

Status Of Basic Urban Amenities: A Case Study On Tarakeswar Town In Hugli District Of West Bengal

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Abstract: Basic amenities are fundamental determinants of quality of living in society. Basic amenities cover those provisions and facilities which are inevitable to human life in modern era. Access to safe drinking water, access to toilet and latrine facilities, well planned sewage system and having access to energy in the form of electricity etc. are certain fundamental determinants of quality of living. This paper deals with an intensive study on availability of urban amenities in the Tarakeswar municipal area. Mainly solid waste management, status and availability of drinking water, house lighting system, availability of latrine and bathroom facilities, sewage system have been highlighted in this research paper. Disparity of urban amenities in the municipal area has been identified. An overall survey report, dealing with the availability and disparity of selected urban amenities of this township area, has been presented here with recommendations for sustainable development of environmental condition.

Index Terms: Basic urban amenities, fundamental determinants, indispensable, availability, solid waste management, Disparity, sustainable development.

1. INTRODUCTION:

The access to basic amenities like solid waste management, drinking water, sanitation, electricity, housing, drainage and others are crucial to the well being as they contribute to physical and material comfort and quality of life. They also benefit by ensuring better health, environment and providing opportunities for other useful activities. Access to basic amenities is the most important aspect of the quality of urbanization. Basic amenities cover those provisions and facilities which are indispensable to human life in modern times. Ability to reside in a stable house, access to safe drinking water, access to toilet facilities and having access to energy in the form of electricity etc. are certain fundamental determinants of quality of living. This present study is endeavor to understand the quality and availability of basic urban amenities in a religious town in developing country like India.

2. LITERATURE REVIEW:

Urban amenities comprise the infrastructural goods and services that are collectively needed for the urban society. They are the main part to urban society without which urban society cannot emerge and sustain (Adekunle et al., 2011). The term urban amenities refer to solid waste, drinking water supply, sanitation, electricity and so on. Amenities are key to understanding quality of life because they are precisely what make some places attractive for living and working. Urban

amenities are understood in this research paper to mean specific urban facilities that contribute to the living experience of residents (Kelly, 2006). Availability of the modern household amenities has a great significance in the human life because it is conventionally believed that housing conditions, availability of drinking water, sanitation facilities etc might contribute to the health improvement of the people and determine the quality of life of the society. It is also being realized that the key dependencies exist between water supply, sanitation and improvement in the overall human development. The amenities generally decrease from the core of the town to its peripheries. Though these infrastructures form an important and integral part of life of any community, either rural or urban but they are unequally distributed over space. Many empirical findings have shown that facilities are unequally distributed in our communities such that the vast majority of the people are caught in a never ending struggle to gain access to their infrastructures in order to improve their quality of life (Elyes, 1996). The spatial variation in availability and access to infrastructure result in spatial disparities in living standards both within and between regions and localities (Madu, 2007). Access to infrastructure inspires life and well-being (Oyebanji, 1978). Provision of such amenities discourages rural-urban migration which means that these amenities have to be provided to both urban and rural communities (Mabogunje, 1997). The present study is an

attempt to analyze the status of source and availability of drinking water, electricity, sewage system, latrine, bathroom facilities of the residents of Tarakeswar town. Beside other objectives of the study is to search spatial variation in respect of the urban amenities in the town area.

3. STUDY AREA:

The Tarakeswar township area has been selected for study with infield investigation on availability of basic urban amenities. The town is located in the Chandannagar subdivision of Hugli district in Burdwan Division of West Bengal. The town obtained the status of a municipality on 6th August in 1975. At present the area of the town is 3.88km². This municipal area is divided into 15 wards for administrative purpose. Tarakeswar town is situated at the centre of the Tarakeswar block. The town is surrounded by nine villages. Towards the north Bhanjipur, Chandur, Hauli, Towards east Baidyapur, Bajitpur, towards South east Jotsambhu, towards South Bhimpur, towards South west Bhata, towards west Gouribati village located. Total area of the adjacent villages is 1137.6 hectares. Tarakeswar town is connected with Burdwan, Medinipur, Howrah, Kolkata, Bankura, Chandannagar, Krishnanagar, Arambagh etc towns and cities through bus service. Many towns and villages of Hugli are connected through Tarakeswar, Arambagh rail line.

4. OBJECTIVES:

The main objectives of the study are

- (a).To identify the status of some selected urban amenities in Tarakeswar municipal area.
- (b).To assess the availability of urban amenities like solid waste management, status and availability of drinking water, latrine and sewage system etc.
- (c).To assess the spatial disparity of urban amenities.

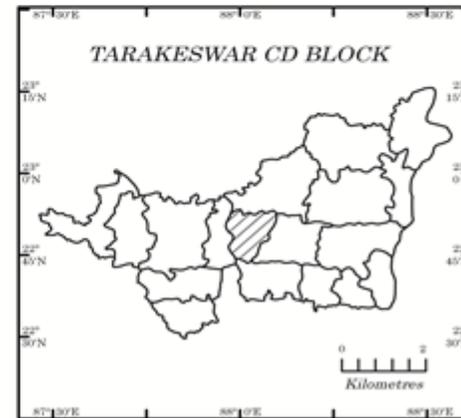
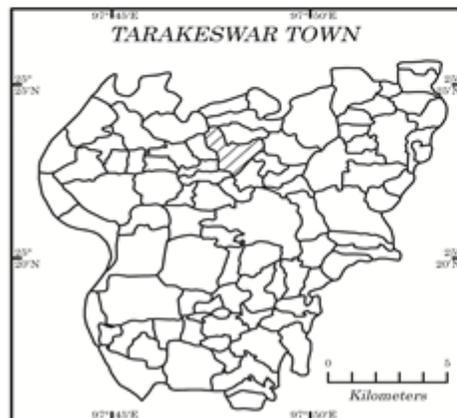
5. DATA BASE:

Mainly primary data has been used for the study. The primary source of data includes perception study of the inhabitants and photography from field. Primary data, on the other hand has been collected from the field through House hold survey, investigations and Interviews.

6. METHODOLOGY:

The original primary data has been collected through door to door household survey through a questionnaire schedule. Then the attribute data have been tabulated and a master copy of primary data was prepared on the availability of basic urban amenities manually. The tabulated hard copy data were calculated by using Excel software which have been shown in the paper separately in tabular formats. The maps has been prepared using G.I.S soft ware.

LOCATION MAP OF STUDY AREA



7. RESULT AND DISCUSSION:

The access to basic amenities like electricity, drinking water, toilet facility, sanitation, healthcare facilities and solid waste management are critical determinants of urban quality of life (Bhagat,2011).The result of the present study has been discussed after a through household survey in the study area. It provides a comprehensive picture about the status of some basic urban amenities in the Tarakeswar municipal area.

7.1Solid waste management:

In Tarakeswar town the number of households increased from 5756 to 6682 and total population also increased from 28187 to 30947 between 2001 and 2011. So the generating rate of domestic solid waste has been also increased. To know the status of household solid waste disposal practice of the residents of municipal area, primary data collected from 600 families. Out of 600 families, 563 families (93.83%) use dustbin, 10 families (1.67%) use open drains and 27 families (4.5%) use open place to dispose solid waste. Open dumping of municipality solid waste is a common practice in the study area.

Regularly management of solid waste is a very challenging work for the conservancy department of Tarakeswar municipality. Daily commuter tourists and unconscious local people are responsible for the disposal of solid waste in open drains and place. In Tarakeswar town solid waste is collected manually by the help of sweepers. There are 70 sweepers and 3 supervisors have been appointed by the conservancy department of Tarakeswar municipal corporation. 21 small carts, 15 tricycles, 2 trucks are used by them to clean the town from solid waste. Every day solid waste is collected, transported and disposed in a fixed dumping ground outside the municipal area.

Table No.1: Solid waste disposal *Data*

Distance Of Drinking water	No. of Family	% of Family
<5 k.m	594	99
.5-1.0 k.m	6	1

Source: Primary data collected from field

7.2 Status of drinking water

In Tarakeswar town about 41,80,000 liters drinking water is required per day. There are 46.1 km pipe lines and 13 pumps are supplying drinking water to the citizen. There are 2647 domestic house connection, 242 hand tubes well, 10 water tanks and 2 water supply tractors are always used for fulfilling the demand of the drinking water. Through the field survey on 600 houses in the town, it has been identified that 566 families (94.33%) use tap water, 94 families (15.7%) use tube well and 44 families (7.33%) use open well as the source of drinking water. Mainly people of back ward class use open well. The source of drinking water of the residents of flats, apartments of the Tarakeswar town is deep tube well. Few residents of 600 use both tap and tube well for drinking water. The quality of drinking water of the town and its adjacent area is well. The water supply department of the municipality is controlling and maintaining the pipeline, tube well and the hand pump consciously.

Table No.2: Source of drinking water

Sources Of Drinking Water	No. of Family	% of Family
Tap	566	94.33
Tube well /Hand pump	94	15.7
Open Well	44	7.33

Data Source: Primary data generated from field survey (Single family responded to more than one option)

7.3 Availability of drinking water

The maximum residents of the town can get drinking water within .5 km distance from their home. Out of 600 families 594 families (99%) collect drinking water from .5 km distance. These residents live in the core wards of the town. Only 6 families (1%) collect drinking water within .5 km to 1 km distance from their houses. These residents are living in the peripheral wards of the town. Mainly tap, tube well, hand pump are the source of drinking water. As a whole the facility and the availability of the drinking water for the residents of municipal area is well.

Table No.3: Distance covered for accessing drinking

Solid Waste Disposal Site	No. of Family	% of family
Open Place	27	4.5
Open Drains	10	1.67
Dust Bin	563	93.83
Total	600	100

Data Source: Primary data generated from field

7.4 House Lighting System

The availability of electricity facility is also very well in the municipal area. Out of 600 families in the municipal area 552 families (92.00%) have electric connection. Kerosene is used by 178 families (29.67%) as domestic fuel. Only one family has been identified to use firewood as domestic fuel. There are 15 families (2.5%) in the town where solar energy, Bio gas etc is the main source of house lighting system. So facility of electricity connection is well in the town area. It has been also identified during the primary data collection that many families responded for multiple options regarding the domestic use of the energy.

Table No.4: Types of House lighting system

House Lighting System	No. of family	% of Family
Electric Connection	552	92.00
Kerosene	178	29.67
Fire wood	1	.02
Others	15	2.50

Data Source: Primary data generated from field survey

Sewage system	No. of Family	% of Family
Open Drains	340	56.67
Underground Drains	238	39.67
Digester	1	0.17
Not connected sewer	21	3.5

(Single family responded to more than one option)

7.5 Availability of Latrine

It has been identified from the field survey that the residents of Tarakeswar town use different types of latrine. Out of 600 house hold 254 families(42.33%) have own septic tank/flush latrine,271 families(45.17%) have their own dry latrine,43 families(7.17%) have shared septic tank/flush latrine,20 families(3.33%) use community septic tank /flush latrine,12 families(2.00%)use community dry latrine. From the above analysis it is clear that the Latrine facilities of the citizen are well. Some slum scheduled caste families use very lower quality latrine. Few of them use common open drains, latrine and open space. Huge tourists come in Tarakeswar to visit the temple of Lord Shiva throughout a year. The area surrounding the temple always becomes fulfilled by the pilgrims who come to worship lord Shiva in the period of Srabani mela, chaitra

Latrine Facility	No. of Family	% of Family
Own septic tank/Flush latrine	254	42.33
Own dry latrine	271	45.17
Shared septic tank/Flush latrine	43	7.17
Community septic tank/Flush latrine	20	3.33
Community dry latrine	12	2.00

mela. Many of them use open space of town and its adjacent villages for latrine. For this reasons environment mainly air, water become polluted during this period every year.

Table No.5: Types of Latrine used by the residents

Data Source: Primary data generated from field

7.6 Sewage System

In Tarakeswar the view of sewage system is not very well and modern. Out of 600 households, 340 families (56.67%) are with open drains, 238 families (39.67%) have connectivity with underground drains, 1 family has digester and 21 families (3.5%) have been identified who have no drainage connectivity. Open drains are the cause of air pollution, water pollution. Besides the household who have no drainage connectivity also responsible for the environmental pollution.

Table No.6: Availability of sewage system

Data Source: Primary data generated from field

7.7 Spatial disparity of urban amenities

An idea about the extent of concentration of public facilities in different wards of the town has been obtained by taking into consideration the distribution of population in analysis. In this context the location

quotient method has been used. This method is in fact used to measure the extent to which the public

facilities in different parts such as wards in a town are in balance (Jahan & Oda,2005).The location quotient is a method for comparing a ward's percentage share of a particular facility with its percentage share of its population.

$$L.Q = (ni/p) / (Ni/P)$$

(Ni =Number of facility 'i' in a given ward, P=Population of the concerned ward, Ni=Number of facility 'i' in Tarakeswar town P=Total population of Tarakeswar town).

It is clear from the table that 8 wards out of 15 (53.33%) have deficiency in the establishment of tap water connection. The rest seven wards (46.67%) posses above normal concentration i.e. the per capita availability of the facility exceed that of the town as a whole. Many house hold suffer from the crisis of drinking water. The people of lower economic category anf the citizen who live in the slum are beside railway

line in ward no.14 and beside 12 no. road suffer from the crisis of drinking water. In the peripheral wards of the town like ward no.10,11,15,14 etc the ratio of tap tube well with respect to the residents of the wards is very little. Similarly, in case of the ration stores, seven wards out of fifteen (46.67%) have above normal concentration. There is not a single ration stores in the rest of eight wards. Beside the management of solid waste, sewage system in the peripheral wards of Tarakeswar town is very poor. The number of dumping ground for the disposal of solid waste in different ward of the municipal area is not satisfactory. In some marginal wards the drains are open in nature. The drains of the peripheral wards are open and incomplete. The domestic water is totally stagnated throughout whole year. So the above analysis is proving that spatial disparity of urban amenities is a general feature of the social environment of Tarakeswar town.

Table No 3.14: Ward wise number of tap water connection and Ration stores in Tarakeswar town

Ward No.	Population	% of population	No. of tap water connection	% of tap water connection	Ration stores	% of ration stores	L.Q of tap water connection	L.Q of ration stores
1	1804	5.83	239	7.01	1	16.67	1.20	2.86
2	1728	5.58	167	4.90	1	16.67	0.88	2.99
3	1281	4.14	131	3.85	0	0.00	0.93	0.00
4	1399	4.52	127	3.73	0	0.00	0.83	0.00
5	893	2.89	104	3.05	1	16.67	1.06	5.78
6	2432	7.86	353	10.36	0	0.00	1.32	0.00
7	2200	7.11	127	3.73	1	16.67	0.52	2.34
8	2446	7.90	320	9.39	1	16.67	1.19	2.11
9	2193	7.09	302	8.86	1	16.67	1.25	2.35
10	3472	11.22	532	15.61	0	0.00	1.39	0.00
11	2415	7.80	126	3.70	1	16.67	0.47	2.13
12	1492	4.82	140	4.11	0	0.00	0.85	0.00
13	1602	5.18	166	4.87	0	0.00	0.94	0.00
14	3198	10.33	271	7.95	0	0.00	0.77	0.00
15	2392	7.73	302	8.86	0	0.00	1.15	0.00
Total	30947	100	3407	100	6	100		

Data Source: Land use & Urban planning Department, Tarakeswar Municipalit

8. MAJOR FINDINGS:

- i. It is clear from the above discussion that the different facilities of the urban amenities are not equally distributed in all wards of Tarakeswar town.
- ii. Ward wise Disparity regarding the urban amenities like tap water connection, ration shops etc have been identified in all over the town.
- iii. Maximum swage system of the study area is highly unhygienic. The open drains are filled with garbage and plastic which is thrown by the local people, daily commuters and tourists.
- iv. The method of solid waste management is traditional unscientific and unhygienic.

9. RECOMENDATIONS FOR PROPER URBAN PLANNING

(i) Government, municipal office, N.G.O organization should establish more public latrine and bathroom to control the environmental pollution.

- (ii) Use of plastic must be prohibited to maintain the cleanliness of the town. Municipal authority should arrange to keep more movable dust bins in different places in the town.
 - (iii) Large sophisticated compactor truck, small tripper trucks should be used to transport municipal solid waste to maintain the hygiene of the study area.
 - (iv) Door to door public awareness program should be taken to control the disposal of domestic solid waste in the open drains.
 - (v) The conservancy department should be more active and regular to maintain the cleanliness of the town.
 - (vi) Different awareness programs regarding the environmental pollution should be organized to grow the sense of the pilgrimage and shop keepers about the environmental protection.
 - (vii) Government, municipal authority should be more active to establish tap tube wells, ration shops, common latrine, bathroom to minimize the regional disparity of civic amenities in Tarakeswar town.
10. CONCLUSION:

Tarakeswar is one of the famous religious towns of India. Lakhs of tourists visit this holy place throughout every year. Residents are also increasing due the growth of migration in the township area. So regular management of solid waste, uninterrupted supply of drinking water and electricity is very challenging work to the Municipal Corporation and Government authority. Municipal corporation and Government authority should be more regular, integrated and organized regarding these basic urban amenities. On the other hand local people of this small town should be more responsible to use drinking water, electricity and disposal of solid waste in future.

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