Urban Centres in Bangladesh: Trends, Patterns and Characteristics

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Abstract

Bangladesh is still a relatively low urbanized country compared to other Asian countries. However, the country experienced a remarkable rate of urban growth both in terms of urban population and urban centres immediately after its independence in 1971. This paper analyses the urban centres in Bangladseh to have an in-depth understanding about them. Firstly, the growth trends of the level of urbanization and urban centres were illustrated and then the rank-size rule was applied to know how the cities fit the rule. Secondly, urban centres were examined from two different standpoints. In the first place all the urban centres were tested to determine 'how urban the urban centres are' on the basis of total population, density of population and literacy rate. In the second place a consistency test was carried out on 64 districts to measure 'how consistent the districts are'. Hence a comparison was made between the level of urbanization and several aspects of urbanization namely, percentage of urban land, density of urban population per sq. km., share in national urban population and share in national urban land.

Key Words: Rank-size rule, regression equation, real urban centre, consistency, rank correlation etc.

Introduction

Among the most significant changes now affecting mankind of developing countries is the ever-increasing level of urbanization as well as the number of urban centres. Thus the number of urban centres is necessarily a factor in the study of urbanization and national development as well. Small urban centres on the other hand, have already achieved utmost importance particularly in developing countries. Because these small towns act as growth and service centres for the rural hinterland and thus assist in the development of rural economy and also reverse the growth of large cities which in turn mitigate the urban problems.

A number of studies, carried out quite a long time ago, focused on the urban centres. Eusuf (1993) studied the growth of urban centres and their changing pattern in rank-order by population size. Laskar (1983) studied the urban centres on the basis of their population distribution and location by region and also examined the nature and factors of their growth. Chaudhury (1980) made a detailed study on the process of urbanization and urban centres in Bangladesh quite a long time ago. This paper presents the findings of an in-depth study of the urban centres in 1991 (Rouf 1999) and focuses on several features of urban centres which were not touched upon in previous studies. The study analyzes the urban centres to test whether they satisfy the rank-size rule, possess the characteristics of real urban centres and are consistent in terms of certain criteria.

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TABLE : 1

Distribution of Urban Centers in Bangladesh (1901-1991) by Seven Size Classes of Urban Population.

Census Years → / Size Classes ↓	Number of Urban Centers									
	1901	**1911**	**1921**	**1931**	**1941**	**1951**	**1961**	**1974**	**1981**	**1991**
5,00,000 and Over	--	--	--	--	--	--	1 1.28	2 1.85	3 0.61	4 0.77
1,00,000 -- 4,99,999	2 4.17	2 4.17	2 4.00	2 3.45	2 3.39	2 3.17	3 3.85	4 3.70	10 2.03	14 2.68
50,000 -- 99,999	--	--	--	--	2 3.39	2 3.17	5 6.41	14 12.96	23 4.67	26 4.98
25,000 -- 49,999	--	--	5 10.00	7 12.07	13 22.03	14 22.22	16 20.51	23 21.30	45 9.15	76 14.56
10,000 -- 24,999	21 43.75	23 47.92	20 40.00	21 36.21	20 33.90	20 31.75	23 29.49	49 45.37	114 23.17	174 33.33
5,000 -- 9,999	15 31.25	13 27.08	13 26.00	17 29.31	19 32.20	18 28.57	20 25.64	12 11.11	129 26.22	138 26.44
Under 5,000	10 20.83	10 20.83	10 20.00	11 18.97	3 5.08	7 11.11	10 12.82	4 3.70	168 34.15	90 17.24
Total	48 100.00	48 100.00	50 100.00	58 100.00	59 100.00	63 100.00	78 100.00	108 100.00	492 100.00	522 100.00
Level of Urb^n	**2.43**	**2.56**	**2.64**	**3.02**	**3.66**	**4.33**	**5.19**	**8.78**	**15.54**	**20.15**

Source : Bangladesh Population Census 1981and Bangladesh Population Census 1991, Vol.III
** *The underlined figures are percentages.*

FIGURE: 1

Growth Trend of Urban Centers
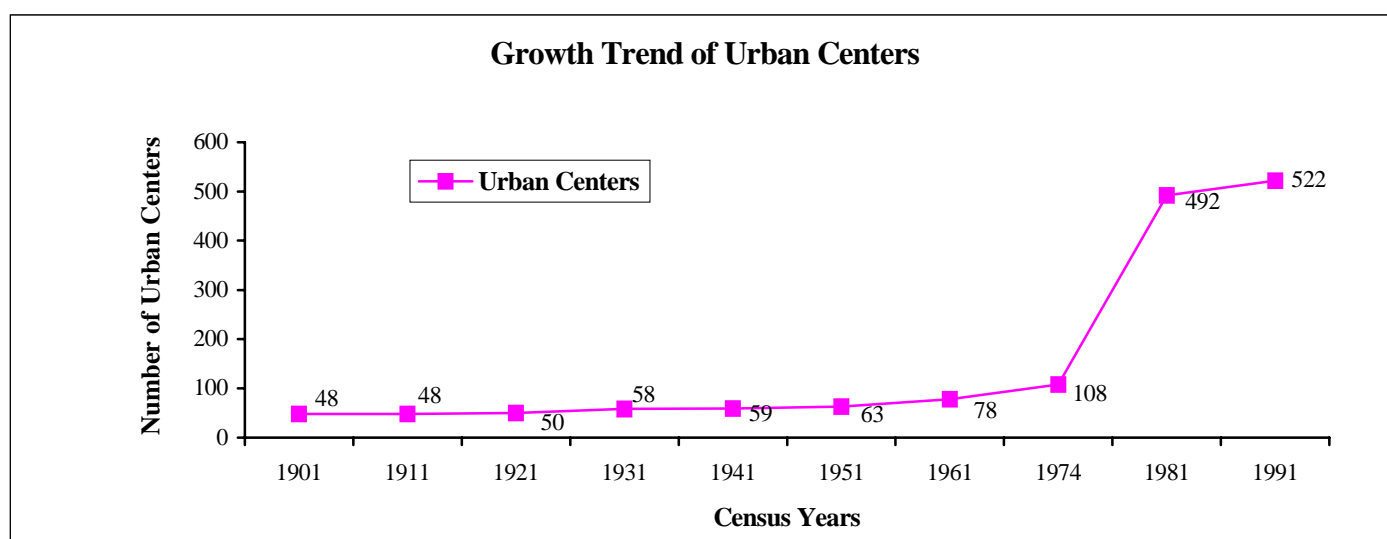
Trends of the Level of Urbanization and Urban Centres in Bangladesh (1901-1991).

Level of urbanization and Urban centres in Bangladesh grew at a sluggish rate up to the 60s and later they flourished at a faster rate. Table 1 provides a vivid picture of the number of urban centres in Bangladesh with their size classes and level of urbanization corresponding to the various census years from 1901 to 1991. The size classes have been classified into seven categories on the basis of total population living in them.

The rapid growth of the number of urban centres of the smallest size class took place between 1974 and 1981. The reason behind this growth may be attributed partly to the development of a large number of growth centres by the government of the newly independent country and partly to the flexibility in the definition of urban area.

FIGURE : 2

Trend of the Level of Urbanization
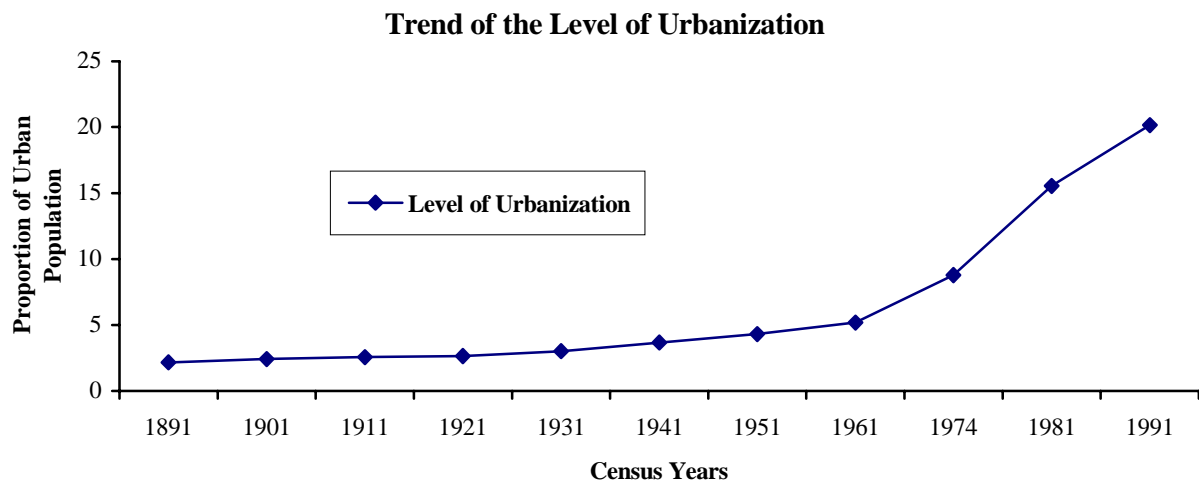
Rank-Size Rule and the Cities in Bangladesh

The distribution of city-size can be studied through the Rank-size rule. According to the rank-size rule, the following formula applies to the settlements in a given area (Lee, 1986):

$$P_i . R^q = C \qquad\qquad (1)$$

Where P_i is the population of a city of rank R, and q and C are constant. The formula can be converted into a logarithmic form as

$$\text{Log } P_i + q \ \log R = \log \ C \qquad\qquad (2)$$

This implies that the rank of any city, when modified by some exponent and multiplied by the size of that city, is equal to a constant which represents the population of the largest city.

Rearranging equation (2) we have

$$\text{Log } P_I = \ \text{Log } \ C - q \ \text{Log } \ R \qquad\qquad (3)$$

FIGURE 3

For Cities with Population up to 50 Thousand
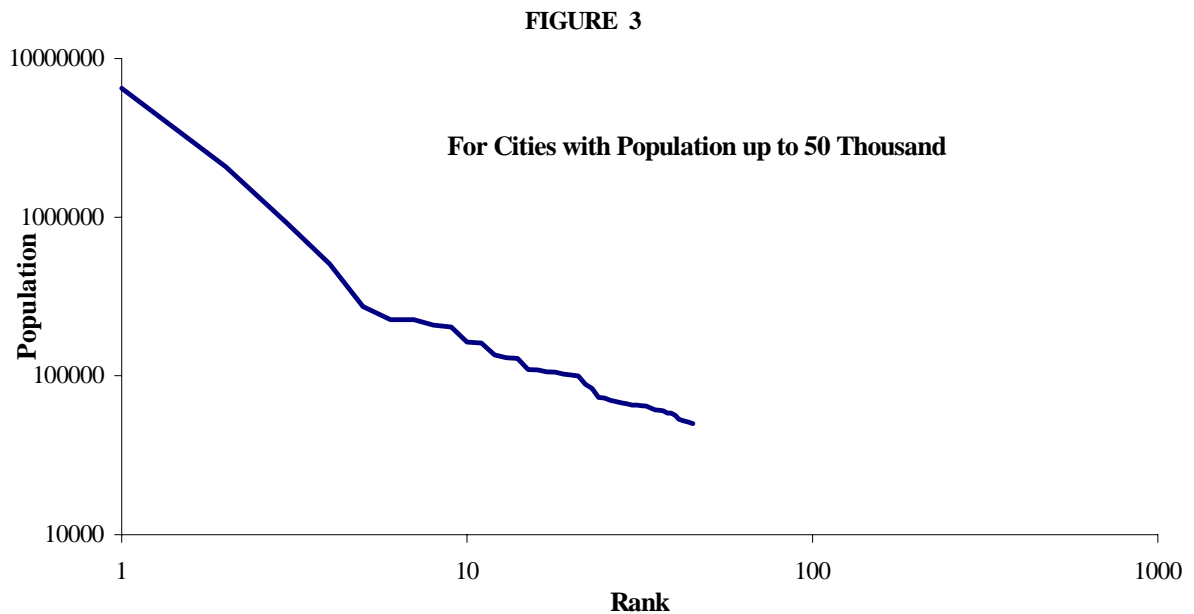
Which represents a line with negative slope. So the deviation of actual distribution is compared with the straight line with slope –1. In our study a simple regression equation regarding rank-size distribution was derived on the basis of the cities with population 50,000 cities of 1991 census. The obtained equation is

$$\text{Log (Pop.)} = 6.42 - 1.09 \log (\text{Rank}) \qquad (4)$$

The value of 'q' in the equation (4) is 1.09 which is close to 1. That means, the distribution of rank-size of cities in 1991 is also close to the distribution of rank-size rule. The graphic representation of city-size distribution is shown in fig. 1. It is seen that the slope of the actual distribution curve is a little steeper than that of the rank-size rule. This result indicates that the expected city-sizes based on rank-size rule are larger than the real sizes of the cities in Bangladesh. At the same time the metropolitan dominance is also evident from the figure since the 'q' value in the actual distribution of cities is larger than 1.

Classification of Urban Centres

The following three statistical criteria were set to test how *'urban'* the urban centres in Bangladesh are:
      i)   a density of not less than 1,000 per sq. kms.
      ii)   a population of at least 5,000
      iii)   a literacy rate of not less than 50 %.

The above three eligibility criteria were applied to each of the 522 urban centres that were designated as urban in the 1991-population census. In this test a capital letter represents the presence of the criterion while the small letter its absence.

Thus,
X → represents a population of 5,000 or more,
x → stands for the absence of the attribute 'X'

Y → indicates a density of not less 1,000 persons per sq. km.
y→ stands for the absence of the attribute 'Y',

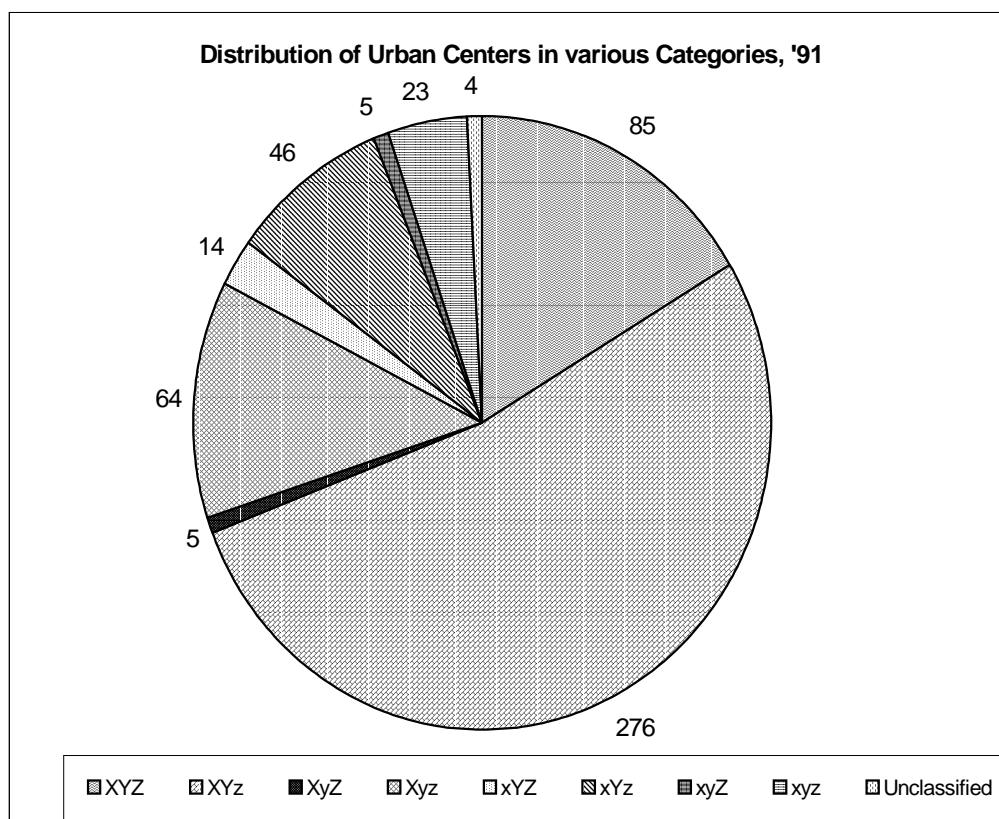Z → indicates a literacy rate (7+ years) of not less than 50 %,
z→ stands for the absence of the attribute 'Z',

TABLE : 2
Distribution of the Urban Centers of 1991-Census on the Basis of Eligibility Test.

Particulars ➡ Three Criteria in Symbols ⬇	Number of Urban Centers	Percent of Urban Centers	Total Popn in each Category '000	Percent of Total Urban Population
XYZ	85	16.28	12490	59.98
XYz	276	52.87	7012	33.67
XyZ	5	0.96	114	0.55
Xyz	64	12.26	899	4.32
xYZ	14	2.68	49	0.23
xYz	46	8.81	155	0.74
xyZ	5	0.96	12	0.06
xyz	23	4.41	68	0.33
Unclassified	4	0.77	25	0.12
Total	522	100.00	20823	100.00

Source : Calculated from Bangladesh Population Census 19991, Vol. III, (Urban Area Report).

FIGURE: 4

Distribution of Urban Centers in various Categories, '91

☒XYZ ☒XYz ■XyZ ☒Xyz ☐xYZ ☒xYz ☒xyZ ☒xyz ☒Unclassified

The number of adult male population employed in the non-agricultural occupations are generally considered as the third aspect of the eligibilty test of an urban centre. But we have used literacy rate in lieu of share of employment in the non-agricultural activities, due of unavailability of employment status of the population of all the urban centres. Hence assumption of 50 % literacy rate means that at least 75 %[3] of the working force are engaged in non-agricultural occupations.

The combination of these three aspects produces eight possible categories of the following: XYZ, XYz, XyZ, Xyz, xYZ, xYz, xyZ and xyz. Besides the above categories there is also a small residual category of unclassified centres for which complete information was not readily available. The total number of centres under this category is four.

Distribution of Urban Centres into Various Categories

The distribution of urban centres among the eight categories are presented in Table 2. An urban centre belonging to the "XYZ" category satisfies all three eligibility tests. It is observed that this category includes 85 urban centres which is 16.28% of the total urban centres. This distribution reveals that a large number of urban centres did not meet at least one of the eligibility test. Category "XYz" includes the highest number of urban centres; that is, the criterion least frequently met among the urban centres is the presence of at least three-fourth of their economically active population in non-agricultural pursuits. The density criterion is the most common among the urban centres. Turning to the last category "xyz", an urban centre belonging to this category does not satisfy any of the three eligibility tests. There are 23 such urban centres in Bangladesh.

Distribution of XYZ-Category Centres in Various Size Classes

Table 3 shows the number of centres of different size classes and their inclusion to the XYZ category. From the table it is revealed that centres belonging to the higher size class satisfied the eligibility criteria in a higher proportion.

TABLE : 3
Distribution of the urban centers of category XYZ by five size classes of urban population, 1991.

Particulars of XYZ centers Size classes ↓	Number of XYZ centers	Percent of the respective size category
100,000 and over	14 out of 18	78
50000 -- 99,999	10 out of 26	38
25,000 -- 49,999	22 out of 76	28
10,000 -- 24,999	22 out of 174	12
5,000 -- 9,999	18 out of 138	13

Source : Calculated from table 2 and Bangladesh Population Census 19991, Vol. III.

[3] We have examined a fairly large number of urban centres about their ratio of literacy rate to the percentage of working force engaged in nonagricultural pursuits and came to the above decision (Bangladesh Population Census, 1981, Report on Urban Area, pp. 51-125).

Consistency Test on the Districts

There are several aspects closely associated with the Level of Urbanization (LOU). These aspects include Percentage of Urban Area (PUA), Share in National Urban Land (SNUL), Density of Urban Population (DUP) per sq. km. and Share in National Urban Population (SNUP) etc.(for details vide Appendix A). Our objective here is to test '*how consistent the districts are*' with reference to their LOU. In order to know whether these aspects vary consistently with LOU, we examined the extent of deviation of all these aspects through their ranks with respect to the corresponding rank in LOU for individually all the 64 districts. This was accomplished by comparing the rank of a particular district in LOU with the ranks of that district on the basis of the above mentioned aspects. By these comparisons the districts have been grouped into three categories.

Category-A   no deviation or coincidence of the ranks
Category-B   deviation by 1 or 2-ranks
Category-C   deviation by 3-ranks

If a district falls into the category-A, it will be termed as perfectly consistent; if it falls into the category-B then moderately consistent and finally, if it falls into the category-C, it will be considered as marginally consistent.
Symbolically,

$$\text{if } R_{PUA} - R_{LOU} = 0 \qquad \rightarrow \text{ perfectly consistent}$$
$$\text{if } R_{PUA} - R_{LOU} = \pm 1 \text{ or } \pm 2 \quad \rightarrow \text{ moderately consistent}$$
$$\text{if } R_{PUA} - R_{LOU} = \pm 3 \qquad \rightarrow \text{ marginally consistent}$$

Where, R_{PUA} = Rank of percentage of urban area and
                      R_{LOU} = Rank of Level of urbanization

If a district's rank in LOU is same to its rank in any of the aspects say, PUA then the district will fall into category-A and will be treated as consistent in reference to the aspect PUA. For example, in appendix table 1 Dhaka district's rank in LOU is 1st and its rank in PUA is also 1st. So it belongs to the category-A. Note that, hence the absolute difference between the two ranks is zero.

Similarly, if the absolute difference between the ranks of LOU and the aspect PUA is 1 or 2, the district will fall under category-B. In the same way, if the absolute difference between the ranks of LOU and any other aspects is 3 then the district will fall under category-C. As for example, in Appendix Table 2 the ranks of LOU for Gazipur and Chandpur districts are 5th and 43rd while their ranks in PUA are 2nd and 41st respectively. In the case of Gazipur district the absolute difference is 3, thus it falls into the category-C and that of Chandpur district is 2, so it belongs to the category-B (vide Appendix B Table 2). In the same way, the districts could be categorized for each of the four aspects separately.

On the basis of the above discussion the comparison between level of urbanization and various aspects was carried out for the census years of 1981 and 1991 (Appendix B, Table 1 and 2).

Table: 4
Consistency Status of the Districts in the Census Years of 1981and 1991

Census Years	Perfectly Consistent Coincidence (Category-A)	Moderately Consistent Deviation by 1 or 2-rank(s) (Category-B)		Marginally Consistent Deviation by 3-ranks (Category-C)
Percentage of Urban Land				
1981	Dhaka	Chittagong, Comilla, Kishoreganj, Barguna, Narayanganj, Gaibandha	Kagrachhari, Bogra	Netrokona, Pabna Faridpur, Bandarban
1991	*Dhaka, Chittagong Narayanganj, Khagrachhari, Kishoreganj*	*Nilphamari, Sunamganj, Pabna*	*Chandpur, Kurigram, Sherpur Barguna, Panchagarh*	*Rajshahi, Gazipur, Narsingdi, Pirojpur, Rangamati*
Density of Urban Population				
1981	Nil	Dhaka, Gazipur Brahmanbaria	Satkhira, Khulna Pirojpur, Patuakhali	Narayanganj, Barguna Mymenshing, Rajbari
1991	*Dhaka, Faridpur, Rangpur, Pirojpur*	*Narayanganj*	*Mymenshing, Panchagarh*	*Jamalpur, Khulna*
Share of National Urban Population				
1981	Dhaka, Narayanganj, Sherpur, Magura	Chittagong, Pabna, Gazipur, Khulna Feni	Jessore, Manikganj Kurigram, Natore Kushtia	Rajshahi, Rangpur, Madaripur, Pirojpur Patuakhali, Jhenidah
1991	*Dhaka, Gazipur, Feni*	*Pabna,Madaripur, Khulna, Kushtia Natore, Narayanganj*	*Chittagong, Rajshahi*	*Shariatpur, Sherpur Magura, Patuakhali*
Share of National Urban Land				
1981	Noakhalii Sirajganj	Jamalpur, Dhaka Rajshahi, Pabna	Chittagong, Habiganj, Khagrachhari, Feni Rangamati, Sherpur Gazipur, Chauadanga	Laksmipur, Bandarban
1991	*Brahmanbaria, Pabna*	*Gazipur,Jamalpur, Khagrachhari, Sariatpur, Bandarban, Dhaka Chandpur, Narail Jessore, Chaudanga*	*Habiganj, Barguna, Rangpur*	*Chittagong,Rangamati Rajshahi, Sirajganj, Jhenaidah, Patuakhali Maulavibazar, Sylhet Magura, Bagerhat*

Source: Appendix B, Table 1 and 2

Consistency Levels of the Districts

There exists significant difference between the census years of 1981 and 1991 regarding the consistency status of the districts. It is seen that (Appendix B) in 1981, 13 districts were consistent for PUA whereas in 1991 the number increased to18 and out of these 18 only 7 districts could retain their consistency status in 1991. The aspect for which the highest number of districts consistent is SNUL. In 1981 and 1991 respectively 16 and 25 districts were consistent for the aspect. That means, consistency for PUA and SNUL is increasing. The reverse is true for the other two aspects.

Statistical Measurement of the Level of Urbanization and the Aspects
Coefficient of rank correlation was computed for all the four aspects, viz., PUA, DUP, SNUL and SNUP with LOU separately for both of the 1981 and 1991 census years (Table 5). The obtained results support our findings.

TABLE: 5
Rank Correlation Coefficient

Rank Correlation Between	Coefficient		Deviation	
	1981	**1991**	**1981**	**1991**
LU –PUA	0.72	0.76	0.28	0.24
LU –DUP	0.19	0.14	0.81	0.86
LU –SNUP	0.65	0.65	0.35	0.35
LU – SNUL	0.73	0.80	0.27	0.20

Source: Calculated from Appendix Table 1 and 2

It is evident from Table 5 that in both the census years SNUL appeared as the highest consistent aspect with coefficients of rank correlation 0.73 and 0.80 respectively. On the other hand, DUP came into sight as the least consistent aspect with coefficients 0.19 and 0.14 in both of the census years of 1981 and 1991 respectively. PUA followed by SNUL with coefficients 0.72 and 0.76 in 1981 and 1991 censuses respectively while SNUP came into view with the same coefficient, 0.65 in both the census years.

Overall Consistency Status
Again the consistent districts are divided into two categories – *totally consistent* districts and *partially consistent* district – on the basis of overall consistency. Districts that are consistent in all the four aspects are considered totally consistent and districts that are consistent in at least two aspects are considered partially consistent. Out of 64 districts, only Dhaka appeared in both the census years as totally consistent district. In 1981 census there were 12 partially consistent districts while that in the 1991 census were 14. From the above observation it is evident that comparatively high-level urbanized districts revealed themselves more consistent than the low-level urbanized ones. It can be inferred that higher urban centres enjoy relatively balanced growth than that of the smaller centres.

Summary and Conclusions

With the increase in the number of urban centres there has also been increase in the level of urbanization in Bangladesh. The rapid growth of the number of urban centres began after the independence of the country. Development of new growth centres and flexibility in the definition of urban area mainly contributed to this rapid growth.

Through the use of the rank-size rule on the cities with population fifty thousand and above we obtained a simple regression equation which indicates that the expected city-sizes are larger than the real sizes of the cities in Bangladesh.

From the test 'how urban the urban centers are' it was observed that out of 522 urban centers in the country only 85 centers satisfied the criteria for 'real urban center' which is 16.28% of the total urban centers. This result reveals that a large number of urban centers are not real in terms of the stipulated criteria in the country.

The consistency test showed that only Dhaka district was totally consistent in both the census years of 1981 and 1991. No other district was found totally consistent in any of the census year but several districts were found partially consistent. It was also observed from the findings that generally higher level urbanized districts revealed themselves as more consistent than the lower level ones.

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APPENDIX A

Introduction to the Aspects of Consistency Test

Percentage of Urban Area, $PUA = \dfrac{DT_a}{DU_a} \times 100$	
Density of Urban Population, $DUP = \dfrac{DU_p}{DT_a}$	Where, DT_a = Total area (sq. km.) of a district DU_a = Total urban area (sq. km.) of a district
Share in National Urban Population, $SNUP = \dfrac{U_p}{DU_p} \times 100$	DU_p = Total urban population of a district U_p = Total urban population of the country
Share in National Urban Land, $SNUL = \dfrac{U_a}{DU_a} \times 100$	

APPENDIX B

TABLE : 1

Comparison Between Level of Urbanization and Several Aspects by Districts in the Census Year 1981.

Aspects / Districts	Level of Urbani-zation 1	Percent of Urban Area 2	Density of Urban Population 3	Share in National Urb Pop^n 4	Share in National Urban Land 5	Ranks of the Aspects				
						Rank-1	Rank-2	Rank-3	Rank-4	Rank-5
Dhaka	73.71	27.49	7369	21.91	7.70	1st	1st	2nd	1st	2nd
Khulna	42.32	3.16	5413	5.56	2.66	2nd	20th	4th	3rd	7th
Chittagaong	36.98	15.59	2005	12.00	15.74	3rd	2nd	46th	2nd	1st
Narayanganj	36.73	8.50	7726	3.68	1.23	4th	5th	1st	4th	20th
Rangamati	36.12	4.92	362	0.81	5.76	5th	9th	62nd	36th	3rd
Khagrachhari	25.34	9.44	277	0.52	4.87	6th	4th	63rd	50th	4th
Chauadanga	23.69	10.92	1226	1.14	2.42	7th	3rd	57th	22nd	9th
Bandarban	21.56	4.85	170	0.27	4.16	8th	11th	64th	62nd	5th
Rajshahi	17.26	4.51	2703	2.17	2.08	9th	13th	24th	6th	10th
Nilphamari	16.46	3.44	3357	1.40	1.08	10th	17th	14th	16th	30th
Pabna	15.52	4.33	2336	1.77	1.96	11th	14th	37th	10th	12th
Barisal	15.13	2.05	4858	2.05	1.09	12th	40th	5th	8th	28th
Narsingdi	13.41	5.65	2752	1.30	1.23	13th	6th	22nd	18th	21st
Noakhali	13.39	2.56	2610	1.78	1.76	14th	32nd	27th	9th	14th
Jessore	13.27	2.26	3912	1.67	1.11	15th	38th	9th	13th	27th
Sylhet	13.14	1.82	3684	1.73	1.21	16th	45th	10th	11th	22nd
Rangpur	12.59	2.70	3444	1.59	1.19	17th	27th	13th	14th	23rd
Kurigram	12.42	4.62	1554	1.22	2.03	18th	12th	54th	20th	11th
Kishoreganj	12.30	3.21	2702	1.72	1.65	19th	18th	25th	12th	15th
Lakshmipur	11.80	4.90	1853	0.98	1.36	20th	10th	48th	29th	17th
Nawabganj	11.71	1.49	4302	0.81	0.49	21st	59th	7th	35th	55th
Faridpur	11.28	2.73	2512	1.05	1.08	22nd	25th	28th	26th	29th
Bagerhat	11.24	2.58	1322	1.00	1.95	23rd	30th	55th	28th	13th
Bhola	10.96	5.01	752	0.95	3.26	24th	7th	60th	30th	6th
Kushtia	10.93	2.57	3241	1.00	0.80	25th	31st	15th	27th	44th
Cox's Bazar	10.79	1.89	2357	0.82	0.90	26th	44th	34th	34th	38th
Mymensingh	10.78	3.17	2506	2.56	2.65	27th	19th	30th	5th	8th
Dinajpur	10.77	1.78	3169	1.44	1.17	28th	47th	17th	15th	24th
Patuakhali	10.67	1.52	2473	0.89	0.93	29th	58th	31st	32nd	36th
Jhenaidah	10.59	2.99	2013	0.87	1.12	30th	21st	45th	33rd	26th
Narail	10.45	4.99	1245	0.45	0.94	31st	8th	56th	53rd	35th

Source : Calculated From Bangladesh Population Census 1991, Vol. I and Vol. III.

Table 1 Contd.

Aspects → / Districts ↓	Level of Urbani-zation	Percent of Urban Area	Density of Urban Population	Share in National Urb Pop^n	Share in National Urban Land	Ranks of the Aspects				
	1	2	3	4	5	Rank-1	Rank-2	Rank-3	Rank-4	Rank-5
Gazipur	10.39	2.94	2391	0.90	0.98	32nd	22nd	33rd	31st	34th
Jamalpur	9.95	2.75	2667	1.09	1.07	33rd	24th	26th	24th	32nd
Pirojpur	9.85	3.45	2344	0.78	0.86	34th	16th	36th	37th	41st
Lalmonirhat	9.82	1.67	3528	0.54	0.40	35th	50th	12th	47th	59th
Joypurhat	9.63	2.90	2131	0.44	0.54	36th	23rd	44th	54th	51st
Madaripur	9.35	2.70	2856	0.65	0.59	37th	28th	20th	40th	47th
Jhalakati	9.04	2.47	2835	0.39	0.36	38th	34th	21st	58th	62nd
B. Baria	8.77	3.46	2273	1.12	1.28	39th	15th	40th	23rd	19th
Sirajganj	8.76	1.81	3634	1.22	0.87	40th	46th	11th	19th	40th
Chandpur	8.66	1.68	5420	1.15	0.55	41st	48th	3rd	21st	49th
Rajbari	8.57	2.47	2273	0.46	0.53	42nd	35th	39th	52nd	53rd
Comilla	8.30	1.98	4552	2.06	1.17	43rd	42nd	6th	7th	25th
Meherpur	8.02	2.72	1652	0.24	0.37	44th	26th	50th	64th	60th
Habigang	7.97	1.61	2396	0.75	0.81	45th	54th	32nd	38th	43rd
Sherpur	7.77	2.17	2511	0.55	0.57	46th	39th	29th	46th	48th
Natore	7.71	1.36	2711	0.52	0.49	47th	61st	23rd	49th	54th
Tangail	7.56	2.46	2197	1.37	1.61	48th	36th	41st	17th	16th
Bogra	6.79	1.66	2960	1.06	0.93	49th	51st	19th	25th	37th
Manikgaj	6.72	2.33	544	0.53	0.61	50th	37th	61st	48th	46th
Shariatpur	6.70	1.61	2987	0.42	0.36	51st	55th	18th	57th	61st
Maulavibaza	6.54	1.25	2195	0.57	0.67	52nd	63rd	42nd	45th	45th
Thakurgaon	6.52	2.52	1171	0.39	0.87	53rd	33rd	58th	59th	39th
Satkhira	6.41	1.40	1596	0.64	1.04	54th	60th	52nd	42nd	33rd
Feni	6.35	2.67	2303	0.43	0.47	55th	29th	38th	56th	57th
Barguna	6.26	1.53	1591	0.33	0.54	56th	57th	53rd	60th	52nd
Panchagarh	6.25	1.18	2178	0.27	0.32	57th	64th	43rd	61st	63rd
Munshiganj	6.03	1.65	4065	0.47	0.30	58th	52nd	8th	51st	64th
Netrokona	5.98	1.55	2001	0.64	0.83	59th	56th	47th	41st	42nd
Gopalganj	5.98	1.68	2345	0.43	0.48	60th	49th	35th	55th	56th
Gaibandha	5.88	1.31	3240	0.63	0.55	61st	62nd	16th	43rd	50th
Naogaon	5.72	1.63	1764	0.73	1.07	62nd	53rd	49th	39th	31st
Magura	5.69	2.01	1646	0.26	0.40	63rd	41st	51st	63rd	58th
Sunamganj	5.67	1.89	1167	0.60	1.33	64th	43rd	59th	44th	18th

TABLE : 2

Comparison Between Level of Urbanization and Several Other Aspects by Districts in the census year 1991.

Aspects → Districts ↓	Level of Urbanization	Percent of Urban Area	Density of Urban Population	Share in National Urb Pop^n	Share in National Urban Land	Ranks of the Aspects				
	1	2	3	4	5	Rank-1	Rank-2	Rank-3	Rank-4	Rank-5
Dhaka	88.31	52.19	7123	24.24	7.98	1st	1st	1st	1st	2nd
Khulna	51.25	7.76	3202	4.86	3.56	2nd	11th	5th	3rd	7th
Narayanganj	51.23	25.09	4892	4.15	1.99	3rd	3rd	2nd	4th	10th
Chittagong	47.14	21.70	2362	12.06	11.97	4th	4th	21st	2nd	1st
Gazipur	39.21	27.11	1398	2.94	4.93	5th	2nd	55th	5th	4th
Rangamati	37.65	9.06	292	0.72	5.79	6th	9th	63rd	36th	3rd
Khagrachhari	33.09	12.74	352	0.54	3.59	7th	7th	62nd	45th	6th
Rajshahi	31.12	17.47	1471	2.76	4.39	8th	5th	52nd	6th	5th
Bandarban	30.85	6.77	251	0.34	3.16	9th	14th	64th	58th	8th
Chauadanga	26.71	15.86	1228	1.00	1.92	10th	6th	59th	24th	11th
Nawabganj	19.11	5.84	2366	1.05	1.04	11th	20th	19th	23rd	32nd
Pabna	17.95	7.11	2147	1.61	1.76	12th	13th	29th	11th	12th
Rangpur	17.10	6.47	2597	1.73	1.56	13th	17th	13th	9th	15th
Sylhet	16.13	3.79	2782	1.64	1.38	14th	44th	10th	10th	17th
Narsingdi	16.13	7.64	3164	1.23	0.91	15th	12th	7th	19th	38th
Barisal	15.53	4.07	3147	1.59	1.19	16th	38th	8th	12th	24th
Lakshmipur	14.87	10.44	1362	0.92	1.59	17th	8th	56th	28th	13th
Kurigram	14.30	6.53	1602	1.07	1.57	18th	16th	44th	22nd	14th
Cox's Bazar	14.18	4.43	1929	0.95	1.15	19th	33rd	36th	26th	26th
Nilphamari	14.10	6.14	1983	0.89	1.05	20th	19th	34th	31st	31st
Jessore	13.85	4.58	2582	1.35	1.23	21st	30th	14th	15th	22nd
Bagerhat	13.68	2.80	1840	0.91	1.16	22nd	59th	39th	29th	25th
Jhenaidah	13.43	6.44	1509	0.85	1.32	23rd	18th	49th	32nd	20th
Jhalakati	13.41	6.59	1863	0.41	0.52	24th	15th	37th	53rd	54th
Bhola	13.08	3.75	1570	0.89	1.33	25th	45th	46th	30th	19th
Dinajpur	13.06	3.73	2416	1.38	1.34	26th	46th	18th	14th	18th
Mymensingh	13.02	5.30	2306	2.38	2.42	27th	22nd	25th	7th	9th
B. Baria	12.74	5.67	2645	1.29	1.14	28th	21st	12th	18th	28th
Kishoreganj	12.47	4.69	2364	1.33	1.32	29th	29th	20th	16th	21st
Pirojpur	12.47	4.98	2114	0.61	0.68	30th	27th	30th	42nd	45th
Jamalpur	11.56	5.11	2163	1.00	1.08	31st	24th	28th	25th	30th

Source : Calculated From Bangladesh Population Census 1991, Vol. I and Vol. III.

Table 2 Contd.

Aspects → Districts ↓	Level of Urbani-zation	Percent of Urban Area	Density in Urban Population	Share in National Urb Pop^n	Share in National Urban Land	Ranks of the Aspects				
	1	2	3	4	5	Rank-1	Rank-2	Rank-3	Rank-4	Rank-5
Sirajganj	11.54	4.28	2564	1.22	1.12	32nd	36th	15th	20th	29th
Kushtia	11.38	3.79	2893	0.79	0.64	33rd	43rd	9th	34th	48th
Natore	11.35	3.99	2173	0.73	0.79	34th	39th	27th	35th	43rd
Bogra	11.33	2.83	3841	1.41	0.86	35th	58th	3rd	13th	39th
Lalmonirhat	11.23	5.19	1740	0.50	0.67	36th	23rd	43rd	49th	46th
Noakhali	10.93	3.06	2330	1.14	1.15	37th	54th	22nd	21st	27th
Patuakhali	10.68	2.93	1505	0.63	0.98	38th	56th	50th	41st	35th
Narail	10.59	8.33	875	0.32	0.86	39th	10th	61st	60th	40th
Rajbari	10.51	3.50	2320	0.41	0.41	40th	49th	23rd	54th	62nd
Joypurhat	10.50	4.47	1952	0.38	0.45	41st	31st	35th	56th	58th
Faridpur	10.38	4.43	1759	0.72	0.96	42nd	32nd	42nd	37th	36th
Chandpur	9.85	3.91	3174	0.94	0.70	43rd	41st	6th	27th	44th
Meherpur	9.68	5.09	1357	0.22	0.38	44th	25th	57th	64th	64th
Sherpur	9.67	3.65	2289	0.51	0.52	45th	47th	26th	48th	55th
Thakurgaon	9.57	4.28	1310	0.45	0.81	46th	35th	58th	51st	41st
Comilla	9.57	3.81	3473	1.82	1.23	47th	42nd	4th	8th	23rd
Tangail	9.51	4.19	2066	1.32	1.49	48th	37th	33rd	17th	16th
Munshiganj	9.31	4.69	2558	0.51	0.47	49th	28th	16th	47th	57th
Feni	9.17	4.32	2647	0.47	0.42	50th	34th	11th	50th	60th
Barguna	8.89	3.23	1208	0.32	0.62	51st	53rd	60th	61st	49th
Satkhira	8.63	1.99	1862	0.64	0.80	52nd	63rd	38th	39th	42nd
Panchagarh	8.41	3.03	1475	0.28	0.44	53rd	55th	51st	62nd	59th
Maulavibazar	8.32	2.06	2093	0.54	0.60	54th	62nd	31st	46th	51st
Habigang	8.17	1.97	2538	0.59	0.54	55th	64th	17th	44th	53rd
Naogaon	8.13	2.55	2088	0.81	0.91	56th	61st	32nd	33rd	37th
Madaripur	8.07	5.07	1539	0.40	0.61	57th	26th	47th	55th	50th
Netrokona	7.92	3.46	1457	0.63	1.02	58th	50th	53rd	40th	33rd
Manikgaj	7.92	3.96	1763	0.43	0.57	59th	40th	41st	52nd	52nd
Magura	7.54	3.57	1512	0.25	0.39	60th	48th	48th	63rd	63rd
Sunamganj	7.48	2.60	1413	0.60	1.00	61st	60th	54th	43rd	34th
Shariatpur	7.33	3.37	1816	0.32	0.42	62nd	51st	40th	59th	61st
Gaibandha	7.19	2.92	2306	0.65	0.66	63rd	57th	24th	38th	47th
Gopalganj	7.04	3.26	1592	0.34	0.51	64th	52nd	45th	57th	56th