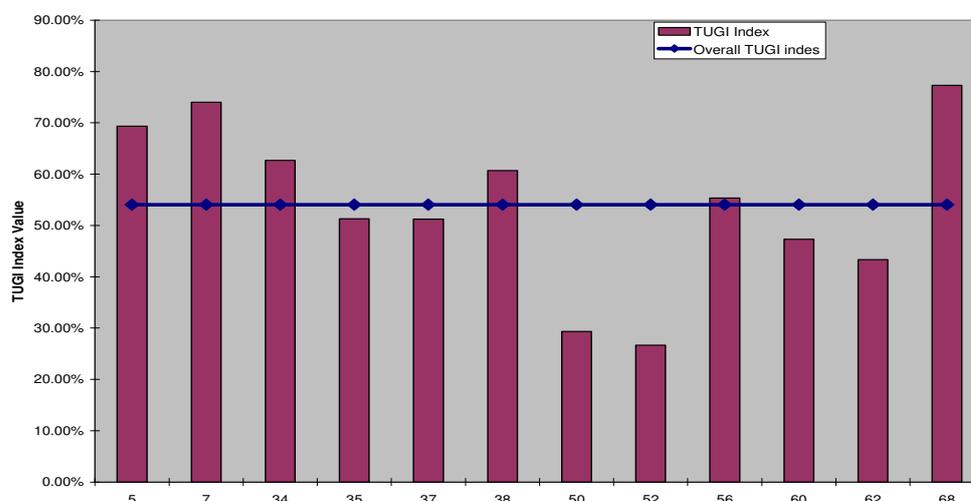
DCC was supposed to clean drains and dustbin regularly (Ministry of Law Justice and Parliamentary Affairs, 1983). Only 13% of respondents said that drains were cleaned daily. For most of them drains are irregularly cleaned without any fixed frequency or never been cleaned by DCC (Table 5). People claim that they have to pay to the DCC sweeper some time as high 3,000 BDT to clean the drains in the locality. In most cases they appoint labor to clean the drains. However, most of the ward commissioners did not agree with the findings. Those who had agreed, complained about lack of manpower and authority over DCC staff.

For the dustbins, the situation is better compared with cleaning of the drains. More than two thirds of respondents agree that dustbins are cleaned daily. A little over 11% of respondents claim that dustbins are not cleaned at all by DCC (Table 5). These respondents live a little away from the main roads of the ward.

TABLE 5: FREQUENCY OF DRAINS AND DUSTBIN CLEANING

| | Dustbin | | Drain | |
|----------------|-----------|---------|-----------|---------|
| | Frequency | Percent | Frequency | Percent |
| Never | 37 | 10.3 | 73 | 20.3 |
| Daily | 118 | 32.8 | 50 | 13.9 |
| Weekly | 107 | 29.7 | 47 | 13.1 |
| Monthly | 15 | 4.2 | 84 | 23.3 |
| Irregular | 76 | 21.1 | 99 | 27.5 |
| Did Not Answer | 7 | 1.9 | 7 | 1.9 |
| Total | 360 | 100.0 | 360 | 100.0 |

Figure 1: Ward wise TUGI index for Solid Waste Management



The principle objective of the research was to produce an index on the quality of services offered to the citizen. The TUGI index values differ considerably among the wards. In one ward it is as high as 94% (i.e. very good) but in another ward it is as low as 42% (i.e. poor). The value is low where there are complain of regular cleaning of drains and dustbins. On the otherhand, community base organizations work in wards with higher TUGI value. But overall TUGI index value for waste management is 64% i.e. fair (Figure 1).

3.3. Mosquito Control Service

One of the widely criticized services of DCC is mosquito control (Hossain, 2002; Hossain, Wagatsuma et al., 2004; Alam, 2005; Staff Reporter, 2008). Almost in every summer there is outbreak of dengue fever in the city. Mosquito is the career of dengue virus. Thus mosquito control is a vital service for citizen. DCC is not performing duty is vindicated by the respondents when more than 50% of the respondent answered that mosquito control activity run in their locality either irregular or entirely absent in last year. About 5% of the respondents claim that they paid money to DCC staffs for carrying out mosquito control activity. Even when they reported to carry out mosquito control activity, in most of the cases there was no response. Ward offices blame this to DCC zonal offices for not carrying out their duty, while DCC clarify this allegation as unavailability of funds and lengthy bureaucratic procedure to obtain mosquito control materials. TUGI index clearly depict the poor performance of DCC regarding mosquito control. With the exception of ward no 50, 58, 62 and 68, all other have TUGI value below 35% i.e. very poor. The overall index value is 37% which is little above very poor category (Table 6).

TABLE 6: TUGI VALUE FOR MOSQUITO CONTROL

| Ward No | TUGI Index | TUGI Index Interpretation |
|---------|------------|---------------------------|
| 5 | 29.33% | Very Poor |
| 7 | 24.67% | Very Poor |
| 34 | 25.33% | Very Poor |
| 35 | 30.00% | Very Poor |
| 37 | 28.18% | Very Poor |
| 38 | 44.00% | Poor |
| 50 | 38.26% | Poor |
| 52 | 31.58% | Very Poor |
| 56 | 37.33% | Poor |
| 60 | 58.00% | Fair |
| 62 | 55.17% | Fair |
| 68 | 51.33% | Fair |
| Overall | 37.96% | Poor |

3.4. Certification Service

One of the major tasks of ward offices of Dhaka City Corporation is to provide different certificate that is needed by the citizens for different purpose. Birth and nationality certificate are two of the most sought after certificate by the citizens. Beside these, DCC through ward commissioner's office also provide death certificate, succession certificate and marriage certificate. Of the 360 respondents 202 have collected some kind of certificates. But not everybody applied and collected certificates from ward offices. It should be also noted that none of the respondents from ward number 37 collected any sort of certificates. Around 30% of the respondents who used this facility received the service either from Zonal office or from DCC office. Though the certification service is either free of cost or charge a very nominal fee, but one third of the respondents claim that they had to pay for this service. They claimed to pay 107.09 BDT on average for a certificate; however most of them pay 50 BDT. Some of the respondents even complained of paying 1,000 BDT for birth certificate. However, it is still rated as one of the better services offered by DCC by the users (Table 7). Even in the worst case scenario the TUGI index is over 50% (i.e. fair) and the best case scenario the value is 94% (i.e. very good).

TABLE 7: TUGI VALUE FOR CERTIFICATION SERVICE

| Ward No | TUGI Value | TUGI Value Interpretation |
|---------|------------|---------------------------|
| 5 | 72.63% | Good |
| 7 | 65.71% | Good |
| 34 | 58.57% | Fair |
| 35 | 74.29% | Good |
| 38 | 94.29% | Very Good |
| 50 | 70.91% | Good |
| 52 | 50.67% | Fair |
| 56 | 60.00% | Fair |
| 60 | 63.16% | Fair |
| 62 | 61.11% | Fair |
| 68 | 80.00% | Good |
| Overall | 67.23% | Good |

4. Conclusions

The result shows that the citizens of Dhaka consider waste management and certification service offered by DCC as fair. However, there is enough scope for improvement in these services. But it should be bear in mind that TUGI value is not uniformly distributed. In some wards this is very good while in other wards this is low. The study did not look at the reasons for such inequality of TUGI value. The study also finds out that irrespective of age and education level, the measurement of service do not

vary. But the study find out that income level does have influence on the assessment of performance of waste management (Table 8). It is found that higher income people ranked the performance better than lower income group. It may be due to the fact the the higher income group pay for the garbage cleaning either to garbage operator or to community based organization whereas, lower income group are solely dependent on DCC. For the other two services socio-economic factors has little influence on the performance status of service as assessed by citizens.

TABLE 8: RELATIONSHIP OF INCOME AND SCALING OF WASTE MANAGEMENT SERVICE

| | Very poor | Poor | Moderate | Good | Very good | Total |
|-----------------|-----------|------|----------|------|-----------|-------|
| < 2500 BDT | 15 | 5 | 7 | 7 | 4 | 38 |
| 2500-4999 BDT | 16 | 13 | 13 | 9 | 3 | 54 |
| 5000-7499 BDT | 11 | 8 | 7 | 12 | 2 | 40 |
| 7500-9999 BDT | 15 | 12 | 17 | 14 | 1 | 59 |
| 10000-14999 BDT | 8 | 14 | 26 | 22 | 2 | 72 |
| Above 15000 BDT | 9 | 18 | 26 | 15 | 10 | 78 |
| Total | 74 | 70 | 96 | 79 | 22 | 341 |

| | Value | df | Asymp. Sig. (2-sided) |
|--------------------|-----------|----|-----------------------|
| Pearson Chi-Square | 36.780(a) | 20 | .012 |

Private-public partnership is visible at ward level, especially in relation to waste collection. This partnership is not well bonded because of some missing links. For example, in case of waste management, house to house collection of waste is successfully done, but due to lack of coordination with DCC the process towards final disposal of waste is not well managed. Waste nowadays is considered as a valuable resource (Amin, 2000). Recycling of waste at a rudimentary level is an age old trend of Bangladesh and source of livelihood of many poor people. But no significant attempt has been taken so far to create awareness among residents regarding proper disposal of waste and recycling. It is worth mentioning here that several NGOs like Waste Concern, Prodipon are working relentlessly in this sector. It is necessary to create an institutional structure where community organizations, NGOs and government organization can work together. Especially NGOs can bridge the gap between the community and the GO organizations.

In addition to municipal tax, most of the residents are paying voluntarily or compelled to pay for the services to improve environment of their community. It includes disposal of waste, maintenance of drains, mosquito control, certification process service etc. It is evident from the study that residents are

paying a significant amount of money to the ward office or middle man to expedite the services or to improve quality of services. The amount of money paid by the residents to avail various DCC services is neither deposited in the central government fund nor at the ward level. Further research work can be done to determine mechanism to introduce private-public partnership in service delivery by removal of illegal middlemen.

In response to the complains of the citizens, most of the ward commissioners claimed that they have given little or no authority over the work force of DCC to perform the designated tasks of DCC. Moreover, they have no decision making power on allocation of financial resources for services they offer. Though number of studies have suggested, decentralization of urban governance activity (Siddiqui, 2000; Siddiqui, 2005) but in reality very little attempt has been taken so far to strengthen the ward level activity.

Ward commissioners of all the surveyed wards were informed about the findings of the study. Many of them admitted their failure. All most all the commissioners mentioned that they have very little administrative and financial resource required for proper management of services. The centralized nature of DCC often act as an obstacle for ward commissioners to work with more autonomy.

The average size of population manages under each ward is about 60,000 (Bangladesh Bureau of Statistics (BBS), 2003). It is quite difficult for the ward commissioners to serve such a huge population. Some researchers like Siddique (2000) noted this issue and suggested that each ward should be a size of neighborhood accommodating about 2,500 population or roughly 500 households. Financial allocation is also very poor for the wards which are about 2,000 BDT per month for ward office management.

It is important to notice that though Dhaka has been denoted as the second most dirty city in the world (Luck, 2008) but her residents identified the municipal services offered to them as fair. Their perception is certainly influenced by the over all socio-economic context of the country. It is the prime responsibility of municipalities to ensure a healthy and clean city. If compared at global scale the failure of DCC is unquestionable but at local level with the active participation of people, the city is still surviving and struggling for a better future.

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