

# PERFORMANCE EVALUATION OF DIFFERENT MUNICIPAL SERVICE FACILITIES: A CASE STUDY ON WARD-09 OF PABNA MUNICIPALITY, PABNA, BANGLADESH

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<http://dx.doi.org/10.26739/2433-202x>

Issue DOI <http://dx.doi.org/10.26739/2433-202x-2017-10-10>

Article DOI <http://dx.doi.org/10.26739/2433-202x-2017-10-10-8>

**Abstract:** Developing countries like those that Bangladesh is characterized by highly rated urbanization, which caused many urban populations deprived from some basic public facilities. However, some basic public services are essential to keep the urban life sound. Too many community services facilities these are water supply, drainage system, electricity etc. and community facilities are served from a specific point like educational institution, health care, market, dustbin, police station, fire services etc. However, service amount is not enough

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for the urban population. Due to the need of planning initiatives, research & proper guideline, distribution of services & facilities has been occurred in unplanned way which result scarcity of services. For this growing population, needs enough services and facilities. The specific objective of the study is finding out the conception about the existing physical, social and economic infrastructural situation of ward 09 in Pabna municipality along with measurement of satisfaction level about the municipal services to the urban dwellers. Community services are very important for urban citizens. However, it is not an adequate amount in Pabna municipality. The service delivery system is not developed in a planned manner. It is indispensable to make sure and improve the services for this people. The study is related with various community facilities like educational institution, health center, community center and market etc. By this study, service provision, level of satisfaction of the dwellers of 09 no ward and gap between existing services are found out. The specific objectives of the study are to evaluate the quality of existing service facilities in the study area and to assess the required need of the dwellers and the satisfaction level of municipal services towards the people of the study area. From existing condition analysis and the survey result the performance evaluation of different municipal services have been identified and some guidelines have been provided to reduce the associated problems according to stakeholder's perspective.

**Keywords:** performance evaluation, municipal service, Pabna municipality, Pabna, Bangladesh

## 1. Introduction

Developing countries like those that Bangladesh is characterized by highly rated urbanization, which caused many urban populations deprived from some basic public facilities. However, some basic public services are essential to keep the urban life sound. [1] In their capacity as the third and lowest sphere of government and the one that functions closest to local communities, municipal governments have often been described as comprising the sphere of government that is tasked mainly with the development and provision of services to communities. [2]

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There are too many community services facilities these are water supply, drainage system, electricity etc. and community facilities which are served from a specific point like educational institution, health care, market, dustbin, police station, fire services etc. However, service amount is not enough for the urban population. Due to the need of planning initiatives, research & proper guideline, distribution of services & facilities has been occurred in unplanned way, which result scarcity of services. For this growing population, needs enough services and facilities

Municipal services are very essential for any area's development, which indicates the standard of living condition of an area's people. However, the study is done in ward 09 of Pabna municipality that is known as one of the secondary town of Bangladesh to understand and analyze the existing condition of different municipal service facilities.

The specific objective of the study is finding out the conception about the existing physical, social and economic infrastructural situation of ward 09 in Pabna municipality along with measurement of satisfaction level about the municipal services to the urban dwellers.

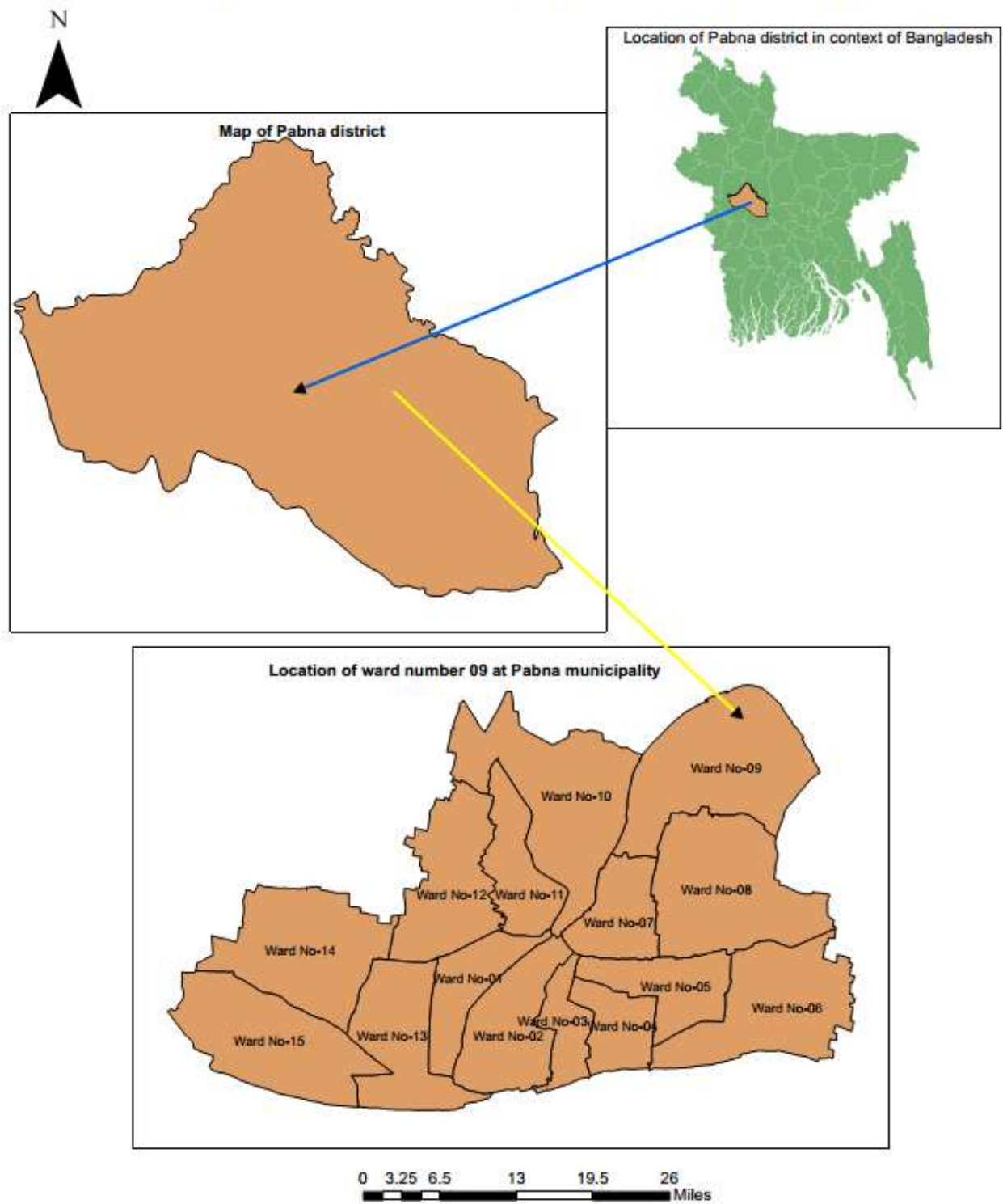
Community services are very important for urban citizens. However, it is not an adequate amount in Pabna municipality. The service delivery system is not developed in a planned manner. It is indispensable to make sure and improve the services for this people. The study is related with various community facilities like educational institution, health center, community center and market etc. By this study, service provision, level of satisfaction of the dwellers of 09 no ward and gap between existing services are found out. The specific objectives of the study are to evaluate the quality of existing service facilities in the study area and to assess the required need of the dwellers and the satisfaction level of municipal services towards the people of the study area.

The study area is situated within 23°53' and 24°05' north latitudes and in between 89°09' and 89°25' east longitudes. [3] Pabna Paurashava is the largest Paurashava in Pabna District. There are 15 wards consist in the Pabna Paurashava. The existing population of Pabna Paurashava is about 1, 16,305

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among them ward number 09 has 7142. [2] The largest ward is Ward no. 8, which is covered 493.867 (12.79%) acres of land. The second largest Ward is Ward no. 9 covered 358.794 (9.29%) acres of land. The Ward no. 9, 10 and 13 is residential dominated land in Paura area. The Ward no. 8 is found as agricultural dominated land. [4]

### LOCATION OF THE STUDY AREA IN CONTEXT OF BANGLADESH



Source: The Author, 2017

Map 1.1: Location of the study area

## 2. Methodology

The term Research Methodology implies 'means and ways' for achieving research objectives. It means a specific method and technique to complete any type of study such as thesis, reports, projects, scientific works etc. It also indicates the sequential activities of a research. The success of a study depends on the methodology to achieve successful completion of the research work. This study was conducted at ward 9 of Pabna municipality. The study contains both primary and secondary data after collection the data are analyzed using various types of analytical tools like Geographic Information System (GIS 10.3), Microsoft excel, SPSS, Auto cad etc. Adding with that some distinctive methods are also be used for calculation of satisfaction level of the people i.e. User satisfaction Index (USI), Community effect index (CEI). After the analysis part existing condition of service facility are identified and recommendations are provided to reduce the existing problems.

**2.1 Sample size calculation:** According to BBS 2001 ward number 09 of Pabna municipality has total 1349 households. Among them for the restriction of time and money total 100 households have been selected as sample size. Simple random sampling has been selected as method for data collection.

**2.2 Data collection:** As it is a research work data has been needed for analysis. For this reason data collection is mandatory. Two types of data were collected for this study like primary data and secondary data. These are described below

**2.2.1 Primary sources of data collection:** Data observed or collected directly from first-hand experience is known as primary data. Primary sources of data and information can be further classified as focus group discussion, personal interview and questionnaire survey etc. From these surveys, we were conducted focus group discussion and questionnaire survey during field visit.

### 2.2.1.1 Household Interview Survey (HIS)

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Based on the selected objective open ended and close ended questionnaire was prepared to identify the perception of the local residents regarding the positive or negative change depending on the title “Performance evaluation of different municipal services: A case study on ward no 9 of Pabna municipality” within the last 10-15 years in the study area. A sequential questionnaire was prepared to collect the data and ward number 09 has been divided into three block namely Block-A, Block-B and Block-C to get actual result. Among the three Block total 100 households were surveyed.

### Survey consideration:

It is asked to the respondent that

- What is the condition of municipal service facility, which is provided by municipality?
- Are you happy or not by the specific service facility?
- What is the Rank over specific service facility?

### **2.2.1.2 Focus Group Discussion (FGD)**

Some Focus group discussion was arranged in the sample sites local political leader, respected person from different professional and social groups who are residing for more than 12 years in the study area. Through these Focus group discussions it was tried to evaluate the perception of local people regarding the selected problem.

### Survey consideration:

- Existing service facility in the study area.
- Specific problem over the issue.
- Road network facility.
- Transportation facility.

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- Recreational facility.
- Solid waste management facility.
- Health facility.
- Market facility.
- Education facility
- Electricity supply
- Water supply facility in that locality.

### **2.2.1.3 Observation survey**

This survey is also known as physical feature survey. By this survey social map and resource map have prepared. Social map has included road network, school, market, hospital, mosque, dumping site, Government officials, Eidgah etc.

Resource map has included water body (River, Pond), tree, agricultural land etc. Some photos have also been captured by this survey.

### **2.2.1.4 Key Informant Interview (KII)**

Mobility map and Service and opportunity map have prepared by Key Informant Interview. According to some key person like driver, student, and passenger share their knowledge about trip distance, fare, behavior of the driver road condition etc. which has included into mobility map and service and opportunity map.

### **2.2.2 Secondary sources of data collection**

Published data and the data collected in the past or other parties are called secondary data.

Data and information about Performance evaluation of different municipal services collected from different secondary sources like previous studies, newspaper, Government report, and different document prepared by local organizations (Both GOs AND NGOs).



### 2.3 Data processing and analysis

From existing condition analysis and the survey result the performance evaluation of different municipal services have been identified and some guidelines have been provided to reduce the associated problems according to stakeholder's perspective.

### 3. Data Analysis and Findings

Based on selected objective after completed the survey, some maps are prepared like social map, mobility map and service and opportunity map. And also SWOT analysis and Cause-Effect diagram has also prepared these are shown below-

Map 3.1: Social map

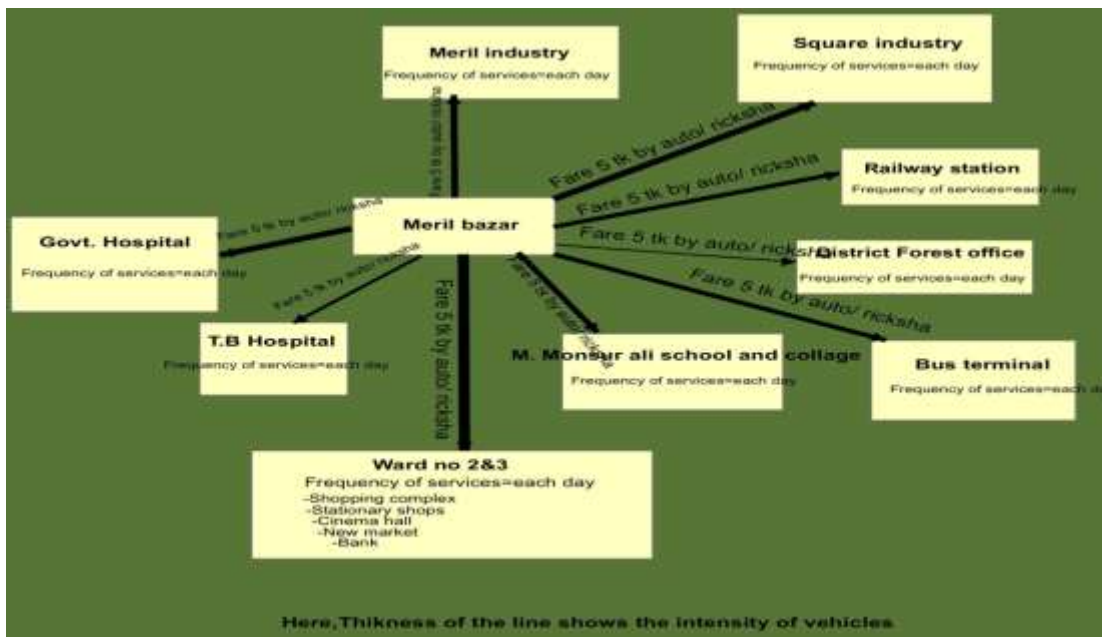


Source: The Author, 2018

From the survey it is found that ward number 9 has three health institutions these are a Government hospital and a T.B hospital and sunrise clinic and diagnostic center and It also has two Governmental institutions like District forest office and Custom and VAT exchange office and it also has large industries in Bangladesh like Square industry and Meril industry and also this

ward also include a growth center named as Meril bazar. This ward has also permanent and temporary dumping site for solid waste collection, It also has educational institutions named as Sohid M Monsur ali school and college and uttar salgaria govt. primary school, Pabna textile engineering collage. It also has religious institutions such as 10 mosques, 2 mondir and 2 cremation place one eidgah named as uttar salgaria eidgah etc.

**Map 3.2: Mobility map**

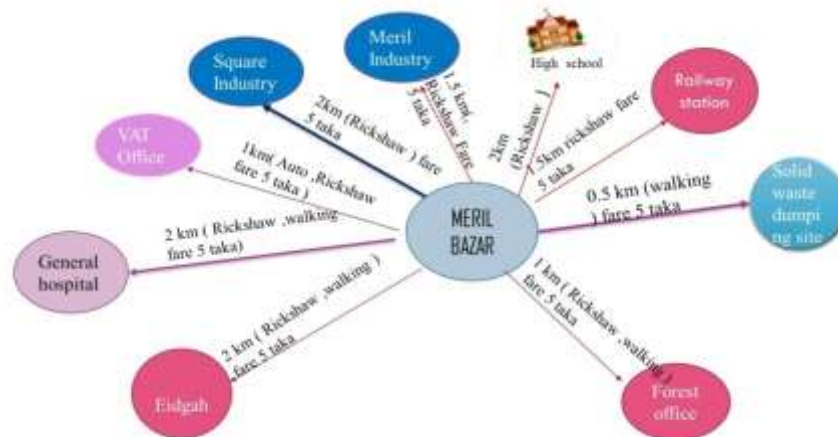


Source: The Author, 2018

From the physical observation survey and key informant interview Mobility map of ward number 09 has prepared. All institutions which provide service facility are situated within two kilometer. Main transportation mode is auto and rickshaw and fare is only BDT 5 taka.

**Map 3.3: Service and opportunity map:**

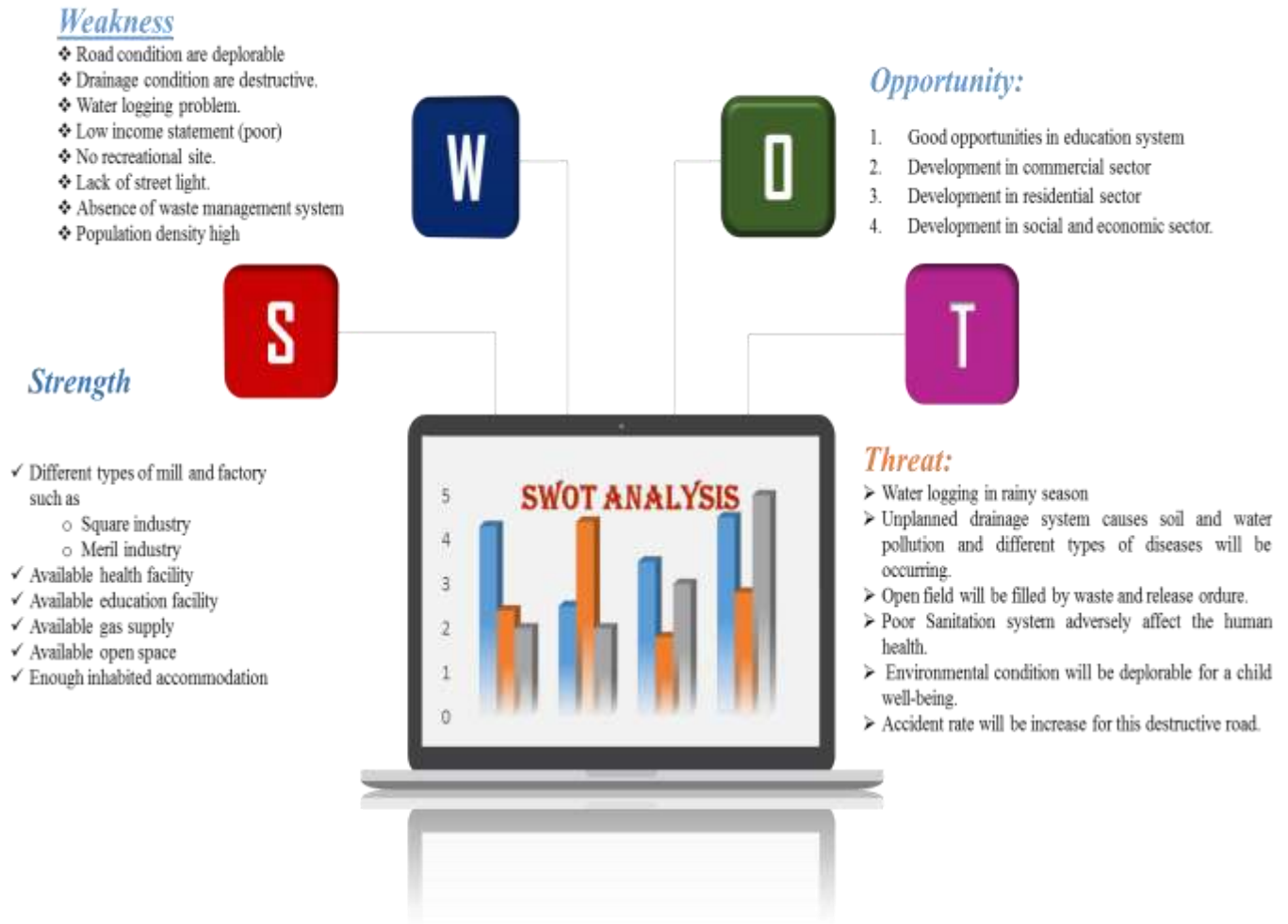
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Source: The Author, 2018

Ward number 9 has Square industry, Meril industry, Govt. Hospital, T.B Hospital, Railway station, M. Monsur ali school and college, District forest office, Meril bazar etc. From the above service and opportunity map shows service and opportunity to getting these services. Here thickness of the line shows the intensity of vehicles. The entire service centers are situated within two kilometer from the Meril bazar and fare only five taka by auto or rickshaw.

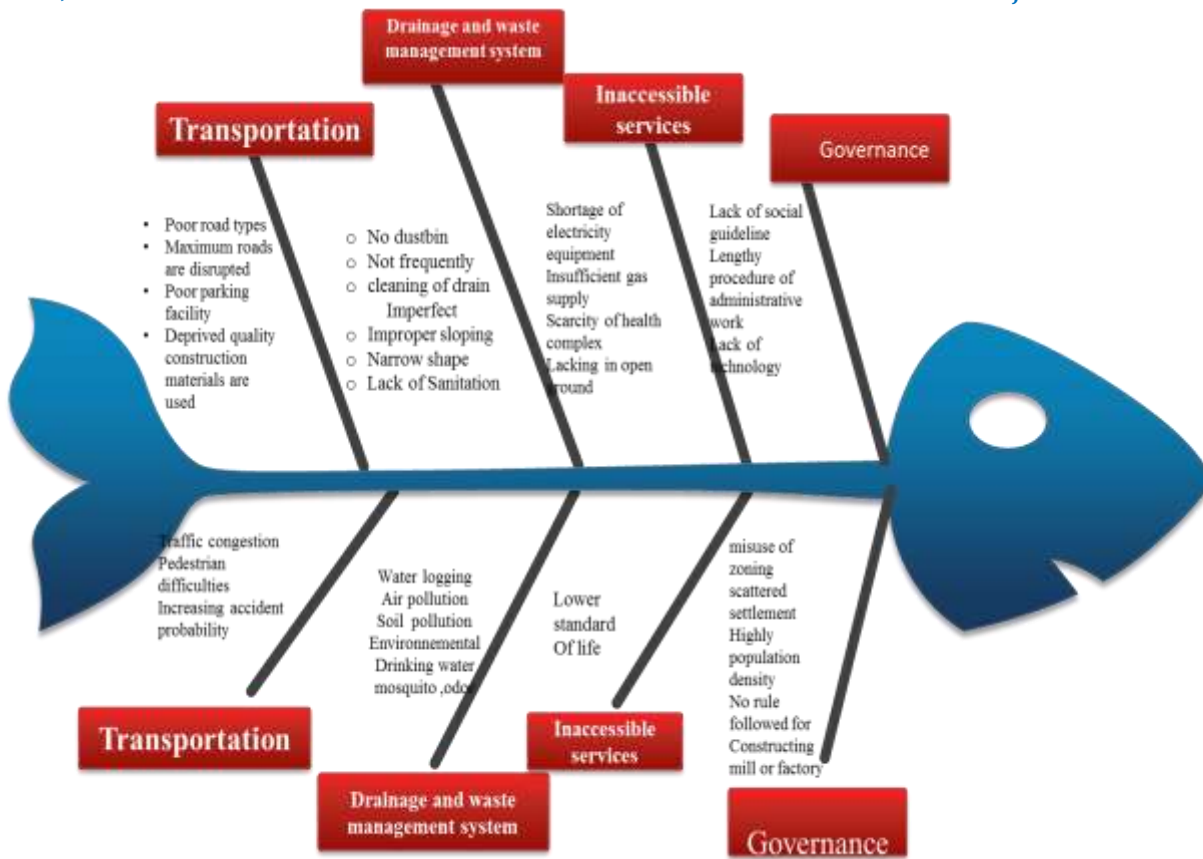
### 3.4 SWOT analysis:



Source: The Author, 2017

### 3.5 Cause-Effect diagram:

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Source: The Author, 2017

#### 4.1 User Satisfaction Index (USI) calculations:

$$USI = \frac{\sum USI \text{ of three blocks}}{3}$$

It is assumed that satisfaction level for USI is

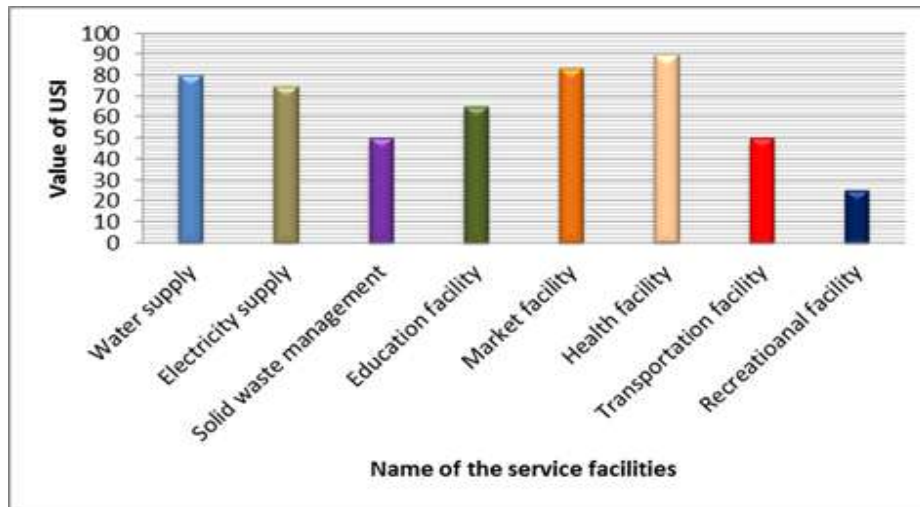
Range	Rank	Quality
67-100	1	Good
34-66	2	Moderate
0-33	3	Bad

The study area is divided into three blocks namely Block-A, Block-B and Block-C

#### Block-A

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Services	USI	Rank
Water supply	80	1
Electricity supply	75	1
Solid waste management	50	2
Educational facility	65	2
Market facility	83.33	1
Health facility	90	1
Transportation facility	50	2
Recreational Area	25	3

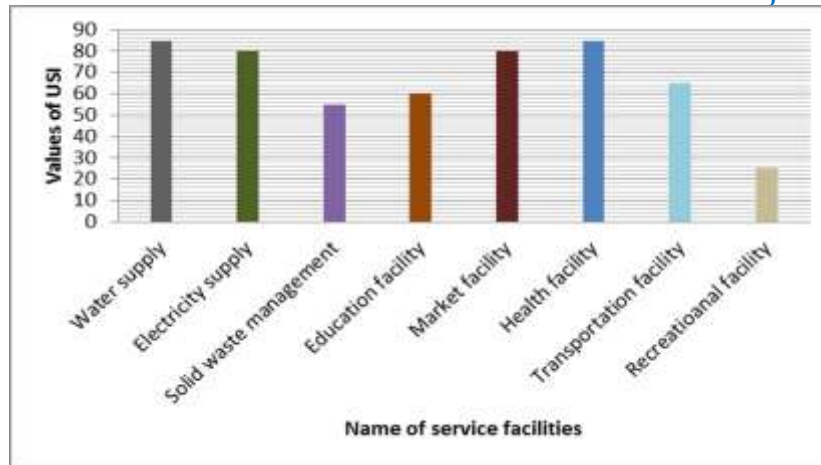


Source: Field survey, 2017

### Block-B

Services	USI	Rank
Water supply	85	1
Electricity supply	80	1
Solid waste management	55	2
Educational facility	60	2
Market facility	80	1
Health facility	85	1
Transportation facility	65	2
Recreational Area	25	3

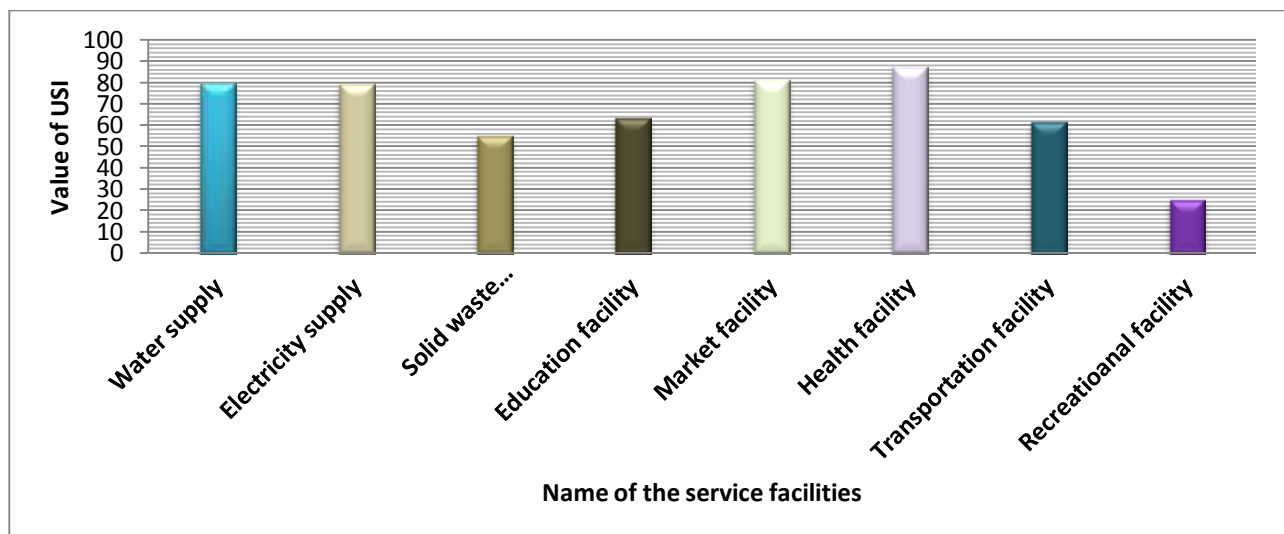




Source: Field survey, 2017

### Block-C

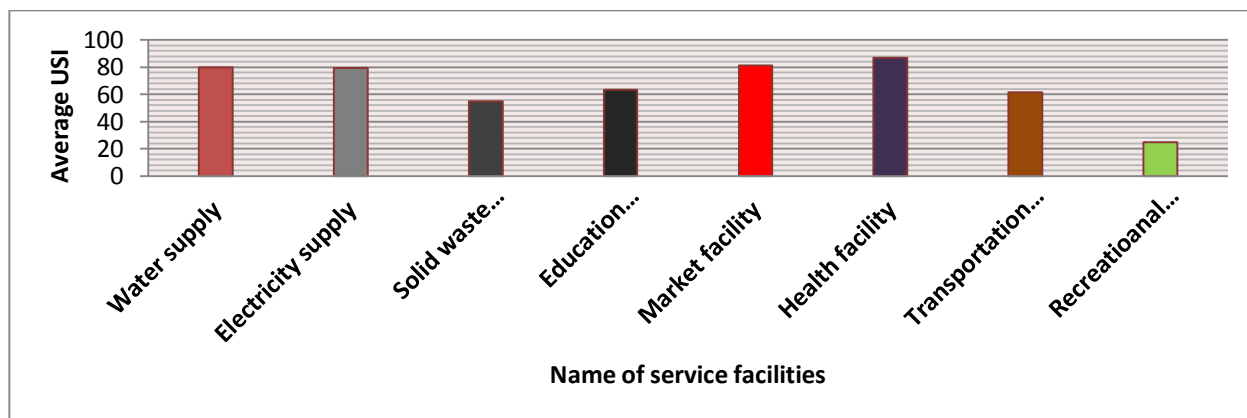
Services	USI	Rank
Water supply	75	1
Electricity supply	83.33	1
Solid waste management	60	2
Educational facility	65	2
Market facility	80	1
Health facility	86	1
Transportation facility	70	1
Recreational Area	25	3



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**Average USI and Rank**

Municipal services	Average USI	Total Rank
Water supply	80	3
Electricity supply	79.44	3
Solid waste management	55	6
Educational facility	63.33	6
Market facility	81.11	3
Health facility	87	3
Transportation facility	61.66	3
Recreational Area	25	9



Source: Field survey, 2017

**4.2 Community effect index calculation:**

The effects of various utility services like water supply, gas supply, better transportation facilities, service opportunities to community is a primary concern whether these services serve effectively or not. A wide range of community facilities is also necessary and make an assessment of the facility requirements for community uses.

CEI refers to community effect index. USI value between, 0 to 33 is ranked as 3; USI value between 34 to 66 is ranked as 2 and USI value between 67 to 100 is ranked as 1. Then the CEI is calculated by the following equation:

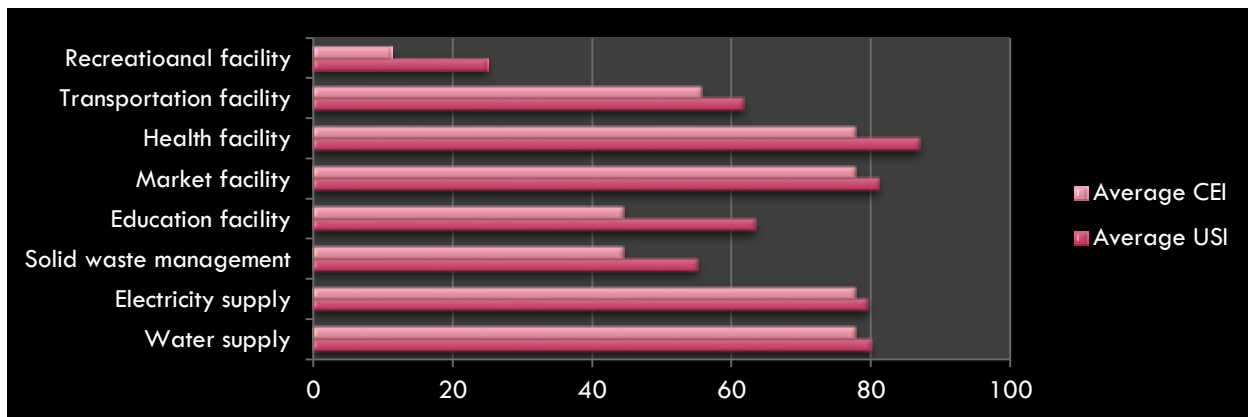
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$$CEI = 100 - \frac{100(\sum Si - 1)}{3b}$$

Here  $\sum Si$  = Total Rank

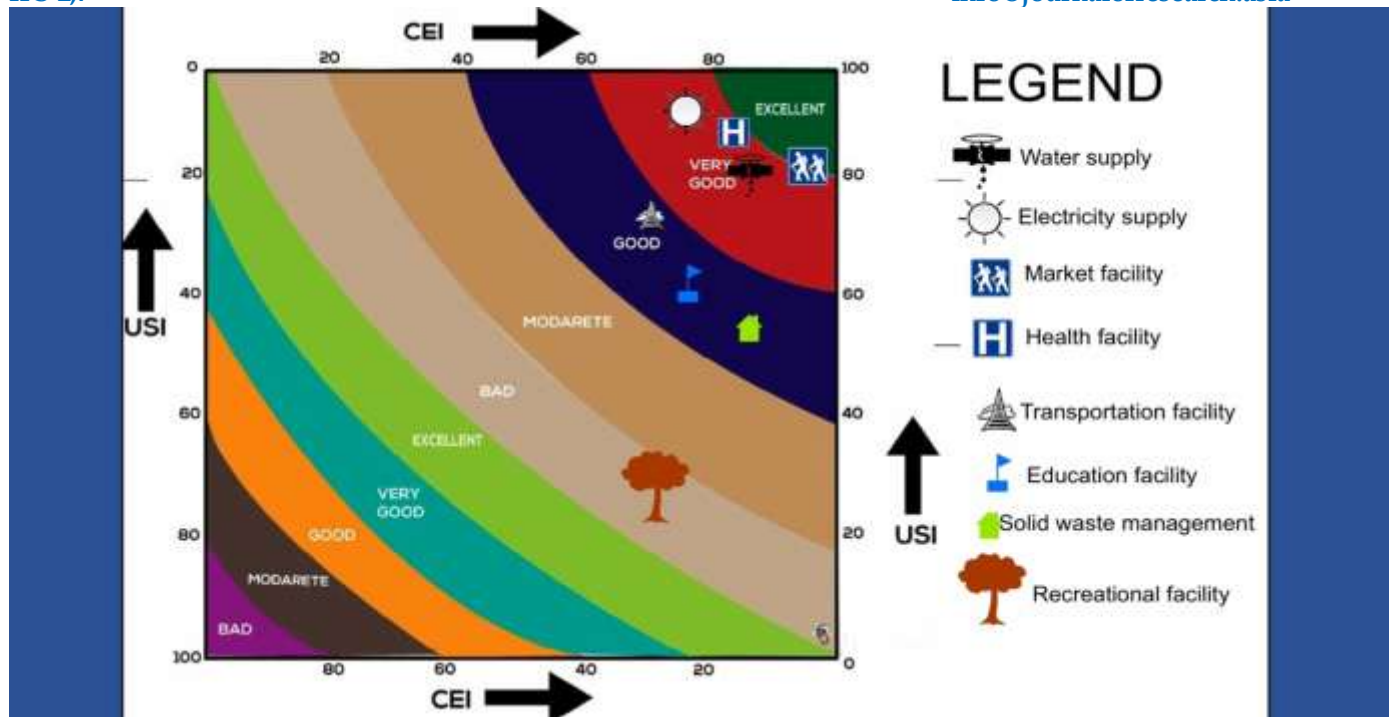
b = Block

Average USI and CEI of ward no. 09 of Pabna municipality:



Source: Field survey, 2017

#### 4.3 Level of service:



Source: The Author, 2018

## 5. Recommendation

Some recommendations and guidelines are provided to improve the quality of different municipal service facilities these are as follows -Ward number 09 has little amount of recreational area. Without Govt. district forest office there is no single forest in this ward. Only 25 percent users are satisfied as a result of recreational facilities. So it is urgently needed to expand recreational area at ward number 09. It is also needed to create play ground as recreational area. Transportation problem is another problem in this ward. Only 61.66 percent users are satisfied due to existing transportation facilities. Road condition is not good, some roads are kacha and some others are semi pucca. So it should be needed to repair and reconstruct the existing road network. Meril industries and square industries have many owned vehicles which are created traffic congestion in this ward. So these two industries should use bypass road for their vehicles. Solid waste management system is not satisfactory in this ward.

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The worker who are related with solid waste collection don't collect solid waste regularly therefore it create bad odor.

## 6. Conclusion

After doing analysis of the collected data the study finds that the existing condition of recreational facilities in the study area is falling into bad condition where moderate condition and other facilities are in fairly good situation. On the basis of the analysis the study has focused on enhancing in accessibility of municipal service facilities to the citizens of Pabna municipality that is essential for sustainable development

## 7. References

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