

RURAL-URBAN MIGRATION IN BANGLADESH : AN URBAN PERSPECTIVE

Mohammad A. Mohit*

INTRODUCTION

Spatial distribution of population through rural-urban migration¹ is considered an important aspect in the process of economic growth and development. Its impact is wide-ranging-it changes the trends of economic activity in regions, affects employment, income distribution and poverty. Migration is usually considered a selective process and resulting from the interaction of many forces-social, economic, cultural and demographic.

The relationship between rural-urban migration and development has been differently viewed by academics and policy makers. Until very recently, rural-urban migration was viewed favourably in the economic development literature. Internal migration was thought to be a natural process in which surplus labour would be gradually withdrawn from rural/agricultural sector to provide needed manpower for urban industrial growth. The process was considered socially beneficial since human resources were being shifted from locations where their social marginal products were often assumed to be zero to places where their social marginal product was not only positive but also rapidly growing as a result of capital accumulation and technological progress.² This process was formalized in the model of rural-urban labour transfer as developed by Lewis (1954) and later formalized and extended by Fei and Ranis (1961).

In contradiction to the above view point, it has become evident from Third World experience of urbanization that rates of rural-urban migration continue to exceed rates of job creation and to surpass greatly the absorption capacity of both industry and urban social services.³ Thus migration is no longer viewed as a beneficial process necessary to solve problems of growing urban labour demand. On the contrary, migration is now seen as the major factor contributing to the ubiquitous phenomenon of urban surplus labour which is mostly absorbed in the swelling urban informal sector production that contributes little to the process of economic growth and national development. Therefore, migration is viewed as a negative factor to cope with unemployment, poverty and environmental problems that are engendered by the scale of the transfer of population between regions and urban and rural sectors (Todaro, 1976).

* Dr. Mohammad A. Mohit, Associate Professor, Department of Urban and Regional Planning, Bangladesh University of Engineering and Technology, Dhaka-1000, BANGLADESH.

The changing perspective of migration from its beneficial to problematic concern requires further investigation which may be directed towards "understanding the nature and character of development process and to formulating policies to influence this process in socially desirable ways" (Todaro, 1985, p. 254).

MIGRATION IN BANGLADESH

Migration is not a new phenomenon in Bangladesh. The process of rural to urban migration in Bangladesh started a long time ago. It existed in the historic and Mughal periods. During the British period, migration was very low in this subcontinent because of economic, social and cultural reasons. After partition of India in 1947, migration in Bangladesh (then East Pakistan) was mainly international being pursued by the influx of refugees from India. Rural-urban migration, however, even before the liberation of Bangladesh in 1971, did not receive momentum. After liberation several socio-economic and political factors have contributed to increase the rate of internal migration in Bangladesh.

Bangladesh has a lower level of urbanization as only 15 per cent of her total population (Census, 1981) live in the urban areas. But in recent years, she has been experiencing a higher rate of growth in urban population. Prior to 1961, urban population of Bangladesh was growing only by about 3.7 per cent per year. This rate accelerated to 6.7 per cent after 1961 and in 1981 it is estimated to be more than 7 per cent per year. Rural to urban migration has been regarded as the main contributor to the urban growth of Bangladesh. One study (NPP, p-II, 1984) has observed that "the share of influx of net immigrants is about 84 per cent of total urban population growth" (p. 6).

At the policy level, few steps have been taken to deal with the migration situation in Bangladesh.⁴ The traditional approach to rural development through developing agriculture only without providing any support services, i.e., market and necessary infrastructures and the recently introduced administrative decentralization at the Upazila level through the creation of small townships and diffused urbanization have contributed little to control in-migration, particularly, the movement of migrants to the large cities or metropolis. Although a mix of pull and push factors have been identified to account for the internal migration (Chaudhury, 1976), it has remained unexplained the extent of influence that urban centres exert upon determining migration stream in Bangladesh. Therefore, an analysis of migration patterns by urbanization or urban growth appears important in order to formulate policies to deal with the problem. Internal migration has no direct effect on a country's total population size and growth but is intimately related to population distribution within a country, and particularly to the process of urbanization (UN, 1973, p. 173).

REVIEW OF LITERATURE

The available literature on migration can be gathered from a variety of disciplines such as economics, political economy, regional science, sociology, geography, spatial planning and anthropology. Each of these disciplines attempts to explain the causes and

consequences of internal migration. But none of them provide a framework within which migration behaviour can be adequately explained. Following Chatterjee (1981) existing literature on migration can be broadly categorized into three groups, viz.,

- a) Studies dealing with factors motivating migration decision;
- b) Studies devoted to explaining the socio-demographic attributes of the migrants; and
- c) Studies related to explain the societal context of migration.

Urbanization and migration studies started in Bangladesh from the last decade (Islam and Begum, 1983, p. 2). The earlier migration studies (Krishnan and Rowe, 1987; Obaidullah, 1967) were concerned about explaining regional pattern of population movement in Bangladesh based on life-time migration data. These studies were mostly concerned with the spatial outcome of migration and did not provide proper explanations of the phenomenon.

Recent rural-urban migration studies have identified that majority of the migrants concentrate in the main urban centres of Bangladesh. One study (Chaudhury, 1976) has observed that in 1974, 56.4, 42.4 and 58.9 percentage of urban dwellers of Dhaka, Chittagong and Khulna cities were in-migrants. The same study also found that rural migrants usually move to the closest urban areas and they mainly originate from densely populated areas.

While most migrants are destined to the big cities, they however, originate from different districts. From some studies (Chaudhury and Curlin, 1975; Hussain, 1962) it can be gathered that majority of the migrants of Dhaka, Chittagong, Khulna and Rajshahi have come from the districts of Dhaka, Comilla, Faridpur, Barisal, Noakhali and Mymensingh.

A variety of reasons which include both economic and non-economic factors have been identified to explain internal migration in Bangladesh. It has been observed that a number of inter-related factors contribute to migration decision. Although economic reasons appeared dominant but physical and social factors also indirectly influence migration decision. Chaudhury (1978) has identified that migrants originate from two distinct classes - the poor and the rich. While for the poor economic reasons are central, the rich are often attracted to city culture for their migration decisions.

Employment opportunities coupled with higher wages in urban labour market usually attract migrants to move into the urban areas. Begum (1979) has observed that migrants move to urban areas for jobs and that migrant's income is higher in urban areas than in the rural areas. The economic condition in the district of origin due to population pressure, diminishing average land holding and lack of rural agricultural development programmes push the rural people towards the cities (Islam, 1976). Landlessness, general poverty and unemployment at the place of origin play a significant role for migration (Begum, 1979; Chaudhury, 1980). It has been reported that villages which are characterised by land scarcity, skewed distribution of land, high proportion of agricultural labourer are likely to induce high rate of migration (Chaudhury, 1980).

Other factors which explain internal migration in Bangladesh are physical factors such as river erosion, natural hazards such as cyclone, drought and flood (Begum, 1972). Social factors such as prestige, marriage, pressure of relatives and friends; socio-political factors such as family dispute, political disturbance etc. also contribute to the internal migration process in Bangladesh.

Migration process is selective based on socio-demographic characteristics and other attributes of the migrants. Demographically, the migrants are disproportionately selected from adult age group of 20 to 30 years (Chaudhury, 1980). Migration rate of the male is higher than the female as revealed from the male-female ratio of urban areas and due to the fact that men frequently move in search of work leaving their wives in the village (DMAIUDP, 1981). Male migrants are disproportionately single and they mostly originate from families having large family size (Chaudhury, 1980). Migrants also have higher education than non-migrants. Based on data from 68 villages of Bangladesh, Chaudhury (1978) has observed that the overall education of migrants (64%) and the migrant families (41%) are higher than that of the non-migrant study population (27%). The same study has also observed that the number of illiterates among migrants was fewer than non-migrants and the percentage of migrants with secondary and higher secondary education far exceeded the corresponding figure for non-migrants (Chaudhury, 1978). Migrants also differ from their class of origin. The nature of migration of poor and rich migrants differ widely. The migrants originating from the rich families have higher education and they tend to move to large urban areas, travel a long distance, belong to service occupation category, have highest income and remit more money to their rural kin. But the migrants originating from the poor families are mostly illiterates and they tend to move to small urban centres, travel short distance, engage in low-paid urban jobs as day labourers, have poor earnings and remit a small amount of money to their rural kin (Chaudhury, 1980).

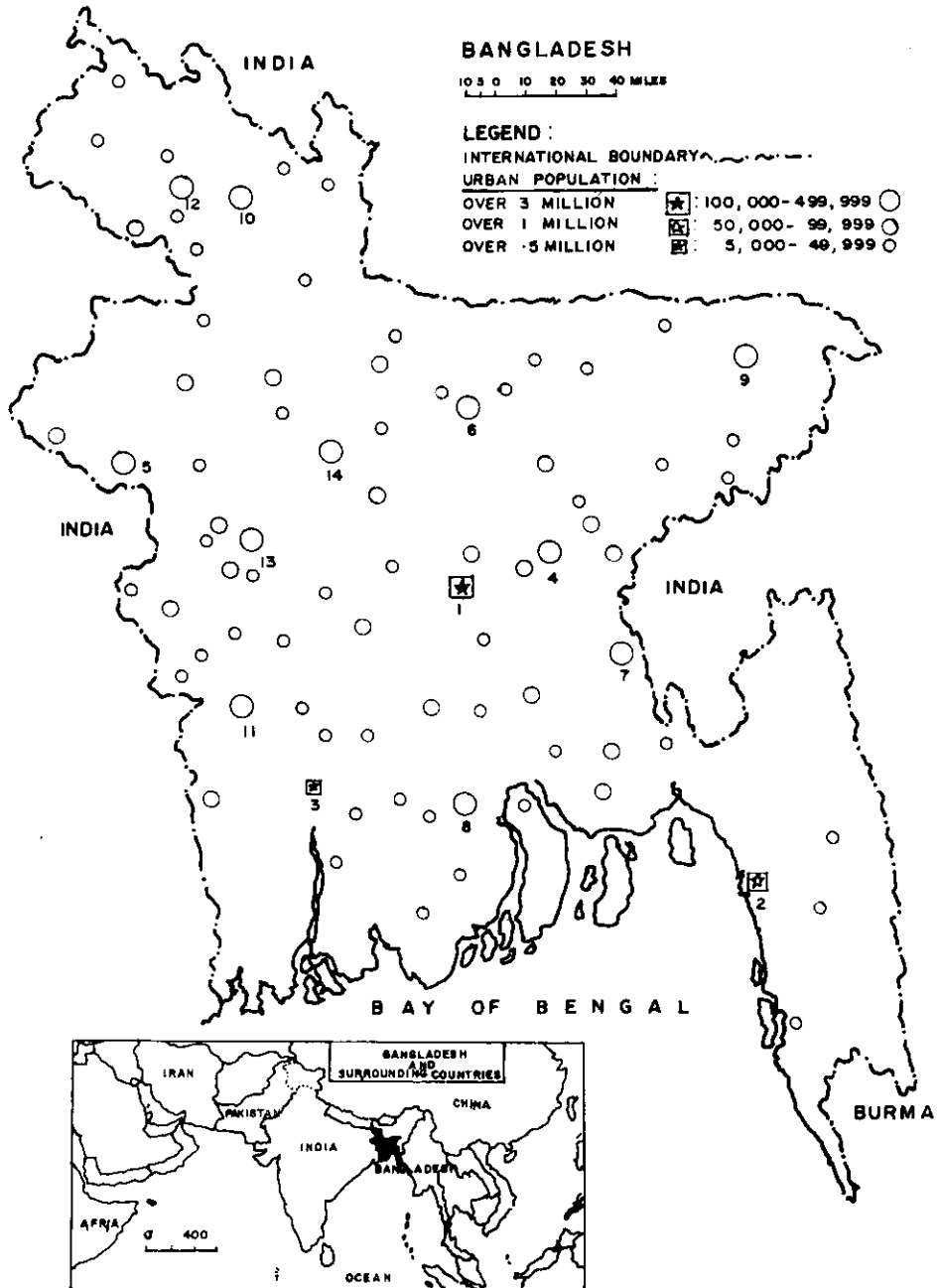
The foregoing review of migration studies in Bangladesh reveals that the process of internal migration has been fueled by a host of economic, social, political and cultural factors and attributes of the migrants. However, no attempt has been made to relate migration to the process of urban growth in Bangladesh. Urban areas are the destinations of the migrants and it is anticipated that the attractiveness of urban areas would vary depending upon many factors. Therefore, it is deemed important that a study directed towards investigating internal migration and urbanization process would help at arriving appropriate policies which can be used for managing future migrants in Bangladesh.

OBJECTIVES OF THE STUDY

The main aim of the current study is to examine internal migration pattern within the urbanization process of Bangladesh. In order to achieve this purpose, two broad objectives have been set for the study. These are, viz.

- a) to identify migration by size and growth of urban centres; and
- b) to determine the relationship between migration and urbanization process.

MAP - I
MUNICIPAL URBAN CENTRES OF BANGLADESH - 1981



METHODOLOGY OF THE STUDY

The study has been primarily based on secondary data and published materials. The Census data of 1981 have been extensively used for examining the migration situation in Bangladesh. The Methodology adopted for the present study has three main aspects, viz.,

- a) Estimation of migration data
- b) Selection of urban centres
- c) Selection of data/variables.

In the absence of available data, migration data for individual urban centres has been estimated based on the difference between urban growth rate and national growth rate of population.⁵ The base period selected for migration estimation is the 1961 urban population. The rationale behind this estimation is based on the following assumption: had there been no migration, the population of urban centres would have grown exactly at the national rate and therefore variation of growth rates is due to migration only.

The study has been based on selected urban centres, i.e., municipal towns/urban centres only.⁶ Map 1 shows municipal urban centres of 1981. The 69 municipal towns that existed in Bangladesh in 1961 were selected for analysis but because of negative population growth and non-availability of data 14 towns had to be discarded bringing the total to 55 urban centres in the migration analysis. The selected urban centres represents cross-section of samples based on variation of urban population. Thus a comparative approach through size variation and resulting variation in other aspects has been adopted for finding meaningful results from the analysis of the study.

Thirty nine variables have been selected for data analysis. All of them have been picked up from the community tables and district tables of the 1981 Census data published by the Bangladesh Bureau of Statistics. The data cover a wide range of aspects, e.g., population and demography, occupation structure, household characteristics, type and nature of dwelling units, social and community facilities, unemployment, literacy and health services.

Various statistical techniques have been applied to analyse the data and find out meaningful results. Statistical methods such as cross-tabulation, correlation analysis, etc. have been used for the analysis of data.

ANALYSIS OF URBANIZATION AND MIGRATION

Urban centres are the destinations of the internal migrants. These centres provide job opportunities and at the same time important services to the migrants. It is anticipated that both job and service provisions would vary by urban size and hence their attractiveness to the migrants leading to the differences in size of net-migrants. In order to explain the relationship between urban size and migrants an attempt has been made in Table 1 to distribute urban centres by their volume of net-migrants for the period 1961-81.

It appears from Table 1 that as urban population increases, the volume of in-migrants also increases. This indicates that there is a positive association between urban population and in-migration. The correlation coefficient between these two variables as can be seen from Table 2 is $r=0.47$ for upto 100,000 urban population but it increases to $r=0.98$ with the inclusion of 100,000 plus urban centres. This implies that while urban centres of below 100,000 population act as low attractors of migrants, urban centres of above 100,000 population are the main attractors of migrants in Bangladesh.

Table 1
Distribution of Urban Population by the Volume of Net-Migrants

Urban Population (000)	In-Migrants (000)					Total
	Upto 5.0	5.1—10.0	10.1—15.0	15.1—30.0	30.0—above	
Upto 25.0	6 (50.0)	2 (16.7)	3 (25.0)	5 (8.0)	—	12 (100.0)
25.1-50.0	1 (7.1)	5 (35.7)	5 (35.7)	5 (7.1)	1 (14.4)	14 (100.0)
50.1-75.0	—	3 (25.0)	2 (16.7)	4 (33.3)	3 (25.0)	12 (100.0)
75.1-100.0	—	2 (33.3)	1 (16.7)	2 (33.3)	1 (16.7)	6 (100.0)
100.1-above	—	—	—	3 (27.3)	8 (72.7)	12 (100.0)
Total	7 (12.7)	12 (21.8)	11 (20.0)	11 (20.0)	14 (25.5)	55 (100.0)

Source : Author's calculations based on BBS data.

Note : Figures within parentheses are percentages.

In order to explain the relationship between migrants' attraction and a variety of factors, 39 variables covering employment, household character, provision of social and community services have been utilized and correlation coefficients have estimated to measure the strength of their relation. The result of the analysis has been presented in Table-2.

A careful analysis of Table 2 is necessary. Table 2 gives co-efficients of correlation of in-migrant and natural population with a host of variables. The analysis presented in Table 2 has been done on the basis of two categories of urban centres. While the first two row figures are for urban population of below 100,000, figures for rows 3 and 4 cover all categories of urban centres. A comparison between the two set of figures would easily reveal that figures of the 3rd and 4th rows invariably relate to centres having urban population above 100,000. This implies that a ready comparison in the relative value of the correlation co-efficients would indicate the size effects.

Table 2 (Part-A)
Correlation Co-efficients of In-Migrant and Natural Population with Selected Variables.

Variables	NIH	URPOP	POPDEN	POPNTWK	AGEMP	MNFEMP	BUSEMP	OTREMP	HHDWU	HHINST	HHBUSIND
IMPOP ¹ n=44	0.49*	0.47*	0.16	0.37*	0.46*	0.53*	0.31+	0.32+	0.47*	0.29	0.40*
NATPOP ² n=44	0.84*	0.87*	0.59*	0.89*	0.10	0.42*	0.85*	0.87*	0.86*	0.72*	0.03
IMPOP ³ n=55	0.98*	0.98*	0.43*	0.97*	0.68*	0.88*	0.98*	0.98*	0.98*	0.94*	0.92*
NATPOP ⁴ n=55	0.90*	0.90*	0.52*	0.93*	0.61*	0.95*	0.89*	0.89*	0.89*	0.95*	0.94*

Source : Analysis based on BBS data.

Notes : IMPOP¹ = In-migrant population of less than 100,000 urban centres

NATPOP² = Natural population of less than 100,000 urban centres.

IMPOP³ = In-migrant population of all urban centres.

NATPOP⁴ = Natural population of all urban centres.

* = Significant at less than 0.05 level.

+ = Significant at less than 0.10 level.

= Significant at more than 0.10 level.

Table 2 (Part-B)
Correlation Co-efficients of In-Migrant and Natural Population with Selected Variables.

Variables	LT NWKG	ILNT WKG	KUCHDU	SPCDU	PUCDU	HHWPW	HHIWAJ	HHWOH	HHWWT	PRYSCH	SECSCH
IMPOP ¹ n=44	0.21	0.49*	0.38+	0.40*	0.23+	0.35+	0.59*	0.52*	0.20	0.08	0.13
NATPOP ² n=44	0.83*	0.78*	0.40+	0.76*	0.65*	0.85*	0.54*	0.71*	0.42*	0.76*	0.77*
IMPOP ³ n=55	0.98*	0.97*	0.79*	0.98*	0.99*	0.98*	0.99*	0.88*	0.88*	0.95*	0.98*
NATPOP ⁴ n=55	0.88*	0.93*	0.93+	0.86*	0.84*	0.88*	0.82*	0.94*	0.96*	0.93*	0.87*

Source : Analysis based on BBS data.

Notes : IMPOP¹ = In-migrant population of less than 100,000 urban centres

NATPOP² = Natural population of less than 100,000 urban centres.

IMPOP³ = In-migrant population of all urban centres.

NATPOP⁴ = Natural population of all urban centres.

* = Significant at less than 0.05 level.

+ = Significant at less than 0.10 level.

= Significant at more than 0.10 level.

Table 2 (Part-C)

Correlation Co-efficients of In-Migrant and Natural Population with Selected Variables.

Variables	COL LEGE	HOSP BED	DOCTOR	DR AZAK	POST OF	BANK	GOFF ICE	CIN HALL	TEL PHON	PCIM POP	MF RATIO
IMPOP ¹ n=44	0.05	-0.47	-0.07	-0.02	0.02	0.20	0.13	0.28	0.22	0.68*	—
NATPOP ² n=44	0.72*	0.55*	0.62*	0.40*	0.26	0.72*	0.33	0.54*	0.75*	0.55*	—
IMPOP ³ n=55	0.89*	0.51*	0.28	0.67*	0.85*	0.88*	0.48*	0.86*	0.99*	0.28	0.27
NATPOP ⁴ n=55	0.88*	0.61*	0.34	0.69*	0.80*	0.93*	0.45*	0.86*	0.81*	0.12	0.39

Source : Analysis based on BBS data.

Notes : IMPOP¹ = In-migrant population of less than 100,000 urban centresNATPOP² = Natural population of less than 100,000 urban centres.IMPOP³ = In-migrant population of all urban centres.NATPOP⁴ = Natural population of all urban centres.

* = Significant at less than 0.05 level.

+ = Significant at less than 0.10 level.

= Significant at more than 0.10 level.

It can be seen from Table 2 that correlation co-efficients vary due to urban size effect and by migrant and natural population. It is evident from Table 2 that migrant population corresponding to below 100,00 urban centres have weak relations to the selected variables compared to natural population of the same group. This indicates that migrants are less attracted to various aspects of urbanization when centre sizes are below 100,000 than natural population. This implies that for below 100,000 urban centres, the crucial determinant is the natural population component rather than the migration component as can be gleaned from the low co-efficients of correlation. On the contrary, for all urban centres, it can be seen from Table 2 that many of the correlation co-efficients excepting a few are highly related to the migration component than to the natural component of population. In other words, it can be deduced that the inclusion of 100,000 plus urban centres in the analysis has enhanced the correlation values of many variables. This implies that the value of most variables with the inclusion of 100,000 plus urban centres becomes responsive to the migration population than to the natural population.

The analysis of Table 2 leads us to conclude that urban size and migration are closely correlated in determining the value of many of the variables. It also becomes evident that urban centres below 100,000 population have weak economic base to attract migrants. This finding indicates that appropriate policy measures are necessary to strengthen the economic base of the smaller urban centers in order to enhance their attractiveness to potential migrants.

SUMMARY AND CONCLUSION

This paper has focused on providing an explanation to internal migration pattern within the urbanization process of Bangladesh. The analysis has identified the weak attractiveness of urban centres having below 100,000 population to the migrants of Bangladesh. By contrast, the migration proneness of the larger urban centres has also become evident from the analysis. It, therefore, appears that a balanced distribution of internal migration would require strengthening the economies of the small - and medium-sized urban centres so that potential migrants may be attracted to these towns. Thus urbanization policies to manage internal migration process should have to be concentrated towards developing the less than 100,000 urban centres in Bangladesh.

NOTES

1. Migration can be defined as the movement of individuals/households from one community to another that involve crossing of administrative boundaries. Internal migration may be permanent or seasonal. Our analysis mainly deals with permanent migration.
2. Following this argument individual migrant's perspective can be analyzed in a human capital framework-as an investment which produces a stream of returns-the locational change permits the migrants to maximize his utility that emanates from the differential between the present value of gains from migration and the costs of moving (Chatterjee, 1981, p. 114).
3. Squire (1983) has also argued that the import-substitution and capital intensive nature of Third World industrialization has generated minimal employment effects.
4. The only indirect measure to discourage migration to large urban areas in Bangladesh was the prohibition to issue ration cards to non-governmental employees. However, this step had very little perceptible impact on in-migration.
5. The formula used for estimating net migrants is: $\text{Net-migrant} = (p^{81} \text{ city} - p^{61} \text{ city}) - (p^{61} \text{ city} \times R^{81-61} \text{Bd})$
where, R = rate of national population growth 1961-81.
6. Two categories of urban centres exist in Bangladesh - municipal and non-municipal. The former category has established administrative and implementation framework and strong data base and hence these have been selected for analysis.

LIST OF VARIABLES

VAR NAME	VARIABLE LABELS
NHH	No. of households, 1981
URPOP	Urban population, 1981.
POPDEN	Population density in sq. km.

HHSZ	Household size.
MERATIO	Male female ratio.
MLIT	Male literacy.
FLIT	Female literacy.
POPNTWRK	Population not working.
AGRIEMP	Employment in agriculture.
MNFEMP	Manufacturing employment.
BUSEMP	Business employment.
OTREMP	Others employment.
HHDWU	Household dwelling unit.
HHINST	Household in institution.
HHBUSIND	Household in business/industry.
LITNWKG	Literate not working.
NLITNWRG	Illiterate not working.
KUCHDU	Kutchha (unpaved) dwelling unit.
SPCDU	Semi-pucca dwelling unit.
PUCDU	Pucca dwelling unit.
HHWPW	Household without potable water.
HHWAL	Household with agricultural land.
HHWOH	Household with own house.
HHCOT	Household with cottage industry.
PRYSCH	Primary school (no.)
SECSCH	Secondary school (no.)
COLLEGE	College (no).
HOSPBED	Hospital bed (no).
DOCTOR	Doctor (no).
DBAZAR	Daily bazar (no).
POSTOF	No. of post office.
BANK	No. of banks.
GOFFICE	No. of Government office

CINHALL	No. of cinema hall.
TELEPHONE	Telephone number.
FPCENTR	No. of family planning centre.
IMPOP	In-migrant population (estimated).
NATPOP	Natural population (estimated).
PCIMPOP	Percentage of in-migrant population.

REFERENCES

- Bangladesh Bureau of Statistics 1983. District Statistics (Series). Dhaka: Bangladesh Secretariat.
- Bangladesh Bureau of Statistics 1983. Bangladesh Population Census 1981, Thana Series. Dhaka: Bangladesh Secretariat.
- Begum, J. 1979. Rural-Urban Migration: A Survey of the Poor Women in Two Localities of Metropolitan Dhaka. Dhaka: Dhaka University Geography Department.
- Chatterjee, L. 1981. "Migration and Development", in Chatterjee, L. and Nijkamp, P. (eds.), Urban Problem and Economic Development. Netherlands: Sijthoff and Noordhoff Int. Publishers, pp. 113-132.
- Chaudhury, R.H. and Curlin, G. 1975. "Dynamics of Migration in a Rural Area of Bangladesh", Bangladesh Development Studies, Vol. III, No. 2, pp. 181-230.
- Chaudhury, R.H. Ahmed, N.R. and Huda, S. 1976. "Management of In-migrants to Urban regions of Bangladesh", in National Report on Human Settlement in Bangladesh HABITAT, Vancouver, May 13- June 14, pp. 87-114.
- Chaudhury, R.H. 1978. "Determinants and Consequences of Rural Out-Migration: Evidence from Some Villages in Bangladesh", The Oriental Geographers, Vol. XXII, No. 1&2, pp.1-20.
- Chaudhury, R.H. 1980. Urbanization in Bangladesh. Dhaka: Dhaka University Centre for Urban Studies.
- Cholera Research Laboratory 1979. "Demographic Surveillance System, Matlab (Vital Events and Migration, 1975 , " Vol.III, Scientific Report II. Dhaka: Bangladesh CRL.
- Fei, J.C.H. and Ranis, G. 1961. "A Theory of Economic Development", American Economic Review, Vol.51, pp. 533-65.
- Harris, J.R. and Todaro, M.P. 1970. "Migration, Unemployment and Development: A Two Sector Analysis", American Economic Review, Vol. 51, pp. 126-142.

- Hossain, M.I. 1984. Migration Pattern and Socio-Economic Structure of the Slums of Dhaka Metropolitan Area: A Case Study of Islambag Bastee. Unpublished M.Sc. thesis. Dhaka: Jahangir Nagar University Geog. Dept.
- Hussain, A.Z.M.F. 1972. Squatting and Squatters in Dhaka City. Unpublished M.Sc. thesis, Dept. of Geography. Dhaka: Dhaka University.
- Islam, N. et al., 1978. Rural Urban Migration in Bangladesh: A Case Study of a Village in Faridpur. Dhaka: Dhaka University Centre for Urban Studies.
- Islam, N. and Begum, J. 1983. Internal Migration in Bangladesh: A Review of Literature. Dhaka: Dhaka University Centre for Urban Studies.
- Islam, N. 1985. "Rural-Urban Migration in Asia-Its Pattern, Impact and Policy Implications", HSD Working Paper No.19. Bangkok: AIT.
- Krishnan, P. and Rowe, G. 1978. "Internal Migration in Bangladesh", Rural Demography, Vol. 5, No. 132, pp.
- Lewis, W.A. 1954. Economic Development with Unlimited Supplies of Labour. UK: Manchester School.
- National Physical Planning Project (NPPP-II) 1984. Inmigration to Statistical Metropolitan Areas and Major Urban Centres in Bangladesh: 1961-81. Working paper No.4, Dhaka: UDD.
- Obaidullah, M. 1967. "Internal Migration in East Pakistan", Oriental Geographers, Vol.XI, No.2, pp.
- Robin, I.P.(ed.) 1979. Migration and Development in South East Asia - A Demographic Perspective. UK: Oxford Univ. Press.
- Sattar, M.A. 1976. Bangladesh Rural-Urban Migration Problems and Prospects. Dhaka, Dhaka University.
- Squire, L. 1981. Employment Policy in Developing Countries - A Survey of Issues and Evidence. UK: Oxford Univ. Press.
- Todaro, M.P. 1969. "A Model of Labour Migration and Urban Unemployment in Less Developed Countries", American Economic Review, Vol.59, No. 1, pp 138-148.
- Todaro, M.P. 1976. Internal Migration in Developing Countries: A Review of Theory, Evidence, Methodology and Research Priorities. Geneva: ILO.
- Todaro, M.P. 1985. Economic Development in the Third World. New York: Longman.
- Shankland Cox and Partners 1981. Dhaka Metropolitan Area Integrated Urban Development Project. Working paper on Population, Dhaka.
- United Nations 1973. The Determinants and Consequences of Population Trends. Vol.1 (summary of findings). New York: Dept of Economic and Social Affairs.
- World Bank 1981. Bangladesh: Urban Sector Memorandum. Dhaka: World Bank.