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People's Perception Regarding the Development of Community Facilities: A Case Study of Rajshahi City Corporation

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Abstract

Rajshahi is the 4th largest metropolitan city of Bangladesh. It was one of the **first Municipalities in Bangladesh**, established in **1876** and declared as a **City Corporation** in 1987. To ensure planned development of the infrastructures and community facilities a number of organizations are working within the city area. In spite of this the city seems to be facing a lot of problems. Therefore a questionnaire survey was conducted to evaluate the performance of the community facilities provided by the local level institutions (RCC and RDA) of Rajshahi. This study used to measure the performance of nine urban facilities: waste management, road network, recreation facilities, Katcha Bazar, Health facilities, community center, water supply, drainage, street lighting. The performance of these services is ranked using improvement and satisfaction index values. Later a number of GIS maps are generated to show the variation of the level of improvement and satisfaction for the community facilities in the core and fringes of the city. The study shows that among all the community facilities a significant improvement is occurred in the road networks, street lighting and waste management system and the level of satisfaction is also high for these facilities. The study provides a clear portrait of the performance of the community facilities by city core and fringe that will help the local level institutions to provide the facilities in the underprivileged areas of the city.

Keywords: Community Facilities, Improvement and Satisfaction Index, Perception, Rajshahi City Corporation

1. Introduction

Rajshahi is one of the prominent cities of the northern region of Bangladesh. It was one of the **first Municipalities in Bangladesh**, was established in **1876.** Rajshahi Municipality was renamed as Rajshahi Pourashava, and finally, Rajshahi Pourashava was declared as Rajshahi City Corporation in 1987 (LGED, 2014). It is the 4th largest metropolitan city in Bangladesh next to Dhaka, Chittagong, and Khulna (RDA, 2004). At the beginning in 1991 RCC had 284056 populations covering an area of 30sq. km. Presently RCC covers an area of 45 sq. km and accommodates about 449757 populations (BBS, 1991; BBS, 2011 and RDA, 2013). The historical growth of Rajshahi in terms of population shows an increasing trend. Though the population of the city is increasing the level of urbanization of Rajshahi has not been at the scale to the other metropolitan cities of Bangladesh. The reasons of slow development are absence of economic investments on a significant scale and consequent lack of economic opportunities in urban Rajshahi (Rahman, 2010). Being a divisional Headquarter and City Corporation a number of local level institutions are working for the development of RCC. Among all these RDA is responsible for the physical planning of the city and RCC is responsible for providing some of the urban services. Though these two organizations are functioning for the physical development of the city it seems to be

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facing a lot of problems and the city development agencies are unable to provide sufficient urban services to meet the ever increasing demand of the citizens. Therefore, the study was conducted to assess citizen's view regarding the development of the community facilities within RCC area. A number of researches have been conducted to evaluate the performance of the urban services as assessed by the citizens. They have introduced and applied different techniques to achieve the research objectives. Among them, Suraiya (2007) assessed the role of the city corporation in urban development by analyzing the undertaken development activities and projects, perception of the residents were taken through questionnaire survey and simple statistical technique (frequency distribution) was applied to represent the data in tabular and graphical format. Ahmed (2013) conducted a research on Sylhet City Corporation's Services: Citizens' View. The paper aimed to find out citizens' satisfaction level on the services provided by the Sylhet City Corporation. He applied normal statistical technique (frequency distribution) to draw a picture of the quality of the public services and the level of the citizens' satisfaction. Data was recorded as satisfied, dissatisfied and neither satisfied nor dissatisfied for the level of satisfaction, and improved, deteriorated, same as before for the level of improvement. Another research was conducted on the Evaluation of Municipal Services in Selected Wards of Dhaka City Corporation: Citizen's Perspective using TUGI (The Urban Governance Initiative) index to measure the performance of services (Akther *et al.* 2009).

Though a number of studies related to the evaluation of urban services are available for the major urban centers of Bangladesh, no research was conducted for Rajshahi. As Rajshahi is one of the prominent cities in the northern region of Bangladesh and the city is growing both in terms of area and population hence it is urgent to assess whether the provided community facilities are being developed keeping pace to the growth of the city. In the developing countries like Bangladesh it is one of the big challenges to provide urban services proportionally with increasing population that in turn creates dissatisfaction to the citizens. Thus the study tried to assess the perception of the city dwellers regarding the development of the community facilities within RCC area. User's feedback is often considered as an important tool for improving quality of services therefore, citizen feedback is taken through questionnaire survey as a form of assessing development of the urban services within RCC area.

2. Objectives and Methodology of the Study

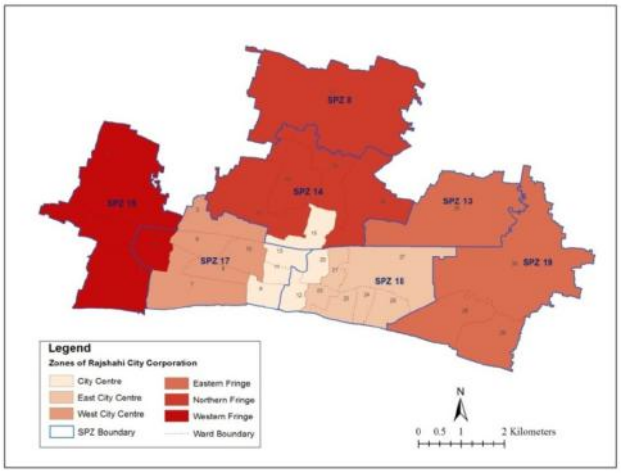
The study aimed to assess citizen's satisfaction level and the status of development of the delivered community facilities by the local level institutions (RDA and RCC). A number of research works are available using citizen's view as a tool to assess the development of community facilities of the major urban centers'. But in case of Rajshahi City Corporation, no research has yet been conducted focusing on citizen perception regarding the development of the community facilities. Thus the research, has contributed in this unexplored field. The objective of this paper is to measure the quality of service as assessed by the citizen. The research is largely based on primary data obtained by questionnaire survey. The objective of the questionnaire survey was to measure the level of satisfaction and improvement of the available community facilities within RCC area. However, it is not possible to assess of all the services due to resource constraint. Therefore, among different community facilities only the level of perception for nine facilities such as road network, drainage, waste management, street lighting, water supply, recreational facilities, katcha bazaar, health facilities and community center are taken as these are being provided by RCC and RDA and more or less each of the citizens avail of all the facilities. Among all the facilities most of them are being provided and managed by the City Corporation and the roads and drains are being partially provided and managed by RDA.

2.1 Study Area and Sampling

The Rajshahi City Corporation area has been selected as study area. It consist a total 30 Wards. For proper assessment and to represent variation of development in the core and fringe of the city area it was desirable to get the respondent's from all over the city. Thus a total 300 samples were selected taking 10 samples randomly from each ward and the survey was conducted. In collecting the survey samples, consideration was given so that samples were representative of the wards. The respondents were chosen in such a way that they are a responsible adult. In most of the cases of development the core of the city areas get more privilege than the city fringes. Thus to investigate the variation of development in the core and fringe of the city area the study area has been divided into six zones as follows (Table 1). The main commercial area and its surroundings have been defined as city centre and the wards located far away from the central area of RCC have been defined as East, West and Northern fringe. While the city centre covers three parts of SPZ 14, 17 & 18; East city centre covers major portion of SPZ 18; West city centre covers maximum part of SPZ 17; Western fringe covers the entire area of SPZ 15 and a small part of SPZ 17; Eastern fringe covers the entire area of the SPZ 13 and 19; Northern fringe covers the entire area of SPZ 8 and a small part of SPZ 14 (Figure 1).

Table 1: Study Zones of Rajshahi City Corporation

City Zones	Area Coverage	Population	Sample Size
City Centre	Ward No. 9, 11, 12, 13, 15 & 20	69277	60
East City Centre	Ward No. 21, 22, 23, 24, 25 & 27	72116	60
West City Centre	Ward No. 3, 6, 7, 8 & 10	70398	50
Eastern Fringe	Ward No. 26, 28, 29 & 30	70758	40
Western Fringe	Ward No. 1, 2, 4 & 5	61221	40
Northern Fringe	Ward No. 14, 16, 17, 18 & 19	95986	50
Total		439756	**300**



Source: Map Prepared by Researcher, 2014 & RMDP-VII

Figure 1: Study Zones of Rajshahi City Corporation

2.2 Data Collection

Both primary and secondary data were used to conduct the research. The questionnaire survey was conducted as a means of primary data collection. During questionnaire survey the data has been recorded on the basis of the following constructed scale.

Level of Improvement: The respondents were asked if the services have improved over the last few years. Therefore, the following seven point scale was used to record the performance of the community facilities. As an ***"Improvement" scale*** the responses were recorded: "highly improved", "moderately improved", "slightly improved", "neither improved nor deteriorated (Neutral)", and "slightly deteriorated", "moderately deteriorated" and "highly deteriorated". The constructed scale was as follows:

Improved			**Neutral**	**Deteriorated**		
Highly	Moderately	Slightly	No Change	Slightly	Moderately	Highly
3	2	1	0	-1	-2	-3

Level of Satisfaction: The respondents were asked about their satisfaction and dissatisfaction levels for the available community facilities. As a "***satisfaction" scale*** ("How satisfied are you with ___?") the response were recorded: "highly satisfied," "satisfied," "neither satisfied nor dissatisfied," "dissatisfied," and "highly dissatisfied." The constructed scale was as follows:

Highly Satisfied	**Satisfied**	**Neutral**	**Dissatisfied**	**Highly Dissatisfied**
1	0.5	0	-0.5	-1

2.3 Computation of indices

The collected data were analyzed both qualitatively and quantitatively. In measuring the performance of services improvement index and satisfaction index was used. Following mathematical expression shows how the performance indices are determined:

The computational formula for calculation of satisfaction index is as follows (Miah, 1993)**:**

$$I_s = \frac{1*f_{hs} + 0.5*f_s + 0*f_o - 0.5*f_d - 1*f_{hd}}{N}$$

Where,

I_s= satisfaction index such that $+1 \geq I_s \geq -1$

f_{hs}= frequency of responses indicating high satisfaction

f_s= frequency of responses indicating satisfaction

f_0= frequency of responses indicating neutral

f_d= frequency of responses indicating dissatisfaction

f_{hd}= frequency of responses indicating high dissatisfaction

N= total number of observations.

According to satisfaction scale the positive and negative values indicate the satisfaction and dissatisfaction for the services.

The computational formula for calculation of improvement index is as follows (Miah, 1993)**:**

$I_m = \frac{3*f_{hi} + 2*f_{mi} + 1*f_{si} + 0*f_o - 1*f_{sd} - 2*f_{md} - 3*f_{hd}}{N}$	Where, I_m= Improvement index such that $+3 \geq I_m \geq -3$ f_{hi}= frequency of responses indicating highly improved f_{mi}= frequency of responses indicating moderately improved f_{si}= frequency of responses indicating slightly improved f_0= frequency of responses indicating neutral f_{sd}= frequency of responses indicating slightly deteriorated f_{md}= frequency of responses indicating moderately deteriorated f_{hd}= frequency of responses indicating highly deteriorated N= total number of observations.

According to improvement index the positive and negative values represent the improvement and deterioration of the services. After calculate the satisfaction, improvement index values a number of maps are generated using ArcGIS Desktop 10.1 to show zone wise variation of development of the community facilities within RCC area.

3. Data Analysis and Interpretation

The variation in the improvement and satisfaction index values for the core and fringe of the city area is shown in the table 2 and table 3. The index values describes the status of a particular facility in a zone above or below the value 0 (i.e. the value > 0 means improvement is occurred and the value < 0 means the condition is deteriorated for the particular facility).

Table 2: Improvement Index Values by Zone of RCC for the Community Facilities

	Zones	Drainage	Waste Management	Road	Water Supply	Health Facilities	Recreation	Community Center
1	Western Fringe	1.2	1.5	2.0	1.7	1.0	0	0
2	West City Centre	1.2	1.7	1.7	1.7	0	0	0
3	City Centre	1.0	1.9	1.8	1.5	0	0	0
4	East City Centre	0.8	1.8	1.7	1.5	0	0	0
5	Eastern Fringe	1.3	1.8	1.7	1.6	0.6	0	0
6	Northern Fringe	1.1	1.7	1.9	1.8	0.6	0	0

Source: Calculated from the Questionnaire Survey Data, 2013

Table 3: Satisfaction Index Values by Zone of RCC for the Community Facilities

	Zones	Drainage	Waste Management	Road	Water Supply	Health Facilities	Recreation	Community Center	Electricity	Katcha Bazar
1	Western Fringe	-0.40	0.10	0.5	0.1	0.0	-1.0	-1.0	0.1	0.0
2	West City Centre	-0.40	0.30	0.4	0.1	-0.3	-1.0	-1.0	0.1	-0.2
3	City Centre	-0.50	0.60	0.4	0.2	-0.4	-1.0	-1.0	0.3	-0.5
4	East City Centre	-0.40	0.50	0.4	0.1	-0.4	-1.0	-1.0	0.4	0.1
5	Eastern Fringe	-0.20	0.40	0.4	0.0	0.2	-1.0	-1.0	0.5	0.4
6	Northern Fringe	-0.52	0.30	0.61	-0.2	0.2	-1.0	-1.0	0.2	0.1

Source: Calculated form Questionnaire Survey Data, 2013

3.1 Drainage Facilities

Provision of drainage is one of the responsibilities of RCC. The drainage condition of the city was very poor. The construction of flood protection embankment in 1990 restricted the natural drainage in the river Padma that further aggravated the drainage problem. Therefore, many core parts of the city faced severe water logging problem. In theses consequences a Drainage Master Plan was prepared in 1994 (RCC, 1994). In the mean time the first two phases of the plan are implemented therefore the drainage condition of the city should be in a better position. The table 4 shows the inventory of drainage facilities within the city area; it seems that the drainage condition of the city is improved significantly as the coverage of the drainage networks is increased from 117.77 km. to 157.5 km.

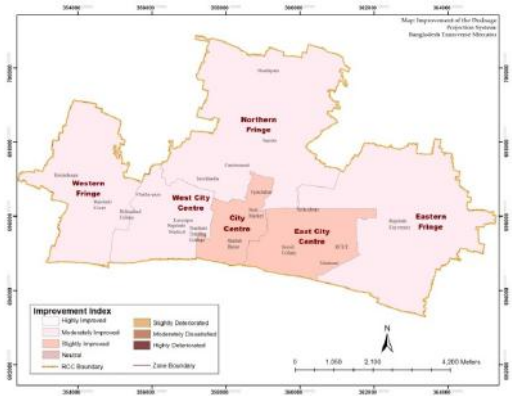
Table 4: Developed Drainage Networks within RCC Area

Year / Type	Length (in km.)		
	1994	2004	2012
Pucca	53.99	82.56	110.25
Katcha	63.78	55.43	47.25
Total	117.77	137.99	157.5

Source: RCC, 1994; RDA, 2004 & RCC, 2013

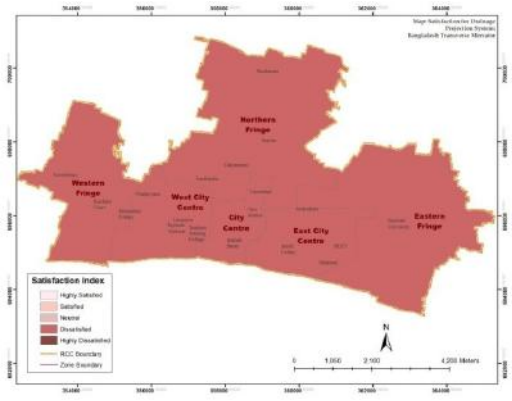
From the table 2 it is evident that among all the six zones four have the index value between the ranges 1.1 to 2 that indicate moderate improvement in these zones. Only the city centre and east of the city centre shows slight improvement. The level of improvement by zone is shown in the

Figure 2. Citizen's view for satisfaction shows that each of the zones has the negative index value that indicates dissatisfaction for the drainage. The level of satisfaction by zone is shown in the Figure 3.



Source: Map Prepared by Researcher, 2014 & RDA

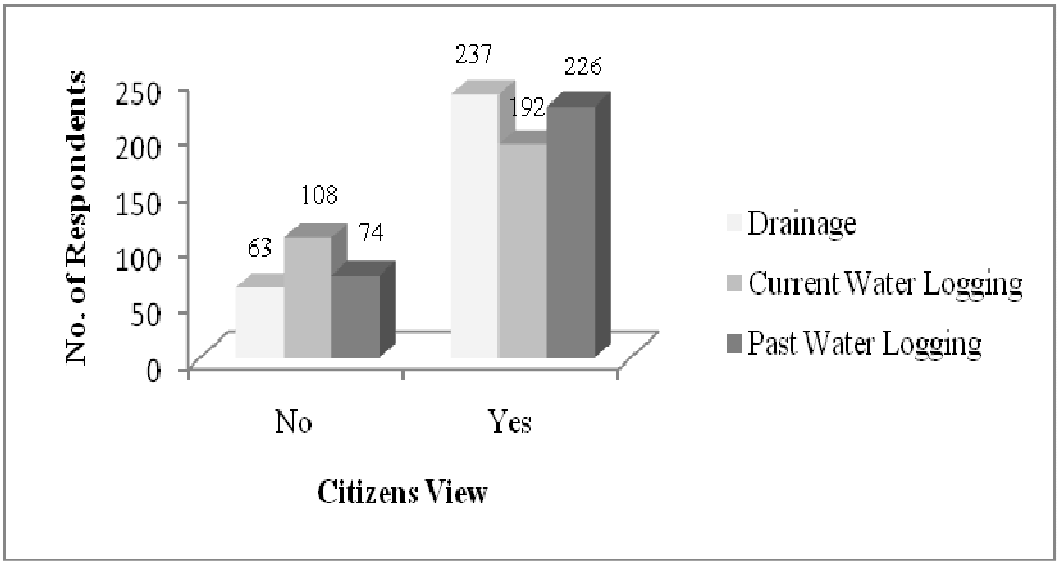
Figure 2: Improvement of the Drainage by Zone of RCC



Source: Map Prepared by Researcher, 2014 & RDA

Figure 3: Satisfaction for the Drainage by Zone of RCC

Though each of the zones of RCC shows the improvement of the drainage, it shows dissatisfaction for the drainage as a significant portion of the citizens face both the drainage and water logging problem (figure 4). The reasons may be unplanned development of the drainage and filling up of water bodies in addition it lacks proper management therefore most of drains are blocked and overflowed. So it can be concluded that the drainage condition is improved but these are not satisfactory.



Source: Questionnaire Survey, 2013

Figure 4: Drainage and water logging problem faced by the citizens

3.2 Waste Management System

Management of waste is a costly and troublesome problem for most of the local authorities of developing countries. The waste management system was very poor in RCC area as the solid waste disposal bins covered only 19.52% of the area. Due to shortage of dustbins and inadequate collection facilities dumping of solid waste in water bodies, drains and vacant lands was very common (RCC, 1994). Over the last few years a massive improvement is occurred in the waste management system (table 5). The questionnaire survey result also depicts the significant improvement in the waste management system.

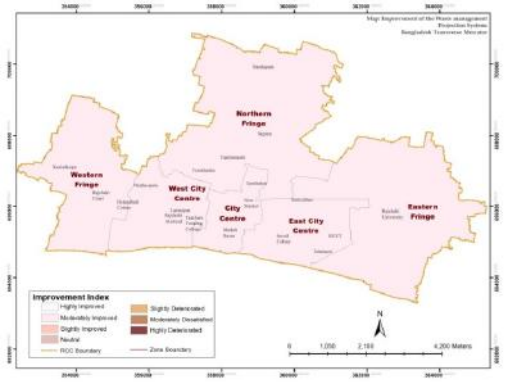
Table 5: Solid Waste Management Facilities

<table>
<tr><th rowspan="2">Facilities</th><th colspan="3">Quantities in Different Years</th></tr>
<tr><th>1994</th><th>2004</th><th>2013</th></tr>
<tr><td>Rubbish bins</td><td>325</td><td>590</td><td>1050</td></tr>
<tr><td>Push carts</td><td>30</td><td rowspan="2">126 (NMT)</td><td>100</td></tr>
<tr><td>Rickshaw van</td><td>20</td><td>150</td></tr>
<tr><td>Trailer</td><td>1</td><td rowspan="2">17 (MT)</td><td>3</td></tr>
<tr><td>Garbage Truck</td><td>7</td><td>10</td></tr>
<tr><td>Sweepers</td><td>372</td><td>934</td><td>1200</td></tr>
<tr><td>Landfill sites</td><td>1</td><td>1</td><td>2</td></tr>
</table>

Source: RCC, 1994; RDA, 2004 & RCC 2013

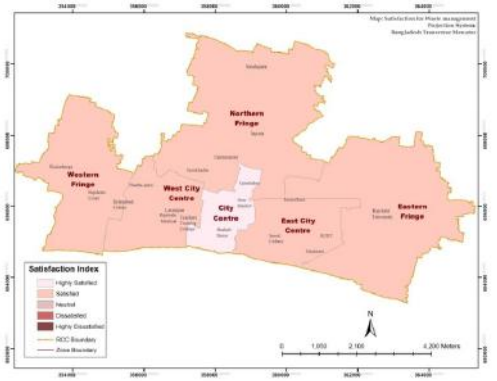
****NMT=Non Motorized Transport ****MT= Motorized Transport*

The Table 2 shows that the waste management system is moderately improved in each of the zones (core and fringe) of RCC as each of them have the positive index values between the ranges of 1.1 to 2. The level of improvement by zone is shown in the Figure 5. On the contrary citizen's view for satisfaction shows that each of the zones are satisfactory in terms of the waste management system as each of them contains positive index value. But only the city centre shows high satisfaction for the waste management system as it contains the index value >0.5 (Table 3). The level of satisfaction for the waste management by zone of RCC is shown in the Figure 6.



Source: Map Prepared by Researcher, 2014 & RDA

Figure 5: Improvement of the Waste Management System by Zone of RCC



Source: Map Prepared by Researcher, 2014 & RDA

Figure 6: Satisfaction for the Waste Management System by Zone of RCC

On the basis of quantitative and qualitative data analysis it can be concluded that the overall waste management system is moderately improved and all of the citizens of RCC are satisfied with the existing waste management system.

3.3 Road Networks

Well planned road network is inevitable to flourish the development of any city. Over the last few years a remarkable development is occurred in the provision of road networks in RCC. The coverage of road network is doubled from 271.58 km to 662.96km by the year 2013 (Table 6).

Table 6: Road Networks within RCC area

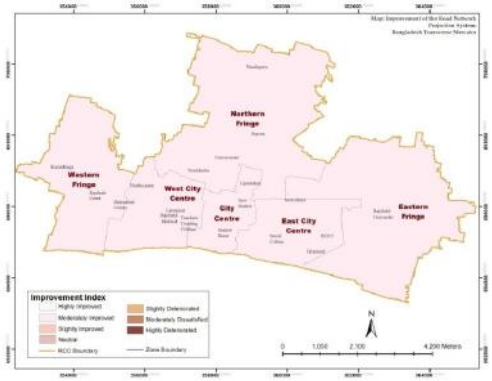
Year / Type	Length (in km)		
	1994	**2003**	**2013**
Pucca	155.92	352.38	450.25
Semi-pucca	61.96	119.45	182.56
Katcha	53.70	43.37	30.15
Total	**271.58**	**515.2**	**662.96**

Source: RCC, 1994; RDA, 2004 & RDA Office, 2013

The questionnaire survey result also depicts that a significant improvement is occurred in the road networks of the city. The table 2 shows that the road network of RCC is moderately improved in each of the zones of RCC as each of them have the positive index values between the ranges of 1.1 to 2. The level of improvement of the road networks by zone is shown in the Figure 7.

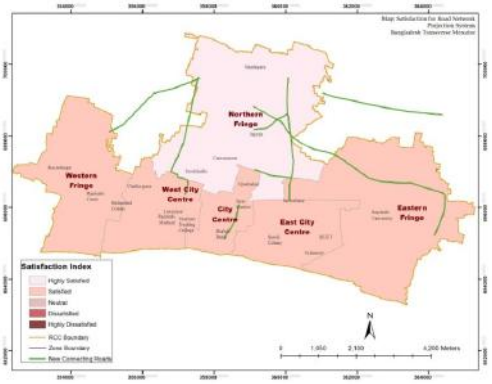
From the table 3 it is evident that each of the zones shows satisfaction for the road networks as each of them contains positive index value. But only the northern fringe of RCC shows high satisfaction for the networks as it contains the index value >0.5. As the city is now expanding in north ward direction therefore recently a number of new connecting roads are constructed in this zone that results high satisfaction for the road networks. The level of satisfaction by zone of RCC is shown in the Figure 8. On the basis of quantitative and qualitative data analysis it can be

concluded that the overall road network of the city is improved both in the core and fringe area of RCC.



Source: Map Prepared by Researcher, 2014 & RDA

Figure 7: Improvement of the Road Networks by Zone of RCC



Source: Map Prepared by Researcher, 2014 & RDA

Figure 8: Satisfaction for the Road Networks by Zone of RCC

3.4 Street Lighting

Rajshahi City Corporation provides the street lighting service that is essential for the safety at night. The questionnaire survey result shows that there is significant improvement in the provision of street lighting within RCC area. But the core of the city area shows more satisfaction and improvement than the fringe of RCC area. Rajshahi City Corporation (RCC) is going to install solar street light and LED lights in the metropolis for eco-friendly infrastructural improvement and to lessen the gradually increasing pressure on electricity (Green Watch, 2014). That will further improve the street lighting within RCC area.

3.5 Water Supply

In Rajshahi water supply was maintained by DPHE before the establishment of RCC and from the year 2010 it is maintained by RWASA. In 1994, RCC was able to distribute water among 6040 households that was only 18% of the total households (DPHE, 1994). Later a massive improvement is occurred in the provision of the water supply facilities. The table 7 shows a gradual improvement of the water supply facilities within RCC area.

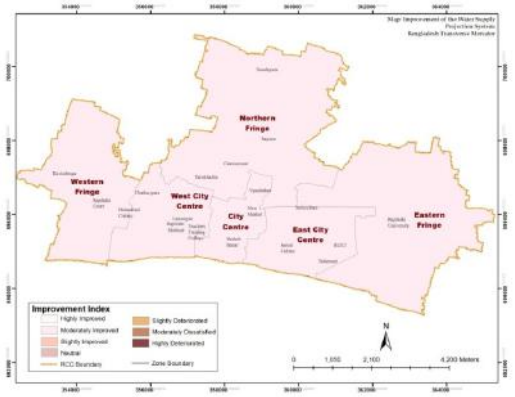
Table 7: Water Supply Facilities in RCC Area

Source of Water	No. Facilities in Different Years			
	1994	2003	2005	2012
Production Tubwell	19	40	52	70
Street Hydrant	465	785	NA	38713
Pipe lines	82 km	248 km	410 km	512km
No of Households Served	6040	NA	21690	30263
Water Treatment Plant	-			1
Hand Tubwell	1970	3750	5500	3811

Source: DPHE, 1994; RDA, 2004 & Editor, 2012

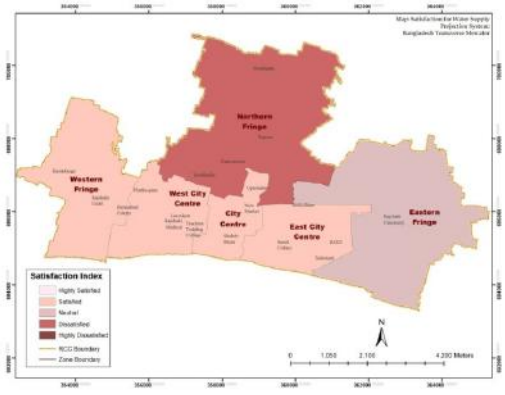
The citizen's view also reveals that improvement is occurred in the provision of water supply. From the table 2 it is obvious that the water supply is moderately improved in all the zones of RCC as all of them have the positive index values between the ranges of 1.1 to 2. The level of improvement by zone of RCC is shown in the Figure 9. The table 3 shows that out of six zones of RCC only northern fringe of RCC shows dissatisfaction for the water supply as it contains negative (-0.2) index value. On the contrary the eastern fringe shows neutral situation as it contains zero (0) index value. The remaining four zones show satisfaction for the water supply as they have the index value between the ranges of > 0 to 0.5. The level of satisfaction by zone of RCC is shown in the Figure 10.

Though the water supply is improved in each of the zones of RCC, the northern fringe shows dissatisfaction as majority of the citizens (64%) of this zone complained that the supplied water is impure. The eastern fringe also reveals the same complain (figure 11). This may be the reason for dissatisfaction and neutral situation in the northern and eastern fringe of RCC despite the improvement in the water supply.



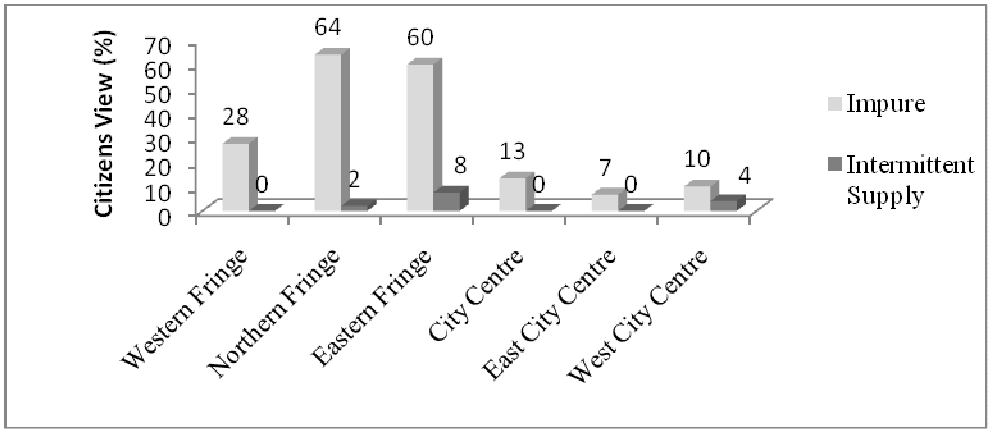
Source: Map Prepared by Researcher, 2014 & RDA

Figure 9: Improvement of the Water Supply in RCC Area



Source: Map Prepared by Researcher, 2014 & RDA

Figure 10: Satisfaction for the water supply in RCC area



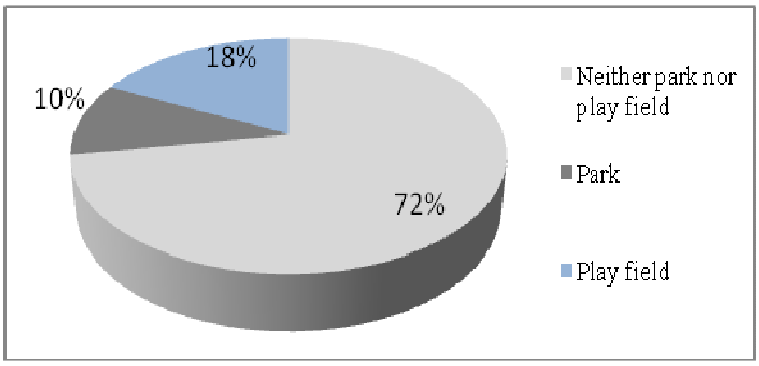
Source: Questionnaire Survey, 2013

Figure 11: Problems with the Supplied Water

3.6 Recreational Facilities

Provision of recreational facilities is one of the responsibilities of RCC. To improve the quality of interpersonal skills accessibility to recreational facilities are very important. Parks and Play fields are vital elements in urban life for passive and active recreation. But these facilities are inadequate in Rajshahi and the recreational areas occupy only 0.98% of the total city area. The city occupies 25 play fields but each of them belongs to the particular educational institutions therefore there is no scope for free access to the general people (RDA, 2004).

The citizens view depicts that there is a limited recreational facilities within the city area that's why a majority of the citizens (72%) do not have the access to any recreational facilities (figure 12). The table 2 shows that the index value is 0 for all the zones of RCC that indicates no improvement in the provision of the recreational facilities. As there is limited access to the recreational facilities therefore the satisfaction index values are also negative (table 3) that indicates high dissatisfaction for this facility.



Source: Questionnaire Survey, 2013

Figure 12: Access to Recreational Facilities in RCC area

3.7 Community Centre

The Functional Master Plan proposed to develop a total 30 community centres one in each ward of the City Corporation. The plan was to enhance the ward commissioner's office as community centre so that it could be used for public meeting or gathering. The implementation status of the planning proposals and citizens' view depicts the same that till now no initiative is taken to develop any community centre. The table 2 and 3 shows the index values for the community center 0 and -1 respectively that indicates no improvement in the provision of this facility and high level of dissatisfaction for this facility.

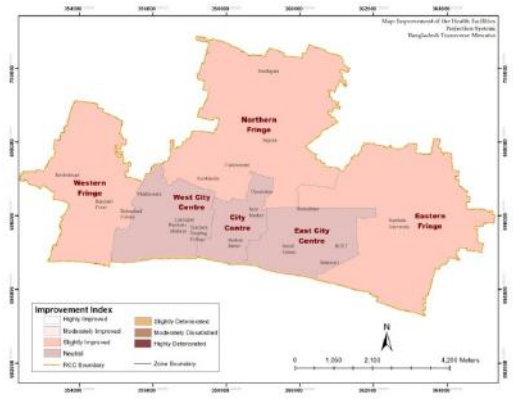
3.8 Health Facilities

Provision of urban health care services is the responsibility of the Ministry of Local Government, Rural Development and Cooperatives (MOLGRDC). Through the implementation of two urban primary health care projects (UPHCPs) since 1998, health services are being provided by the city corporations and municipalities. At present 14 healthcare centers and two maternal clinics are providing maternal and child healthcare services within the city area (BSS, 2013).

The citizen's view depicts that a slight improvement is occurred in the fringe of the City Corporation area but the central city zones show no improvement as these contain zero index value (table 2). The improvement of the health care facilities by zone is shown in the Figure 13.

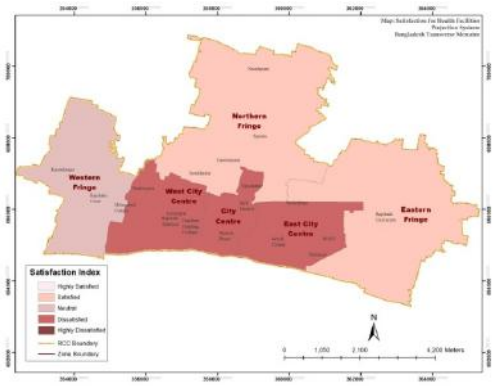
On the contrary from the table 3 and figure 14 it is evident that central city zones show dissatisfaction for the health facilities.

As Rajshahi Medical College Hospital is located at the city centre therefore a number of community clinics are providing health facilities at the fringe of RCC area this resulted satisfaction at the fringe of the city area. So it can be concluded that the incorporation of the primary health care services have improved the health facilities in the city.



Source: Map Prepared by Researcher, 2014 & RDA

Figure 13: Improvement of the Health Facilities by Zone of RCC



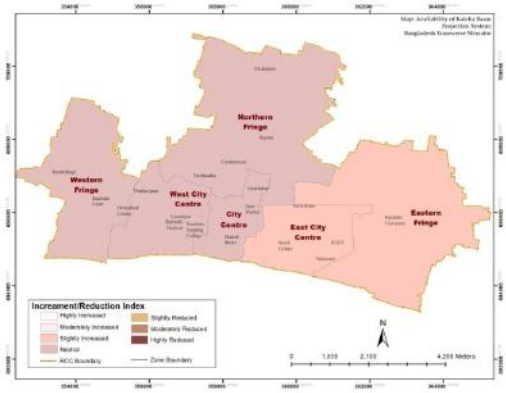
Source: Map Prepared by Researcher, 2014 & RDA

Figure 14: Satisfaction for the Health Facilities by Zone of RCC

3.9 Katcha Bazar

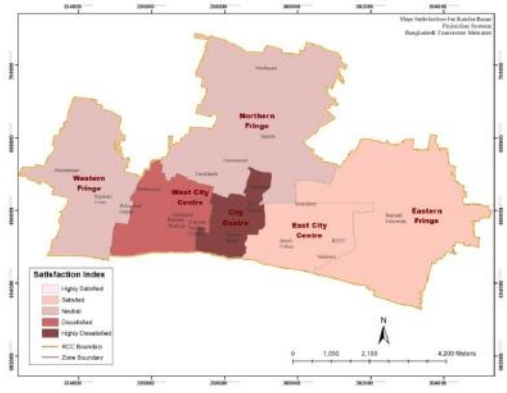
Availability to a nearby Katcha bazaar is one of the requirements to the city dwellers for daily life. Rajshahi had only 8 authorized katcha bazaars and were not evenly distributed over the city area. Therefore the RMDP proposed to develop 20 katcha bazaars by the year 2014 (RDA, 2004). The citizen's view reveals that the katcha bazaar facilities are slightly increased only in the east city centre and eastern fringe of the city whereareas it shows no change in the remaining four zones of RCC (Figure 15).

On the contrary table 3 shows that only two zones (east city centre and eastern fringe) having positive index value show satisfaction for this facility this is due slight increment in the provision of katcha bazaar facilities. The central area of the city and west of the city centre shows dissatisfaction as these are the congested part of the city but the facility is not adequate to meet the demand of the citizens. The level of satisfaction by zone is shown in the Figure 16.



Source: Map Prepared by Researcher, 2014 & RDA

Figure 15: Availability of the Katcha Bazaar Facilities by Zone of RCC

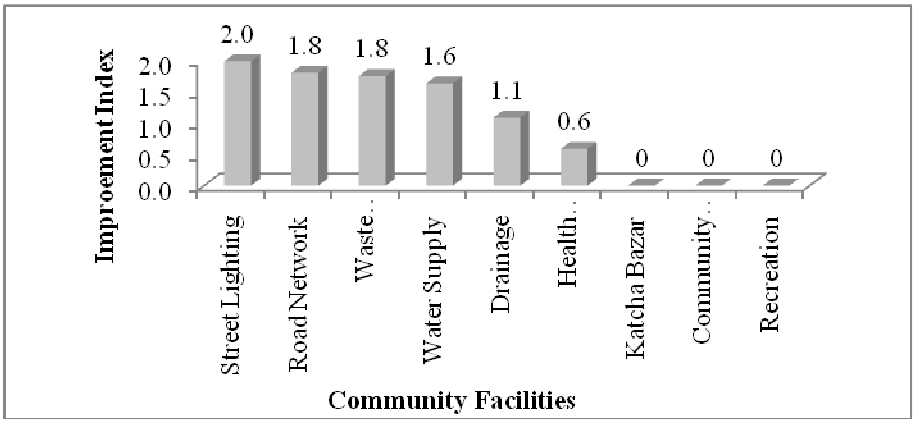


Source: Map Prepared by Researcher, 2014 & RDA

Figure 16: Satisfaction for the Katcha Bazaar Facilities by Zone of RCC

4 Conclusion

The result shows that the citizens of RCC consider highest improvement and satisfaction for the street lighting after then the road network and waste management system. A slight improvement is occurred in the provision of drainage and health facilities but a number of facilities: katcha bazaar, recreation and community centres are remained unchanged with index value 0 (figure 17).



Source: Questionnaire Survey, 2013

Figure 17: Overall Improvement of the Community Facilities

The overall satisfaction for the community facilities as assessed by the citizen's show that among all the nine community facilities the citizens are satisfied only with three community facilities: road network, waste management and street lighting. The result shows dissatisfaction for the majority of the community facilities with negative satisfaction index value. The development by zone of RCC shows that the street lighting, road network and waste management system of the city is moderately improved in all over the RCC area. It is remarkable that in some cases the zones located at the fringe of the city show less development and satisfaction than core of the city area.

Rajshahi is a less urbanized and populated city than the other urban centers of Bangladesh. It is a small city and has a lot of opportunities to develop the city with sufficient urban facilities for all the citizens. But due to lack of coordination among the service providing agencies all zones of the RCC are not developing simultaneously. In addition to this lack of finance, improved technology and skilled man power also acts as a hindrance in the provision of the community facilities. To ensure effective management and development of the community facilities the Government should strengthen the service providing agencies especially RCC and RDA by providing monetary and technical support. In most of the cases the authorities provide services without considering citizens view/perception, that results disproportionate development in different zones within the city area. Therefore, the citizen's view should be taken before providing the urban services. The results obtained from this study show that among all the nine community facilities a few of them are improved. The result also shows variation in development in the city core and fringe areas. Thus the result obtained from the research will be a great value to the service providing agencies for the future planning in the allocation of the community facilities over the city area. Furthermore, this kind of research has a high potential to contribute towards the proportionate development of the community facilities both at any local and regional level in the world.

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