



## Level of Urbanization: An Empirical Study of North 24 Parganas

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### Abstract

*As the world gets increasingly urban, more than half of its population live in cities and towns. India and West Bengal too is catching up the trend. Urbanization inevitably is accompanied by some changes in the socio-economic character of the place which is going through the process of urbanization. North 24 Parganas has a long history of urbanization. The district had experienced a remarkable rate of urban growth both in terms increasing urban population and urban centres since 1951. The present study analyses the trend of urbanization and also detect the level of urbanization of the district on the basis of composite standardise values of some selected urbanity and socio-economic indicators and also focused on type of economical concentration in respect of urbanization level. Community Development (C.D) blocks have been selected as the spatial unit for present study. This article reveals that there is intra spatial disparity in the urbanization level and economic activity of the selected C.D. blocks.*

**Keywords:** Urbanization, economical concentration, intra spatial disparity.

### Introduction

Geographers use the term urbanization more commonly to a process of transformation. Lampard<sup>1</sup> suggests that a distinction should be made between the three aspects of the process of urbanization, i.e., behavioural, structural and demographic aspects of urbanization process. Keeping in view the various aspects of urbanization, Riesman depicts urbanization as a process of change, when a society is transformed from an agrarian economy and small homogeneous society to an industrial economy and large heterogeneous mass<sup>2</sup>. Or in other words urbanization is a territorial response to structural changes in the economy. Now days the city have been increasingly chosen as the spatial unit where the adequacy of political institutions, performance of government agencies and effectiveness of programmes to combat social problems, to enhance the environment and to promote economic development have to be tested. Therefore, the level of urbanization is often equates level of development in general. To formulate and to modify urban policies and programmes it is necessary to collect information on urban conditions and trends. Only then we can convert this information to knowledge for formulating and modifying urban policies and programmes. Therefore it has become essential to investigate the level of urbanization of North 24 Parganas. The present study is concerned with the historical aspect of the district's urbanization, its trend through time since independence and its present level of urbanization with special attention on economic specialization of the concerned area.

**Objectives:** This paper has made an attempt to analyse the trend and level of urbanization of the selected C.D. blocks and their economic specialisation in respect to their urbanization level.

**Literature review:** Here an attempt has been made to synthesize the existing literatures assumed to be relevant with the present study. Urbanization or urban growth is a severely discussed topic in the most of the researcher's writings especially in the last decade of the 20<sup>th</sup> century. They are namely Alan Pred<sup>3</sup>, R. Ramachandran<sup>4</sup>, Mahesh Chand and Vinay kumar Puri<sup>5</sup>, Jayasri Roy Chaudhuri<sup>6</sup>, Ashis Sarkar<sup>7and8</sup> et.al. Though Pred<sup>3</sup> have presented a hypothetical model for urban growth; Ramachandan<sup>4</sup>, Chand and Puri<sup>5</sup>, and Roy Chaudhuri<sup>6</sup> et.al. presented an in depth discussion about India's urbanization whereas Ashis Sarkar<sup>7and8</sup> focused on West Bengal's (W.B.) urbanization and it's city size distribution, where he noticed that in W.B.'s urban scene larger cities grew very fast whereas small and medium towns have consistently declined in size in the period 1901 to 2001. The reasons may be that the medium and the small towns are infrastructural poor and functionally weak without pulling power, while larger cities are growing or may be overgrowing at the expense of the smaller ones with diverse functions and opportunities though they are vulnerable in terms of per capita availability of infrastructure. Similar notions have been found in Zipf's<sup>9</sup> rank size rule of city size distribution. B. K. Roy<sup>10</sup> gave similar views of metropolitan supremacy. S. Paul<sup>11</sup>, Paul and Chatterjee<sup>12</sup> particularly investigated the urban scene of the district of North 24 Parganas and have measured its consistency. Reddy<sup>13</sup> correlated urbanization with migration and have commented that urbanization is a polarisation technique, giving birth to multifunction cities. Arthur Lewis (1954, as cited in Reddy, 1991)<sup>13</sup>, Ashis Sarkar<sup>8</sup> and D. Ramesh<sup>14</sup>, Kevin. M. Murphy and Finis Welch<sup>15</sup>, Emilio Casetti<sup>16</sup> et.al, were of the view that urbanization and labour transfer go parallel. There are some scholars like Farouk<sup>17</sup> and Narain<sup>18</sup> who have emphasized the

spatial dimension of labour transfer i.e. the migration of workforce besides their occupational shift. Swapna Basu<sup>19</sup>, 1991 gave a detail analysis of economical concentration of urban units of Lower Damodar Valley. Asok Mitra<sup>20</sup> have pointed out that in Indian urban scene during 1961-71 there is a slowing down of creation of higher wage jobs in organised industry, manufacturing, trade, commerce and transportation even in the informal sector of household industry. There is shift towards the more unorganised segments of trade, commerce and services for employment.

**Database:** Secondary sources like District Census Handbook, 24 Parganas, West Bengal Series, 1951, 1961, 1971 and 1981<sup>21</sup>,

District Census Handbook, North 24 Parganas, West Bengal Series, 1991 and 2001<sup>22</sup>, and District Statistical Handbook, North 24 Parganas, 2001<sup>23</sup> have been considered for collecting maps and information.

## Methodology

Being the thrust on the level of urbanization only those C.D. blocks which have urban area selected for the present study and other C.D. blocks have been exempted. Several indicators have been selected for calculating the urbanization level of each C.D. block. These are as follow: i. % of Urban Area to the total area of the C.D. block (U.A). ii. % of Urban Population to the total population of the C.D. block (U.P). iii. Urban Population Density (U.P.D) = urban population/ urban area of the P.S/ C.D block. Iv. Urban Spacing, Inter-settlement spacing (I.S.S) by Sarkar's method (U.S.)= $2\sqrt{(A/n)}$  where n=number of urban settlements within the P.S/C.D block and A= area of the P.S/C.D block. v. % of Urban Households to the total households of the C.D. block (U.H). vi. % of Households Availing Banking Facility to the total households of the C.D. block (HABF). vii. % of Households Having Electricity (HHE). viii. % of Households Having Separate Kitchen within the House (HHSKWH). ix. % of Households Having Bathroom within the House (HHBWH). x. % of Households Having Water Closet Latrine (HHWCL). xi. % of Households Having Drainage Connectivity (HHDC). xii. % of Households Having Tap Drinking Water within the Premise (HHTDWWP). xiii. % of Households Using LPG for Cooking (HULPGFC). xiv. General Literacy Rate (%) (GLR) = (literate population/ total population)\*100. xv. Female Literacy Rate (%) (FLR) = (literate female/ total female)\*100.

Z score for each indicator for each C.D. block have been calculated by using the following formula  
 $Z_j = (X_j - \text{Mean of } X_j) / \delta_j$

Where,  $Z_j$  denotes the standardised score of the  $j$ th indicator,  $X_j$  denotes the original value of the  $j$ th indicator, Mean of  $X_j$  denotes the average value of all C.D. blocks of the  $j$ th indicator  $\delta_j$  denotes standard deviation of the  $j$ th indicator.

After calculating the Z score, Composite Score for level of urbanization of each block have been calculated by the following way-

Composite Score for a particular block =  $Z_j + Z_k + \dots + Z_n$ .

Where,  $Z_j$  denotes the standardised score of the  $j$ th indicator of that block,  $Z_k$  denotes the standardised score of the  $k$ th indicator,  $Z_n$  denotes the standardised score of the  $n$  number of indicator of that block.

For detecting the economic specialization of the C.D. blocks Location Quotient (L.Q.) have been calculated by using the following formula:

$L.Q. = (S_i / A)$

In the equation,  $S_i$  denotes the percentage value for segment  $i$ , and  $A$  denotes the percentage value for the total area.

Location Quotient is a ratio of ratios. It is used to describe the relative concentration of an activity or socio-economic group in one section of a large area. A quotient value  $>1.0$  indicates that the activity is more concentrated in the segment relative to the whole, whereas value  $<1.0$  indicates its relative absence there and quotient nearer 1.0 indicates self sufficiency in that activity. In this paper three activity groups have been selected on the basis of census categorization of workers, 2001. Each group includes both main and marginal workers. These are as follows: i. Agricultural activity group (cultivators + agricultural labourers), ii. Household industry activity group and iii. Other activity group (inclusive of all industries other than household, mining-quarrying, trade commerce and other workers).

All these secondary information have been tabulated and diagrams have prepared with the help of Microsoft Office Excel 2007. MapInfo Professional version 10.5 have also used for thematic mapping.

**Background of the Study Area:** The district North 24 Parganas forms the south-eastern part of the West Bengal and lies between  $22^{\circ}11'06''$  N to  $23^{\circ}15'02''$  N latitude and  $88^{\circ}20'E$  to  $89^{\circ}05' E$  longitude (figure-1). The district is bordered by the districts of Nadia in north, South 24 Parganas and Kolkata in the south, Howrah and Hooghly in the west. Bangladesh forms the eastern border of the North 24 Parganas. Barasat is the district headquarters<sup>24,25</sup>. North 24 Parganas is the most populous district having 10009781 populations (Census of India, 2011) and also the tenth largest district in the state by area (4094.0 sq. km). It has five subdivisions, 22 community Development blocks, 27 municipalities and a total of 55 urban centres. The density of population (2445persons/ sq.km.) is much higher than the state average of 1029 population per sq.km, and it ranks third in terms of population density.

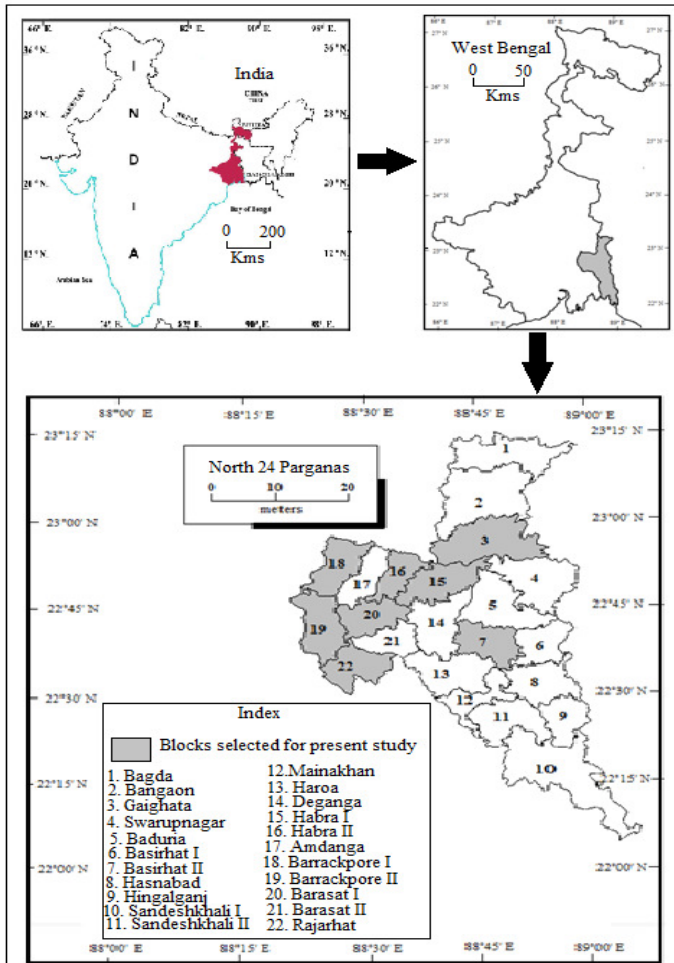


Figure-1  
 Showing Location of North 24 Parganas

North 24 parganas as an administrative unit originated in 1986; when the old 24 Parganas was bifurcated in two segments. The district was physically formed on March 1, 1986. The nomenclature of 24 Parganas had its origin in 1757, when Mir Zafar the nabab of Bengal ceded to the East India Company the rights of twenty four mahals. The twenty four mahals were –(i) Akbarpur, (ii) Amirpur, (iii) Azimabad, (iv) Balia, (v) Baridhati, (vi) Basndhyer, (vii) Kolikata, (viii) Dakshinsagar, (ix) Garh, (x) Hatiagarh, (xi) Ekhtiarpur, (xii) Kharijuri, (xiii) Khaspur, (xiv) Medinimal, (xv) Magura, (xvi) Manpur, (xvii) Maida, (xviii) Muragacha, (xix) Paikan, (xx) Penchakuli, (xxi) Shatal (xxii) Shahanagar, (xxiii) Shahpur, (xxiv) Uttar pargana namely. Thus the name of the district should really have been 24-Mahals. Some of these mahals had been full paraganas, others being part of parganas and one being Malang Mahal. As the name 24 part parganas was too cumbersome and the name converted into twenty four parganas<sup>25, 26</sup>.

Deltaic plain, alluvial soil, monsoonal climate, principal rivers like the Ganges, the Hooghly, the Ichhamati, the Mathabhanga, the Jamuna, and the Bidyadhari etc., embrace the physiographic

of the region. The floras and faunas of the area are deciduous plants and mangrove forest, the Royal Bengal Tigers and spotted deer, different bird species (ducks, fowls) and aquatic species (saltwater alligators, gangetic figure-1 Showing Location of North 24 Parganas dolphins) etc<sup>23-27</sup>.

## Results and Discussion

**Brief History of Urbanization:** Historically the process of urbanization evolves after the industrial revolution characterised by mass production in the western world. Thus it contributed to the expansion of infrastructure, transport and communication network which act as magnet to the rural population and they migrated to the urban centres.

In India every municipality, every cantonment, all civil lines not included in municipal limits, and every other collection of houses permanently inhabited by not less than 5000 persons even not having any municipal government was defined as urban area in the colonial period. These criteria continued till 1951 census because 1961 census had defined the urban area on the basis of two criteria namely: i. Administrative Aspect: Towns having a municipal body called as statutory town. ii. Economic and Demographic aspect: In this criterion towns having a population of 5000, population density of 400 persons per Km<sup>2</sup> and 75% population engaged in non-primary sector are defined as non-municipal towns. iii. Since independence India has been experiencing a very high pace of urbanization both in terms of increasing volume of urban population and increasing number of urban centres. West Bengal and North 24 Parganas too had catches the trend. Before going to the North 24 Parganas urbanization it is necessary to have an overview of the West Bengal's urbanization in general. In pre-colonial period towns were largely trading centres, army camps, or the places of pilgrimage in West Bengal. Some of the largest urban centres, such as Tamralipta, Saptagram, Chattagram and Dhaka were port towns. The level of urbanization in this period was very high and some of the largest urban centres, such as Dhaka and Murshidabad were compared with cities like London and Paris for their population size.

After that, British takeover of Bengal resulted in rapid de-urbanization and de-industrialization. The traditional textile industry and other rural based industries suffered from the competition of factory made cheaper products. Due to this collapse of economic base population of large urban centres registered massive drops and village-ward migration intensified. Consequently the rural artisans who were part-time agriculturalists now belong to fulltime farmer; some were even compelled to become agricultural labourers. Imposition of heavy land revenue has further declines the rural economy and resulted in 1770's disastrous famine.

Establishment of the jute factories in mid 1830s on both sides of the river Ganga in the neighbourhood of Calcutta, and of the railway towns after 1851, and formation of the coal and tea plantation

towns in the second half of the nineteenth century set the basis of the new urbanization pattern based on industries. In the early part of nineteenth century, the activities around commercial crops such as indigo, opium, and mulberry etc., had led to setting up of many 'kuthis' or factories in rural areas, which also grew into towns in due course. British policies had also encouraged the growth of two other type of towns- administrative and trading towns. Overshadowing every urbanization pattern the Calcutta city grows from a collection of three fisherman's villages on a marshy land to one of the largest metropolis of the world.

Two distinct features have been found in the existing pattern of West Bengal's urbanization in colonial period – i. it was externally induced in order to meet the needs of the colonial economy, and thus mainly based on export trade ii. it was not linked with the development of rural areas. Therefore, they did not play any role in urban growth, except, in a negative way by pushing out the rural destitute.

After the First World War the pairing of industrialization and urbanization had ceased to exist. Because the economic growth related to the coal, tea and jute construction had a set back because there is a falling demand of labour as these activities approached saturation point. In spite of halted industrial progress urbanization process continued. Lack of jobs in the formal sector now led to the growth of informal sector of coolies, pavement traders etc.

The decade of forties was characterised by four major types of population movements, each of which left its imprint on the urbanization pattern of the cities of West Bengal<sup>28</sup>.

First: The fear of Japanese bomb attack, have compelled many city dwellers to send their families to the native villages. Second: The great famine of 1943 pushed a large number of peoples to Calcutta. Third: The great riot of 1946-47 led to redistribution of population in various areas. Fourth: The refugee movement from other side of Bengal after partition of the country in 1947.

**Trends of Urbanization:** From the above discussion it is cleared that the present pattern of urbanization has evolved over two hundred years ago, as a consequence of colonial economy and administrative policies. Now coming to the North 24 Parganas, the district has long history of urbanization characterised by different rates of urbanization in different periods. The trends of urbanization have been studied through six census years (1951-2001) after the independence. During this fifty years urban population of the district shows a fivefold increase from 967790 (1951) to 4850947 (2001) and also the number of urban centres have jumped to 55 (2001) from 23 (1951).

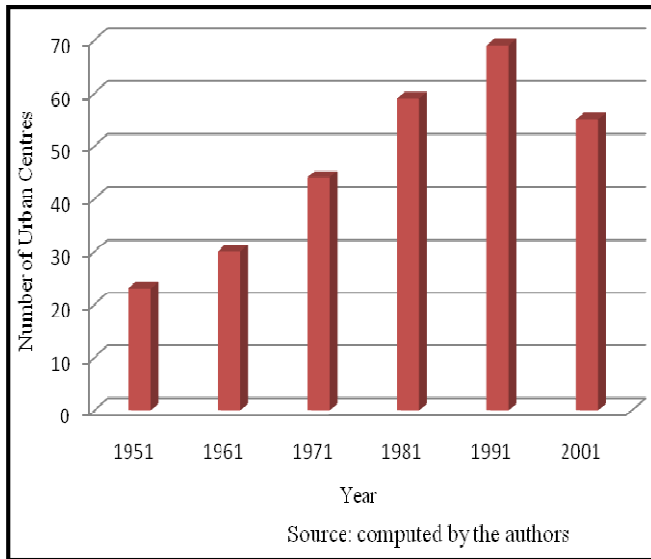
During 1951-1981 the district had registered a high level of urbanization. The percentage of increase of urban population, number of urban centres and the rural urban ratio increases remarkably; showing a high pace of urbanization in every term (table-1). This high urban growth is attributed mainly by large scale migration from rural areas of 24 PGS (N). Urban gathering was found mainly around Barrackpore industrial belt due to its favourable economic condition and proximity to Kolkata. Besides this high urban growth the district also receives a huge influx of refugee during this period due to partition of Bengal, which attributed to a considerably high rural growth in this district.

The period between 1981-'91 show a slow but steady urban growth. The reason may be the separation of the district into two halves North 24 Parganas and South 24 Parganas namely. The percentage of urban population to the total population registered a small increase of 32.06% but there is a net increase of 10 urban centres. Though the rate of increase of urban population was less (36.37% to 32.06%) than the previous decade, the increase of rural population registered a remarkable growth rate 30.58 % which was the second highest growth amongst the six decades (table-1). The rural urban ratio in this period does not show any significant changes.

**Table-1**  
**Relative growth of Urban Population and Urban Centres in North 24 Parganas, 1951-2001**

Census Year	Population			% of Population		% of Increase		Urban-Rural Ratio	No. of Urban Centres	% of increase of Urban Centres
	Total	Rural	Urban	Rural	Urban	Rural	Urban			
1951	2254717	1286927	967790	57.08	42.92	-	-	0.75	23	.....
1961	3156415	1730490	1425925	54.82	45.18	34.47	47.34	0.82	30	30.43
1971	4205204	2133883	2071321	50.74	49.26	23.31	45.26	0.97	44	46.67
1981	5535465	2710771	2824694	48.97	51.03	27.03	36.37	1.04	59	34.09
1991	7269929	3539629	3730300	48.69	51.31	30.58	32.06	1.05	69	16.95
2001	8934286	4083339	4850947	45.71	54.29	15.36	30.04	1.19	55	- 20.29

Source: Computed by the authors from different Census Reports, 1951-2001

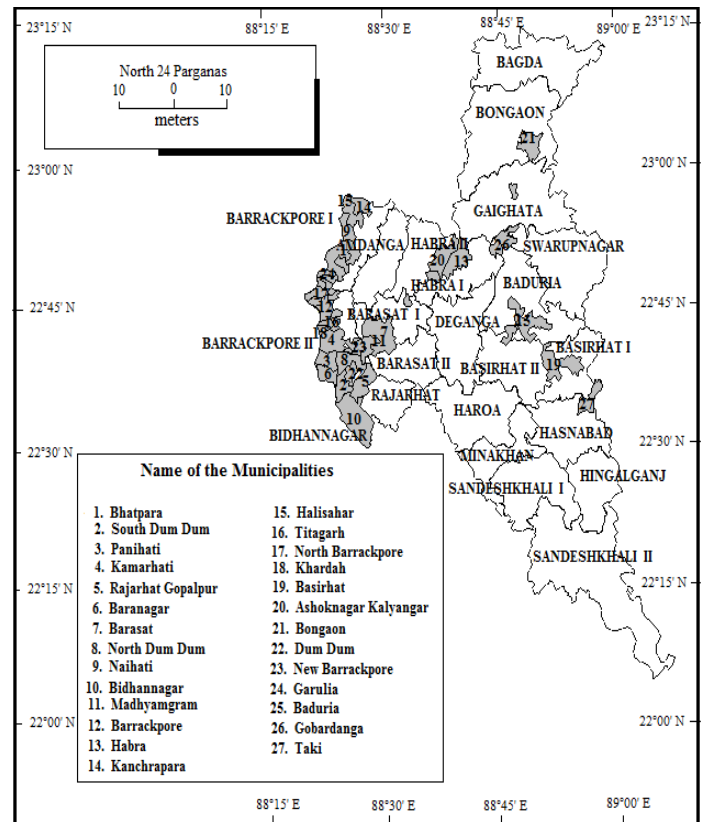


**Figure-2**

**Showing Changing Number of Urban Centres in North 24 Parganas, 1951-2001**

**Centres n North 24 Parganas, 1951 to 2001:** The pace of urbanization is further enhanced during the period 1991 to 2001, whereas the total number of urban centres decreased from 69 to 55 but the rate of increase of urban population reduced to 30.04%. This reduction may be attributed to the new census criteria for defining urban area and declassification and reclassification of towns accordingly. For example declassification of class V and VI towns and merging of them with their neighbouring class I and class II towns, reclassification of rural settlements as urban when the grow to certain limit, and besides that the limits of municipal boundaries have expanded due to incorporation of sub urban areas into them. A new territorial unit named as outgrowth have also been included within the urban category.

**Level of Urbanization:** As a whole North 24 Parganas shows a high pace of urbanization in respect of other districts. In 2001 there are 27 municipalities and 55 urban centres inclusive of municipalities (Figure- 3), census towns, cantonment boards and outgrowths. For showing the level of urbanization of North 24 Parganas eight C.D. blocks (Gaighata, Habra I, Habra II, Barasat I, Barrackpore I and II, Basirhat II, Rajarhat etc.) have been selected because only they have urban area and other C.D. blocks have been excluded from the study. Fifteen indicators related to urbanity, social, economic, infrastructure and civic amenities of the C.D. blocks have been selected for computing the composite score for urbanization level. Table 2 represents the individual Z score values for each indicator of each C.D. block and the composite score value for urbanization level of the corresponding C.D. block. From the following table it is clear that only three C.D. blocks namely Barrackpore I, Barrackpore II, and Barasat I show the positive level of urbanization whereas other C.D. blocks lagged behind in the urban scene.



**Figure-3**

**Showing Urban Land Use**

Beside this all C.D. blocks scored variably in individual indicators. In most of the cases the aforesaid three blocks dominate in all indicators. % of urban area to the total area is an important indicator of urbanity. In 2001 Barrackpore II(21.40%) has the highest percentage followed by Barrackpore I (12.96%) and both have left back the district percentage.. These two also retain the maximum % of urban population followed by the blocks of Habra I, Habra II, Barasat I, Gaighata, Rajarhat , and Basirhat II. Barrackpore II (8958 persons/km<sup>2</sup>) is the most densely populated one followed by Barasat I. Inter- settlement spacing shows an inverse relationship with the urbanization level where closely spaced settlements having less values show urban concentration and greater values of wide spacing shows rural dominancy. Percentage of urban households also reveals urbanization level. Here Barrackpore I, Barrackpore II, Habra I, Habra II and Barasat I accounts for large share of urban households within the district.

All the C.D. blocks more or less equally avail the facilities like banking and separate kitchen within the house, whereas except the three blocks of Barrackpore I, Barrackpore II and Rajarhat, all blocks remain backward in using LPG for cooking. More percentage of households enjoys electricity in Barrackpore I and II block where the percentage is decreasing in other blocks.

**Table-2**  
**Computation of Composite Z Score for Level of Urbanization**

Sl. No.	C.D Block	Z Score of								
		UA	UP	UPD	ISS	UH	HABF	HHE	HHSKWH	
1	Gaighata	-0.72	-0.66	-0.07	1.11	-0.67	0.72	-1.10	1.73	
2	Habra I	-0.27	-0.19	-0.30	-0.55	-0.18	0.26	-0.72	0.63	
3	Habra II	-0.50	-0.31	0.002	-0.12	-0.30	-0.96	-0.31	0.12	
4	Barrackpore II	2.25	2.29	2.28	-1.89	2.28	7.44	1.67	-0.63	
5	Barasat I	-0.44	-0.45	0.57	0.84	-0.40	6.53	-0.11	-1.41	
6	Basirhat II	-0.74	-0.86	-1.29	1.20	-0.86	-1.69	-0.90	0.46	
7	Rajarhat	-0.59	-0.70	-0.45	0.24	-0.75	-0.20	-0.13	-1.34	
8	Barrackpore I	1.01	0.88	-0.73	-0.83	0.89	1.78	1.60	0.45	
Sl. No.	C.D Block	Z Score of								Composite Score for Urbanization Level
		HHBWH	HHWCL	HHDC	HHTDWWP	HULPGFC	GLR	FLR		
1	Gaighata	-0.62	-0.87	-1.19	-0.26	-0.89	0.26	0.03	-3.19	
2	Habra I	-0.15	-0.02	-0.63	-0.66	-0.88	0.53	0.48	-2.65	
3	Habra II	-1.02	-0.20	-0.97	-0.98	-0.94	-0.17	-0.43	-7.09	
4	Barrackpore II	1.67	1.52	1.39	0.09	1.48	1.03	1.34	24.22	
5	Barasat I	0.23	-0.43	1.41	0.86	0.18	-0.22	-0.33	6.81	
6	Basirhat II	-1.36	-0.99	-0.90	-0.66	-0.91	-2.32	-1.92	-13.72	
7	Rajarhat	-0.10	-0.79	0.71	-0.64	0.41	-0.15	-0.49	-4.96	
8	Barrackpore I	1.35	1.77	0.19	2.23	1.53	1.04	1.32	14.47	

Source: Computed by the authors from District Census Handbook, North 24 Parganas, 2001

**Table-3**  
**Urbanization level of the C.D. blocks**

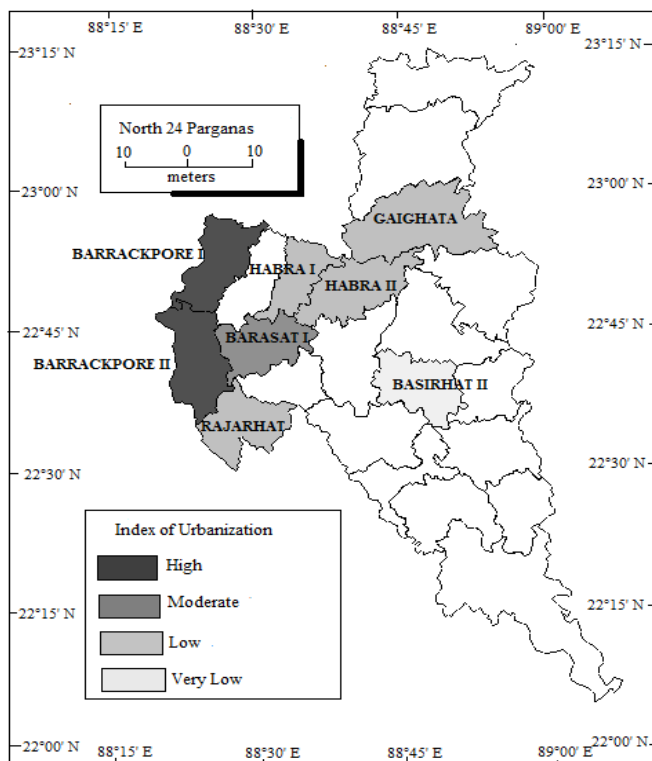
Composite Score for urbanization level	No. of blocks	Name of the blocks	Remarks
>10	2	Barrackpore I and Barrackpore II	High
0 to 10	1	Barasat I	Moderate
0 to -10	4	Gaighata, Habra I, Habra II and Rajarhat	Low
> -10	1	Basirhat II	Very Low

Source: Computed by the authors from table-2.

This scenario is more or less same because all the amenities like bathroom facility, presence of water closet latrine, tap drinking water within the premise and drainage connectivity etc. are concentrated in the aforesaid two blocks. Educationally

enlightened society is an essential feature of urbanization. In all the C.D. blocks the general literacy rate is above 60% only Basirhat II (49.98%) misfits into the scenario.





**Figure-4**  
 Showing Level of Urbanization, 2001

After computing the Composite Z Score, we are able to detect the combined impact of all the indicators on the level of urbanization. As a whole four levels have been detected, as shown in table 3.

It is vivid that among the blocks Barrackpore I and II show high level of urbanization it is due to their nearness to Kolkata metropolitan region and also because of its industrial belt and army barrack. Location of district headquarters and its nearness to Kolkata may be the satisfactory explanation for medium level of urbanization of Barasat. Rajarhat is relatively new in the urban scene as it first emerged in the 1991 census. Other C.D. blocks show low level of urbanization as they have strong rural base.

**Urbanization and Economical Concentration:** For having a clearer picture of urbanization it is essential to know what type of economic activity is concentrated in the blocks, for this reason a close comparison between the urbanization level and economic concentration have worked out in table 4. It is observed that more urbanized blocks show concentration of or self sufficiency in other activity i.e. they are characterized by diversified economic activity. Whereas blocks acquiring low or very low level of urbanization show concentration or self sufficiency in agricultural activity.

**Table-4**  
 Showing economic specialization of blocks on the basis of Location Quotient

C.D. Blocks	Level of Urbanization	Location Quotient of			Concentration of or Specialised in	Self sufficient in	Absence of
		Agricultural activity	Household industrial activity	Other activity			
Gaighata	-3.19	1.36	0.80	0.49	Agriculture	Household industry	Other activity
Habra i	-2.65	0.73	1.21	0.73	Agriculture	Household industry, other activity	_____
Habra ii	-7.09	0.94	0.53	0.68	_____	Agriculture	Household industry and other activity
Barrackpore ii	24.22	0.15	0.48	1.17	Other	_____	Agriculture and household industry
Barasat i	6.81	0.50	0.84	0.92	_____	Household industry and other activity	Agriculture
Basirhat ii	-13.72	1.07	1.06	0.76	Agriculture and household industry	Other	_____
Rajarhat	-4.96	0.55	0.72	0.90	_____	Household industry and other activity	Agriculture
Barrackpore i	14.47	0.54	0.51	0.93	_____	other activity	Agriculture and household industry

Source: Computed by the authors.

**Findings:** i. The district registered a rapid rate of urbanization since independence both as a result of rural urban migration after independence and development of Barrackpore industrial belt. ii. Direction of urbanization of the district is from west to eastward as level of urbanization is decreasing from the western blocks of Barrackpore I and II, Rajarhat blocks towards the eastern blocks of Barasat I, Habra I, Habra II and Gaighata. iii. Only these eight blocks dominate the urban scene because they are nearer and to Kolkata which is the gateway of eastern India. Therefore, Kolkata's pull factor is behind the urbanization of the concerned blocks. iv. Huge disparity in the level of urbanization of blocks signifies that the urbanization process have not operated in a balanced way. v. Level of urbanization and location quotient of the blocks has inverse relationship. High level of urbanization promotes economic diversification whereas low level of urbanization is associated with concentration of one economic activity like agriculture.

## Conclusion

After the overall discussion about the trend and level of urbanization of the North 24 Parganas, it is clear that North 24 Parganas has retained a high level of urbanization since independence. In spite of this high level there is spatial disparity in urbanization level. Barrackpore I and Barrackpore II and Barasat I show maximum concentration of civic amenities, gathering of urban population and urban activity which in turn may leads to deterioration of urban environment or may become vulnerable in terms of per capita availability of infrastructure and may possess a threat to the urban system of the district. Therefore all the public amenities must be uniformly distributed among the C.D. blocks and urbanization process should operate in a balanced way otherwise the system may not be consistent.

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