# Health Economics Programme

HEP Working Paper No. 3-98

# Demographic, socio-cultural and economic profile of Slum Residents in Dhaka-City, Bangladesh

Health care seeking studies

Health Systems Research Team

Martinus Desmet Ishtiaq Bashir Nazmul Sohel



May 1998

ICDDR,B Working Paper No. 110

#### **Editing**

Taskin Saadad

#### Cover design and lay-out

Absar Chowdhury, Martinus Desmet

#### Texts

Martinus Desmet

#### Printer

Gonomudran Limited Nayarhat, Dhaka 1350.

ISBN 984-551-149-X

© May 1998. International Centre for Diarrhoeal Disease Research, Bangladesh

HEP Working Paper No.3-98 ICDDR,B Working Paper No. 110

#### Publisher

International Centre for Diarrhoeal Disease Research, Bangladesh Mohakhali, Dhaka 1212, Bangladesh GPO Box 128, Dhaka 1000, Bangladesh

Telephone:

+/880/(0)2/871751-60 (PABX)

Fax:

+/880/(0)2/883116, 886050 (Public Health Sciences Division)

Telex:

675612 ICDD BJ

Cable:

CHOLERA DHAKA

E-mail:

maarten@icddrb.org

Web site:

http://www.icddrb.org/

# Acknowledgements

The findings presented in this Working paper are from a study conducted at the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B). The study was carried out with the aid of grants from the International Development Research Centre (IDRC), Ottawa, Canada and the Belgian Agency for Development Cooperation, Brussels, Belgium. The authors would like to particularly recognise Dr. Anwar Islam of IDRC for his invaluable support to the research team.

ICDDR,B is supported by countries and agencies which share its concern for the health problems of developing countries. Current donors include: the aid agencies of the Governments of Australia, Bangladesh, Belgium, Canada, Japan, the Netherlands, Norway, Saudi Arabia, Sweden, Switzerland, the United Kingdom and the United States; international organizations including Arab Gulf Fund, European Union, the International Atomic Energy Centre, the International Development Research Centre (IDRC), Save the Children-USA, the United Nations Children's Fund (UNICEF), the United Nations Development Programme (UNDP), and the World Health Organization (WHO); private foundations including Aga Khan Foundation, Child Health Foundation (CHF), Ford Foundation, Population Councii, Rockefeller Foundation, Thrasher Research Fund, and the George Mason Foundation; and private organizations including Helen Keller International, the Johns Hopkins University, Karolinska Insitute, Loghborough University, National Institutes of Health, New England Medical Centre, Nothfield Laboratories Ltd., Procter & Gamble, RAND Corporation, Swiss Red Cross, the University of Alabama at Birmingham, University of Pennsylvania, UCB Osmotics Ltd, Wander A.G. and others.

The authors wish to thank Dr. Mahmud Khan, head of the Health Economics Programme, for his valuable comments on earlier drafts of the paper. Dr. Sushila Zeitlyn, Dr. Jacques Myaux and Mr. Mohammed Ali collaborated with us in the preparatory phase of the study. Dr. Zeitlyn and Ms. Rabeya Rowshan assisted in organising the qualitative phases of the study and Ms. Rowshan further participated in fieldwork supervision and coding. We express our gratitude for their assistance. The authors want to especially recognise all the staff involved in fieldwork, data management and logistics for their hard work, enthusiasm, motivation and team spirit. Finally and not the least, the authors wish to thank the slum households who participated in the study, for their much appreciated cooperation.

# **Contents**

Acknowledgements					•			iii
Foreword .					•			v
Slums in developing co	untries	•				,		l
Chapter 1 - Basic demo				lums in	Dhaka-0	City		2
A. Slum population and	-	ition den	isity			•		2
B. Age-sex distribution								3
C. Household size and	Househo	old comp	position	•				4
D. Marital status	•						•	6
E. Migration pattern			•				•	7
Chapter 2 - Socio-cultu	ral aspe	ets of sle	um hous	eholds				13
A. Religion								13
B. Ethnic composition					,			13
C. Education .								14
D. Social structure								14
Chapter 3 - Economic s	ituation	of slum	househo	olds				15
A. Household income							_	15
B. Household expendits							•	18
C. Occupation pattern			•	•	•	•	•	22
D. Income-earning disa			•	•	•	•	•	31
D. meome-carming disa	Unity	•	•	•	•	•	•	וכ
Chapter 4 - Proximate i	ndicator	s of soc	io-econo	mic sta	tus			36
A Land annuality			_					36
B. Disposal of excreta	,	•	•	•	•	•	•	36
C. Source of water for o			•	•	•	•	•	
				•	•		•	37
D. Number of rooms of	cupiea j	per hous	enoid	•	•	•	•	38
							•	39
F. Type of fuel for cool		•					•	39
G. Household assets								40
H. Association between	i househ	old inco	me and	demogr	aphic, so	cio-cult	ural and	
proximate indicators	for soc	io-econo	omic stat					41
Chapter 5 - Poverty mea	asureme	nts						51
Conclusion on the demo	ographic	socio-	cultural :	and soci	io-econo	mic prof	ile	
of the study sample					•			53
References .				•				54
Annexes.								

#### **Foreword**

This publication is part of the Working Paper series of the Health Economics Programme of ICDDR, B in the Public Health Sciences Division. From 1993 to the first half of 1998, three studies on health care seeking in three sub-groups of the Bangladeshi population were conducted by the Programme's Health Systems Research team. The first study collected information from the slum population of Dhaka-City, the second, from its non-slum population, and the third one from a peri-urban/rural area.

The overall objective of these studies was to get a better understanding of health care use and spending by different sub-populations, and to contribute, with the findings, to the development of more appropriate health policies in Bangladesh and in other countries with similar health care provision patterns and socio-economic and/or cultural characteristics. The specific objectives were (1) to document the components of health care decision processes, i.e. perceived illness patterns, the health care options that the study populations perceive to be available, and the reasons and constraints operating in health care choice making; (2) to determine and investigate variables that contribute to health care choice making and utilization; (3) to describe the pattern of direct household expenditure on health care; (4) to study indirect expenditure, namely loss of income due to illness; and finally, (5) to examine aspects of user satisfaction with health care received.

A similar research strategy was used for all the three studies, consisting of three phases and combining qualitative and quantitative research methods. The first phase was a cognitive study to generate data on the components of health care decision making. It was followed by a 6-month longitudinal survey, in which data were collected on all new illness episodes and existing chronic ones through fortnightly visits. Simultaneously, selected socio-economic and demographic variables were followed up on a monthly basis. Each survey was preceded by a more extensive baseline survey on socio-cultural and economic variables. Finally, a series of case studies were conducted on specific health care seeking experiences reported during the longitudinal survey.

A number of working papers will be published based on the findings of each of the studies. This Working Paper presents the demographic, socio-cultural and economic profile of the 905 households in the sample the of slum study's baseline survey and socio-economic and demographic follow-up. The findings are complemented and annotated, where appropriate, with information obtained from the literature. The interested reader may also consult the following Working Papers on other aspects of the slum study:

- -Illness profile and Health care utilization pattern of Slum Residents in Dhaka-City, HEP Working Paper No.4;
- -Direct and indirect health care expenditure by Slum Residents in Dhaka-City, HEP Working Paper No.5;
- -Specific health care seeking experiences of Slum Residents in Dhaka-City, HEP Working Paper No.6;
- -Main findings and policy implications of a study on health care seeking among the Slum Residents of Dhaka-City, HEP Working Paper No.7.

#### Slums in developing countries

Many cities in developing countries have areas where people live in conditions of great poverty and deprivation. As D. Albala puts it: 'these areas are obvious for the most casual observer'.' They are so particular that they are indicated with specific terms in most parts of the developing world: 'favelas' in Brazil, 'bidonvilles' in french-speaking countries, and 'slums', 'shanty towns' or 'squatter settlements' in anglophone parts, or 'katchi abadi' in Karachi, Pakistan, and 'bastees' in India and Bangladesh.

However, there may exist substantial differences in the environmental conditions and consequent health outcomes among slum areas, even in the same city<sup>2</sup>. Additionally, the particularly low socio-economic conditions of slums do not prevent their dwellers from attempting to improve their situation. In several cases it has been shown that local community initiatives of self-help and advocacy, coupled with local government involvement, have resulted in sustainable improvements, not only in the infrastructure, such as roads and drainage systems, but also in the self-esteem of slum dwellers and their general living conditions and health status.<sup>3,4,5,6,7</sup> Conversely, the positive outcome of slum upgrading projects may be jeopardised by too much top-down planning, rivalries and conflicts among groups within the slum, the frequent negative interference by slum leaders, extremely high population density, lack of land and land tenure system.<sup>8</sup>

While in the 1960s and 1970s, government efforts largely concentrated in subsidizing low-cost public housing, sanitation and water supply, policy was reoriented in the 1980s to multi-sectoral slum upgrading projects, integrating infrastructural work and improvements in housing with social programmes in education and health care. <sup>10</sup> Recently, emphasis has been given to link health and social policy in a city-wide planning effort. It focuses not only on building of improved social integration through decreasing socioeconomic inequalities, but also on the huge disparity obvious in the various patterns of consumption and the recognition of the need for sharing resources among those subgroups. <sup>11</sup>

## A working definition of slums in Dhaka-city

ICDDR,B's Urban Health Extension Project and the Centre for Urban Studies of Dhaka University have used the following working definition<sup>12</sup> of slum areas in their 1991 slum survey (this definition was also used in our study):

"settlements/areas of very high gross area density (over 300 persons/acre) and high room crowding (3 or more adults per room), poor housing, inadequate water supply, poor sewerage and drainage facilities, little or no paved streets, irregular clearance of garbage, insufficient or absence of street lights, and little or no access to gas facility."

# CHAPTER 1 DEMOGRAPHIC FEATURES OF THE SLUMS IN DHAKA-CITY

#### A. SLUM POPULATION AND POPULATION DENSITY

The cities in Bangladesh, and more specifically its capital Dhaka, have experienced an enormous population growth during the past decade. Overall, while 'the cities are currently hosting 25% of Bangladesh's 123.1 million population, this will increase at an alarming rate in the future'. <sup>13</sup> In-migration, accounting for an important portion of the urban population growth, is dominated by the influx of poor peasants looking for opportunities for survival in the cities. Dhaka - believed to be one of the fastest growing cities in the world, with an annual crude growth rate of about 5%<sup>14</sup> - is well underway to become the ninth biggest city in the world with almost 20 million inhabitants by the year 2015.<sup>15</sup> In 1991, the Bangladesh Bureau of Statistics estimated the population at 6.1 million, of which one fourth to one third are poor, living in poor areas.<sup>16</sup>

In 1988, the population density of slum areas was estimated at over 300 people per acre with three or more adults per room.<sup>17</sup> This rose to over 900 in a slum survey conducted in 1991<sup>18</sup>, and in some bastees it may be up to 2000-2500 persons per acre.<sup>19</sup> Islam and Zeitlyn indicate that there may be an inverse relationship between population density and rents per unit of floor space.<sup>20</sup> Furthermore, the urban poor population includes "floating people" squattered on the pavement, alongside settlements on private land and government land, and refugee camps. The floating population - despite the fact that they may belong to the hard-core urban poor - was excluded from our study on health care seeking, because of the difficulty of following them up for 6-months which was the main research strategy used in this study.

The 1991 slum survey, mentioned above, identified 2,156 slum housings with about 718,000 inhabitants (the population was estimated at slum level, not at individual household level; rechecking of the data collected on a 10% subsample resulted in an estimated underreporting of around 25%'), about 75% of them on private land, 23% on government and semi-government land, and 2% on land owned by various non-governmental organisations. It should be noted that each of the two main types had about the same number of inhabitants resulting in the private slums being substantially smaller than the public/semi-public ones. Occupation of land is in many instances illegal, particularly on public land.

The adjustment with 25% brings the total number of slum dwellers from the 1991 slum survey to almost one million. This conflicts with the official data from the Bangladesh Bureau of Statistics referred to above. The 1991 slum survey data - the only population database available on the slums in Dhaka - excluded the floating population (which is usually also excluded from National Census) and 'non-slum households', defined as a household living within slum areas, but using its own latrine and water source. No other data sources are available to further check the discrepancy between the data of the 1991 slum survey and of the Bangladesh Bureau of Statistics.

Slum settlements in Dhaka-City are distributed in a highly fragmented way, as may be observed from Map 1, produced by the surveyors of the 1991 slum survey. However, more than 50% of the total recorded number of households and population were located in only three thanas², i.e. Lalbagh, Mirpur and Mohammadpur (see the table below). In addition, almost 75% of slums are small, consisting of 10 to 40 households, while only 5% of the slums have more than 200 households, with some having several thousand households.

Table 1: Number of slums, estimated number of slum population and households per slum by thana in Dhaka-City (according to the 1991 Slum Survey)

Thana	No slums	popul (thou)	(%)	Average pop/slum	No HH <sup>J</sup> /slum
Uttara Gulshan Cantonment Mirpur Mohammadpur Tajgoan Ramna Motijeel Sabujbagh Demra Sutrapur Kotwali Lalbagh Dhanmondi	71 138 65 354 156 151 95 61 230 277 211 57 193	9 36 17 126 170 40 34 17 42 55 54 15 82 21	1.3 5.0 2.4 17.5 23.7 5.6 4.7 2.4 5.8 7.7 7.5 2.1	127 261 262 356 1,090 265 358 279 183 199 256 263 425 216	23.1 47.5 47.6 64.7 118.2 48.2 65.1 50.7 33.3 36.2 46.5 47.8 77.3 39.3
Total	2,156	718	100	333	58.6

The data of the 1991 slum survey have been entered into a computerised database and used in our study as the sampling frame. Map 2 shows the slums with the households of our study sample. Their distribution follows the distribution pattern on Map 1, indicating they are geographically representative of all the slums surveyed in 1991.

#### **B. AGE-SEX DISTRIBUTION**

The data in Table 2 are taken from month 3 of our survey. Overall, 53% of the sample population are younger than 19 years. Additionally, there is an important divergence when female and male sub-populations are compared: the dissimilarities between the male and female subgroups respectively in age groups 13 to 18 and above 45 years of age are consistent with the findings of other studies. The female dominance in the 6 to 12 years

At the year of investigation (i.e. 1993), there were only 14 thanas. The Mirpur thana has since then been split up in a Northern and Southern thana. A thana on average covers about 350,000 inhabitants.

HH = household.
Urban Health Extension Project, ICDDR,B Urban Surveillance System, Unpublished data.

age-group however, is particular for this survey. The age-sex structure of other survey-months (see Annex 1) are similar to the one presented here for survey-month 3, except for the 13-18 years age-group where the gender difference is slightly less.

Age Categories	Ma	le	Fem	ale	Tot	Total		
categories	No	(%)	No	(%)	No	(%)		
0 - 5 6 - 12 13 - 18 19 - 45 > 45	452 422 202 884 169	(49) (46) (43) (51) (51)	466 499 263 837 165	(51) (54) (57) (49) (49)	918 921 465 1,721 334	(21) (21) (11) (39) (8)		
Total	2,129	(49)	2,230	(51)	4,359	100		

Table 2: Age-sex distribution of survey-month 3

### C. HOUSEHOLD SIZE AND HOUSEHOLD COMPOSITION

#### 1. HOUSEHOLD SIZE

The overall mean household size during our survey was 5.21, the average of the mean household sizes of the first and last survey-months.<sup>5</sup> (Table 3) Table 3 further shows that the mean household size gradually increased over the survey period. This is related to (1) the relatively more frequent out-migration by smaller households (see further under Migration pattern), and (2) net addition of members in the sample households due to higher number of births than deaths (half of the survey sample consisted of households with pregnant women).

Period	Mid- point	Population	No of HH	Mean HH Size
01/05-31/05	15/05/93	4376	866	5.05
01/06-30/06	15/06/93	4368	851	5.13
01/07-31/07	15/07/93	4377	847	5.17
01/08-31/08	15/08/93	4325	829	5.22
01/09-30/09	15/09/93	4364	813	5.37
01/10-31/10	15/10/93	4349	810	5.37

Table 3: Average household size by period

 $<sup>^{5}</sup>$  The average household size, found in the 1991 Census, conducted by the Bangladesh Bureau of Statistics, is 5.5 members.

#### 2. HOUSEHOLD COMPOSITION

Table 4 reports all forms of household compositions that represent more than 1% of all the households surveyed. The compositions reported in the table constitutes 77% of all households, while the remaining 23% shares more than 25 other compositions. The most common compositions are couples with 2, 1, 3 or 4 children and these categories constitute 42% of the households. Single female headed households represent 7.6% of all households. Only in five couples the household head is female and the spouse is male. Single males without children usually live in messes. Finally, it appears that sons-in-law rather than daughters-in-law live with their in-laws. This multitude of household compositions suggest that there is no one or a few 'typical' household compositions in the slum areas.

Table 4: Household composition (Survey-month 3)

Description of household composition	No	*	Cumula tive %
COUPLE  + 2 children* + 1 child + 3 children + 4 children + 4 child(ren) + parent(s) HH head + child(ren)<18 + child(ren)>18 years - children + 5 children + 5 children + children + brother/sister HH head + children + parent(s) spouse + children + niece/nephew HH head + children (all) + son-in-law + grand-son + children + others + children + parent(s) + brother/sister HH head + children (all) + son-in-law all other combinations	732 128 85 78 62 45 41 41 27 27 20 15 14 12 9	87.2 15.3 10.1 9.3 7.4 5.0 4.9 3.2 3.2 2.4 1.8 1.7 1.4 1.1	47.1 52.0 56.9 60.1 63.3 65.7 67.5 69.1 70.6
SINGLE male - children female + 1 child female + 2 children all other single male all other single female	107 16 11 9 27	12.8 1.9 1.3 1.1 3.2 5.2	74.6 75.9 77.0
TOTAL * child = 0 -18 years.	839	100	100

#### D. MARITAL STATUS

Almost all households consist of currently married couples; only 3% of the household heads are divorced and 2% widowed. (Fig. 1)

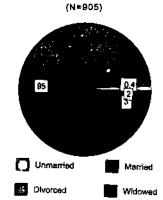


Fig 1 - Marital Status of Household Head

#### MARITAL STATUS BY AGE AND GENDER

There are marked differences in the marital status when age and gender are considered. (Table 5) While almost all males in the 13-18 years age-group are not married, more than half of the females in the same age-group are married. More than half of the females of above 45 years old are divorced or separated, compared to less than 5% of the elder males. In the 19-45 years age-group, females are 8 times more likely to be divorced than males.

Age-group	New marri			ently led(%)	Divo: Separa		Widow	ed (%)	Tot N	al
	Male	Fem	Male	Fem	Male	Fem	Male	Fem	M	F
13-18 years 19-45 years > 45 years	98.5 16.7 .6	55.9 3.2 1.2	1.5 82.6 94.7	43.4 88.3 40.0	- .7 4.7	.4 5.6 56.4	- - -	.4 2.6 1.8	202 884 169	263 837 165

Table 5: Marital status by age and gender (Survey-month 3)

#### E. MIGRATION PATTERN

The minimum period of out-migration considered in this survey was three days. This allowed collection of detailed information on mobility of the study household members and their days of and reasons for presence and absence during the survey period.

#### 1. HOUSEHOLDS' AND HOUSEHOLD MEMBERS' MIGRATION

Overall, there were 725 in-migrations, 2,333 out-migrations and 1,187 re-migrations during the six survey months (Table 6). It should be emphasised that all these movements may not indicate the movement of different individuals, as one individual may have moved more than once during the survey period. The data indicate that 1,146 (2333-1187) individuals definitively out-migrated. They represent 823 single persons and 89 households with 323 members. The mean size of these households was thus 3.63, considerably smaller than the overall mean household size mentioned above. As household size is positively associated with household income (see Chapter 4), the data on out-migration indicate that poorer, more vulnerable households change their residence more often than the less poor slum households.

For the duration of the survey, out-migration represents 53.5% of the mid-point population. Out of these, about half re-migrated. In-migration stands at about 17%. The table further shows fairly stable percentages for in-, out- and re-migration over the surveymenths, except for May, the first survey month (re-migration is almost zero, because out-migration in the previous month was not recorded), and for the month of June (in the beginning of the month there was an important Muslim festival Eid-ul-Azha, when households are used to visit relatives in the family's country home).

Period	Mid-point popula-	In-migration		Out- migration		Re-migration	
	tion	No	8	No	&	No	*
1-31.05.93 1-30.06.93 1-31.07.93 1-31.08.93 1-30.09.93 1-31.10.93	4376 4368 4377 4325 4364 4349	135 154 127 115 104 90	3.1 3.5 2.9 2.7 2.4 2.1	280 592 406 393 325 337	6.4 13.5 9.3 9.1 7.4 7.8	17 433 189 198 162 188	0.4 9.9 4.3 4.6 3.7 4.3
1.05-31.10	4360	725	16.6	2333	53.5	1187	27.2

Table 6: Overall migration pattern by survey-month

#### 2. OUT- AND RE-MIGRATION

Table 7 shows that out of the total number of out-migrations, about half did not remigrate during the survey period. From those who re-migrated, slightly more than half out-migrated for one to two weeks, about 30% for more than three weeks, and another 17% for

two to three weeks.

Table 7:	Out-	and	re-migration	bу	duration	of	out-migration
----------	------	-----	--------------	----	----------	----	---------------

Duration	Out- No	migrated	Re-migrated
Re-migrated after 4 - 7 days 8 - 14 days 15 - 21 days > 21 days Definitively out-migrated	91 551 207 338 1146	3.9 23.6 8.9 14.5	7.7 46.4 17.4 28.5
Total	2333	.100.0	100.0

The total number of long-term out-migration represents 26.3% of the survey midpoint population (1146/4360). The month-wise mid-point populations, however, remained similar during the survey. Consequently, the out-migrated individuals were replaced by in-migration (725/1146 or 63.3%), and births (302/1146 or 26.4%). The remaining cases are 'missing' (1) re-migration cases in the first survey-month (see Table 6), and (2) in-migrations between the mid-point of the last survey-month and the completion date of the survey (i.e. between 16 and 31 October 1993).

Overall, two-thirds of slum dwellers out-migrate to the rural area, and one-third to other areas of Dhaka-City (Table 8). They rarely moved to other urban areas, although only a few out-migrated to other countries. Migration, within Dhaka-City, increases to more than 40% of the cases when only confirmed out-migrated individuals are considered, while more than half of confirmed out-migration cases went to rural areas.

Table 8: Destination area of out-migration cases

Destination	Re-m	igrated		itively	All		
	No	8	Мо	*	No	8	
-Rural area -Within Dhaka-City -Other urban area -Abroad -Unknown	883 261 40 3	74.39 21.99 3.37 .25	616 474 38 4 14	53.75 41.36 3.32 .35 1.22	1499 735 78 7	64.25 31.50 3.34 0.30 0.60	
Total	1187	100	1146	100	2333	100	

#### Reasons for out-migration

The individual reasons for out-migration are given in Tables 9 and 10: the first one breaks them down by duration of out-migration, and the second one reports the reasons by survey-month.

The most important reasons for out-migration were social visits and joining other family members (Table 9). Together with the dependents who out-migrate, these two reasons represent more than 60% of all out-migrations. Economic reasons (6.8%) are mainly job-related, and flood is the main environmental reason. Family feud or split was reported as a reason for another 6% of out-migrations. Out-migration for delivery constitutes another reason (2.0%). Therefore, 14.5% of all pregnant women who gave birth during the survey out-migrated for the delivery. Treatment of illness was as important as delivery as a reason for out-migration, and other non-specified causes make up another 19% of all cases.

When the duration of out-migration was considered (Table 9), some disparities could be discerned:

- -social visits become far less important with increasing duration, while joining other family members (and with it the dependents) becomes more important;
- -economic reasons almost triple between the duration categories 'less than 21 days' and 'definitive out-migration' (in the latter becoming 9%);
- -family feuds and splits become more important in the categories more than 21 days and definitive out-migration.

Table 9: Reasons for out-migration by duration of out-migration

		Durat		11A					
Reason	=<21 days		> 21 days		Definitive No *		No	ŧ	
Social visit	452	53.2	111	32.8	93	<u> </u>			
Join family/Reunion	149	17.6	71	21.0	371	8.1	656	28.1	
Dependent	37	4.4	17	5.0	136	32.4 11.9	591 190	25.3 8.1	
Economic					1				
Job-related	26	3.1	28	8.3	104	9.1	158	6.8	
-move near job site	24	2.8	24	7.1	89	7.8	137	5.9	
-seek earning	6	. 7	و ا	2.7	56	4.9	71	3.0	
opportunities	11	1.3	10	3.0	23	2.0	44	1.9	
-other job-related	7	. 8	5	1.5	10	. 9	22	.9	
Loss house/land/earning	2	. 2	4	1.2	15	,1.3	21	.9	
Family feud/split	16	1.9	37	11.0	79	6.9	132	5.7	
<u>Environmental</u>	33	3.9	9	2.7	25	2.2	67	2.9	
Flood	31	3.7	3	. <b>9</b>	24	2.1	58	2.5	
River erosion	1	. 1	1	. 3	1	-	2	. 1	
Natural crisis	1	. 1	5	1.5	1	. 1	7	. 3	
To give birth	10	1.2	9	2.7	28	2.4	47	2.0	
Pregnancy			4	1.2		_	4	.1	
Treatment	23	2,7	12	3.6	9	.8	44	1.9	
Other reasons	101	11.9	34	10.6	264	23.0	399	17.1	
Unknown	2	. 2	6	1.8	37	3.2	45	1.9	
[otal	849	100	338	100	1146	100	2333	100	

With regards to the break-down of the reasons for out-migration by **survey-month** (Table 10), the following was observed:

- -social visits were the most important reason in the month of June, corresponding to the Eidul-Azha festivities, already mentioned above;
- -joining other family members showed a U-shape pattern over the months, i.e. high in the beginning and at the end of the survey, and low during the full monsoon period (this is in July and August). It appears that the rains act as an intervening factor in the decision to migrate. Perhaps slum dwellers do not want to leave their house uninhabited during full monsoon when heavy rainfall may damage the house and the property;
- -floods was an important reason in the months of May, July and August, but less important in June, and totally absent in September and October. This again corresponds with the period of full monsoon, and with the heavy rains in May in 1993.

Table 10: Reasons for out-migration by survey-month

		May		June	1 .	July	
Reason	No	*	No	*	NФ	*	
Social visit	67	23.9	229	38.7	111	27.3	
Join family/Reunion	104	37.1	163	27.5	80	19.7	
Dependent	18	6.4	37	6.3	29	7.1	
Economic	20	7.1	32	5.4	30	7.4	
Job-related	16	5.7	29	4.9	26	6.4	
-move near job site	8	2.9	14	2.4	14	3.4	
-seek earning opportunities	4	1.4	9	1.5	4	1.0	
-other job-related	4	1.4	6	1.0	8	2.0	
Loss house/land/earning	4	1.4	3	0.5	4	1.0	
Family feud/split	12	4.3	48	8.1	25	6.2	
Environmental	23	8.2	5	0.8	20	4 9	
Flood	21	7.5	4	0.7	15	3.7	
River erosion	2	. 7	]-		-		
Natural crisis	-		I	.2	5	1.2	
To give birth	2	.7	10	1.7	. 8	2.0	
Treatment	1	. 4	9	1.5	7	1.7	
Other reasons	33	11.8	56	9.5	81	20.0	
Unknown	[-		3	0.5	15	3.7	
Total	280	100	592	100	406	100	

	Au	gust	Sej	tember	00	October	
Reason	No	*	No	<u> + _ </u>	No	ŧ	
Social visit	109	27.7	66	20.3	74	21.9	
Join family/Reunion	70	17.8	83	25.5	91	27.0	
Dependent	32	8.1	40	12.3	34	10.1	
<u>Bconomic</u>	25	6.4	20	6.1	31	9.2	
Job-related	22	5.6	15	4.6	29	8.6	
-move near job site	11	2.8	12	3.7	12	3.6	
-seek earning opportunities	10	2.5	3	. 9	14	4.1	
-other job-related	1	. 3	l -		3	. 9	
Loss house/land/earning	3	. 8	5	1.5	2	.6	
Family feud/split	20	5.1	7	2.2	20	5.9	
Environmental	18	4.6	1	.3			
Flood	17	4.3	1	. 3	-		
River erosion	1-		1-	-	- '		
Natural crisis	I	. 3	-		-		
To give birth	15	3.8	6	1.8	6	1.8	
Pregnancy	4	1.0	<b>i</b> -		1-		
Treatment	11	2.8	7	2.2	9	2.7	
Other reasons	71	18.1	86	26,5	72	21.4	
Unknown	18	4.6	9	2.8	-		
Total	393	100	325	100	336	100	

The <u>main reasons</u> for <u>re-migration</u> are summarised in Table 11. One particular reason, namely joining other family members and family reunions, accounts for more than 85% of all the reasons.

Table 11: Reasons for re-migration

Reasons	Ио	+
Join family/Reunion	1013	85.3
Social visit	61	5.1
Economic	65	5.5
Job-related '	65	5.5
-move near job site	26	2.2
-seek earning opportunities	33	2.8
-other job-related	6	0.5
Loss house/land/earning	-	
Other reasons	48	4.0
Total	1187	100

#### 3. IN-MIGRATION

The <u>origin</u> of in-migration cases reflects the destination for out-migration cases: about two thirds come from the rural areas, about 30% from within Dhaka-City, and the remaining from other urban areas. (Table 12)

Origin	In-migrated			
	No	- %		
-Rural area	480	66.2		
-Within Dhaka-City	212	29.2		
-Other urban area	32	4.4		
-Unknown	1	.1		
Total	725	100		

Table 12: Origin of in-migration cases

The <u>main reasons</u> for <u>in-migration</u> (Table 13) are social visits (40%), joining other family members (18%) and economic reasons (17%). Economic factors are thus about twice as important here as a reason for in-migration (compared to out-migration). Moreover, the economic reasons for in-migration are almost all job-related, with the most important one seeking earning opportunities (12%). Treatment of illness and family events, such as marriages, family feuds and splits, account for about 3% of the cases each, while about 13% are unspecified.

Table 13: Reasons for in-migration

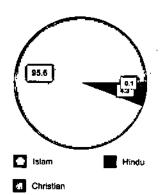
Reasons	No	t
Social visit	288	39.7
Join family/Reunion	128	17.7
Dependent	44	6.1
   Economic	123	17:0
Job-related	120	16.6
-seek earning opportunities	91	12.6
-move near job site	22	3.0
-other job-related	7	1.0
Loss house/land/earning	3	0.4
Family feud/split	15	2.1
Marriage	8	1.1
Environmental	5	0.7
Treatment	23	3.2
Other reasons	92	12.7
Total	725	100

# CHAPTER 2 SOCIO-CULTURAL ASPECTS OF SLUM HOUSEHOLDS

#### A. RELIGION

Although the proportion of Hindu families in the Bangladesh society, at large, is about 10 to 15%, in the slums they represent only 4%. (Fig. 2) The main reason for this may

Fig 2 - Religion of Household

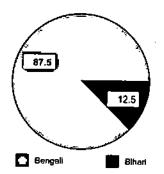


be attributed to the fact that, when Hindu families move from the country-side, they do so due to socio-economic problems in the local communities owing to their religious affiliations. As a result, they often resettle straight away in India, instead of migrating to the slums where they may expect to be confronted with similar problems as those which drove them from the country-side in the first place.

### **B. ETHNIC COMPOSITION**

In the slums of Dhaka-City there is a minority of Pakistani nationals, stranded in Bangladesh since its independence in 1971. In our study they represent about 12% of the

Fig 3 - Household Ethnicity



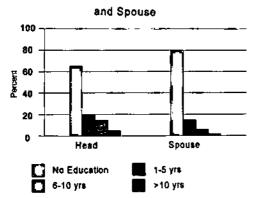
population (Fig. 3) They are called Bihari, because they were originally form Bihar which is located next to the state of West-Bengal. Being Muslims, they moved to the then East-Pakistan at the time of partition of British India into India and Pakistan. However, since the independence of Bangladesh, they have never been officially recognized as citizens of Bangladesh, and are still awaiting repatriation to Pakistan. They organise themselves in distinctive communal groups, and keep Urdu as their dominant language.

In Bangladesh there are a number of tribal people representing about 1% of its total population and mainly dwelling in the border areas. No household, of tribal origin, was found in the survey sample.

#### C. EDUCATION

The education levels of the household head and spouse show the all too obvious problem of high illiteracy rates among slum dwellers, particularly among the spouses. (Fig.

4) Education was defined in this survey as any form of formal training, whether it be private, religious or otherwise.



#### D. SOCIAL STRUCTURE

Kinship and geographical origin are the bases for strong networks among slum dwellers, particularly during the time of initial settlement including the times when they are getting a job.<sup>21</sup>

The traditional power structure is based on the bastee landlord who may himself be an illegal occupier when living on public land. He is protected and assisted by his musclemen, called mastans<sup>6</sup> who make their living by extording money out of tenant dwellers. The latter are almost powerless, because police forces in many of these cases ignore the mastans' activities. At times they even collaborate with the mastans when the latter make false charges to subdue tenant dwellers. Only self-help group formations, motivated by non-government organisations or otherwise, may provide tenant slum dwellers with the strength and power to counteract the extortions and threats made by mastans. Furthermore, theft and addiction to drugs, alcohol and gambling are common in urban slums. The worst crimes, but less frequently mentioned, are murders and housewives being subjected to physical and mental violence by husbands and other male household members.<sup>22</sup> Finally, prostitution, often a consequence of rural poverty, is common among poor slum women under its various forms of streetwalking/floating prostitutes and brothel prostitution.<sup>23</sup>

<sup>&</sup>quot;Mastan - in Bengali literally means a strong and powerful person in the society. The term used to indicate a person who has special spiritual gifts and healing power. However, nowadays it is associated with persons who earn their living by means of unlawful activities.

# CHAPTER 3 ECONOMIC SITUATION OF SLUM HOUSEHOLDS

#### A. HOUSEHOLD INCOME

# Introduction: Data collection on household income and data computing

For every survey-month and in every household under investigation in our study, information on household income and income forgone were collected in the following ways: - on every household member, data on at least three occupations were gathered whether they were income-generating or not;

-for the income-generating ones, the following series of questions were addressed: (1) the time-frame within which the income was earned, i.e. the 'wage-unit': daily, weekly or monthly, (2) the average income per wage-unit, and (3) the number of wage-units for which the income was forgone and the reasons behind it.

These data were then analyzed to assess the following: (1) monthly individual household member income, (2) for all the members of the household combined, the household income for the considered month, and (3) the monthly income forgone and its reason.

For every household, the average monthly household income was then computed by adding up all the monthly incomes and dividing the sum by the number of months for which the data on income was obtained (which coincides with the number of months during which the household was followed up in the survey).

Finally, one should not confuse income with revenue which includes expenditure incurred for the economic activity that generates the income. Two examples from our study are given in Annex 2 to illustrate this difference.

# Composition of monthly household income

The level of household income is given in Table 14. The mean household monthly income stands at taka 2758 (Standard Error 55), or US\$69.7 The mean is higher than the median (17%) and the geometric mean (13%).

The distribution of household income is thus skewed to the right. This is also reflected in the values of the 10th and 90th percentiles, the former being much nearer to the median than the latter.

It was found that this household income included upto 2% loans (1%), grants (.5%) and savings (.5%).

 $<sup>^\</sup>prime$  Taka is the national currency of Bangladesh. In 1993, taka 40.- equaled one USDollar.

Table 14: Measures of central tendency for monthly household income

1	Median	P10	P90	Mean	SE	Geon mean	netric SE
Monthly revenue	2300	1310	4675	2758	55	2395	1.01

#### 1. CLASSICAL MONTHLY HOUSEHOLD INCOME CATEGORIES

Classical income categories based on the average mean income per household are considered here. Table 15 shows that two-thirds of the survey sample households fall in the categories between taka 1,001 and 3,000 per month and another 15% in the category taka 3001 to 4000.

Table 15: Classical household income distribution

Categories (taka/month)	n (No=905)	g.
=< 1,000	30	3
1,001 - 2,000	321	36
2,001 - 3,000	276	31
3,001 - 4,000	137	15
4,001 - 5,000	69	8
> 5,000	72	8

# 2. MONTHLY HOUSEHOLD INCOME BY INCOME QUINTILES

Another way of distributing households according to income is to average household income by household quintiles. In general the advantage of using quintiles, deciles, quartiles, etc for presenting income in a population is that the households are equally distributed over a number of categories according to their income. The results for our study are shown in Table 16, where income quintiles have been made by using the following measures of central tendency: medians, means and geometric means and standard errors for the latter two.

Table 16: Measures of central tendency for household income by income quintile

Income	No	Average income/HH						
Quintile	HНs	Median	Mean	SE	Geome Mean	etric SE		
1 2 3 4 5	181 181 181 181 181	1310 1803 2300 3045 4675	1250 1815 2312 3086 5328	21.1 9.0 13.6 22.0 137.1	1207 1811 2305 3072 5087	1.02 1.01 1.01 1.01 1.02		
Overall	905	2300	2758	55.0	2395	1.01		

The three measures of central tendency used here are similar in income quintiles

2,3 and 4. However, in income quintile 1, the median is greater than the mean, and the opposite of this is true for income quintile 5. This is the result of the income distribution in income quintile 1 being skewed to the left, and in income quintile 5 towards the right. This is also expressed in the higher standard errors relative to the value of their respective means. For income quintile 5, the skewedness to the right may be solved by using the geometric mean, which value is indeed situated between the mean and the median. For income quintile one, however, this transformation is inappropriate: this is expressed in the geometric mean which is smaller than the median.

Income disparities among slum households are considerable. Compared to the mean household income of the lowest income quintile, the income of the second quintile is about 50% higher, of the third quintile about twice as much, of the fourth quintile about 2.5 times higher, and of the fifth quintile 4.5 times higher.

#### 3. TOTAL INCOME GENERATED BY AGE AND GENDER

Overall, the 905 households under investigation totaled 9479 income-earning months and an overall income of more than 14 million taka, or US\$ 353,008. About 11% of this can be ascribed to the female income-earners. (Table 17)

Ninety-two percent was earned by adults, almost 3% by the age groups between 13 to 15 and 16 to 18 each, and the remaining 2% by the 6 to 12 year age groups. These proportions are lower for the male child and adolescent males compared to the corresponding female age-groups, whereas the male adults are, by far, the largest contributors.

In the female sub-group, the relative contributions of children and adolescents represent one fourth of the sub-groups' total income, while in the male sub-group the contribution is only 5%.

Age-	MALE		MALE FEMALE			TOTAL			
group	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
6-12 13-15 16-18 >18	402 404 329 6000	154,786 266,010 272,520 11,864,869	1.2 2.1 2.2 94.5		132,903 140,387 116,784 1,172,073	9.0 7.5	761 662 522 7534	287,689 406,397 389,304 13,036,942	2.0 2.9 2.8 92.3
Total	7135	12,558,158	100	2344	1,562,147	100	9479	14,120,332	100

Table 17: Distribution of income by age and gender

(1) = Number of income-earning months; (2) = Total income generated; (3) = percentage.

#### 4. MEAN MONTHLY INCOME BY AGE AND GENDER

Table 18 illustrates the growing disparity in income with age between females and males. From a similar monthly income in the 6 to 12 years age-group, income from males is 21%, 37% and 159% higher than from females for the 13 to 15, 16 to 18, and above 18 years age-groups respectively. A similar bias is observed when female and male wages are compared for the same occupation category. (See section C., Occupation pattern, Table 28)

Table 18: Mean monthly income by age and gender

Age-group	MALE	FEMALE
6-12	385	370
13-15	658	544
16-18 >18	82 <b>8</b> 1977	605 764
A11	1760	666

#### B. HOUSEHOLD EXPENDITURE PATTERN

# 1. LEVEL OF OVERALL HOUSEHOLD EXPENDITURE. COMPARISON WITH OVERALL HOUSEHOLD INCOME

Table 19 summarises medians, means and geometric means for the overall monthly household income and expenditure. First, it shows that, the distribution of household expenditure is being skewed to the right, as is the household income, and, secondly, depending upon the measure, the overall monthly expenditure is 10 to 18% lower than the overall monthly income. The standard errors of the means being quite small, relative to the value of the means, indicate that not only there is not that much variability in the individual household data, but it also results in the difference between the means of income and expenditure indicated being highly statistically significant. (P<.0001)

Table 19: Measures of central tendency for overall monthly income and expenditure

	4	-			
	Median	Mean	SE	Geome mean	etric SE
Monthly income	2300	2758	55	2395	1.01
Monthly expenditure	2092	2339	39	2127	1.01

Usually, it is accepted that data on household income, because of their sensitive nature, tend to be under-reported and thus lower than expenditure data. Our data reveal the contrary. This may be explained by the following:

- the disaggregated, detailed way in which data on occupation-related income have been collected in every household; (See the introduction given in the previous section)
- possible under-reporting of expenditure by the main respondent, usually the spouse of the household head, on expenditure items, such as food and rice (the household head in a Muslim household does most of the shopping), and on personal expenses of the household head which are not always known by the main respondent, e.g. some food and drinks purchased by an income-earner during his working time and some small maintenance costs borne by a rickshaw-puller for his rickshaw.

### 2. MONTHLY HOUSEHOLD EXPENDITURE BY ITEM

Table 20 details measures of central tendency for overall average monthly household expenditure of all 905 households in our study and the break-down by expenditure items.

As may be expected, the distribution for all items is skewed to the right (the means being greater than the medians). The most appropriate approach would be to use the geometric mean values. However, as explained in the footnotes, the overall medians and geometric means are not the sum total of the values found for each of the expenditure items (the percentages in the table below have as basis the values of the latter overall measures).

	Average Expenditure								
Expenditure item	Median	1 %	Mean	8	SE	G Mean	eometri	SE	
RICE FOOD EDUCATION HEALTH CARE CLOTHING HOUSING GEWS* OCCUPATION OTHER	540 660 0 48 49 163 8 23 355	25.8 31.5 - 2.3 2.3 7.8 .4 1.1	571 717 38 93 77 223 35 94 491	24.4 30.6 1.6 4.0 3.3 9.5 1.5 4.0 21.0	8.3 10.7 3.8 7.9 3.4 9.0 2.8 6.0 18.7	522 661 4 41 27 33 7 16 351	24.5 31.1 0.2 1.9 1.3 1.6 .3 .8	1.01 1.01 1.07 1.05 1.06 1.10 1.06 1.08	
1) Total 2) Overall average expenditure	(1846) 2092 <sup>8</sup>	100	(2339) 2 <b>33</b> 9	100	38.7	(1662) 2127"	100	1.01	

Table 20: Average monthly household expenditure pattern

\*GEWS=outlays for formal connections to gas, electricity, water, and sanitation, whether they are legal or illegal.

In view of what precedes, the normal mean was chosen to compare the relative contribution of the cost items in total expenditure.

The overall median is indeed taka 2092. The sum of the median values for the different cost items is taka 1846. The reason for the difference is due to a difference in the level of computing. The following mathematical example illustrates this for 3 hypothetical households:

	Rice item	Food item	Total HH Expenditure
HH1	40	60	100 }
HH2	60	50	110 } overall median = 110
<u>нн3</u>	30	90	120 }
Model	- 40	<del></del>	

Median 40 60 -----> Sum of the medians of the 2 items = 100. "The overall geometric mean of taka 2,127 differs from the sum of the different cost items, i.e. taka 1662, because of the logarithmic nature of the data. The mathematical example uses the same 3 hypothetical households as in the previous footnote;

	log	log	Total HH Expenditure
нн1	1.602	1.778	2.000 }
HH2	1.778	1.699	2.041 } overall mean log=2.04> G.mean=109.7
ннз	1.477	1.954	2.079 }
Mean l	og 1.619	1.810	
G.mean	= 41.6	64.6	> Sum = 106.2.

Overall, there are five main categories of items in accordance to their contribution to the overall household expenditure:

- 1) 'food' and 'rice' represent together about 55% of total household expenditure;
- 2) 'other expenses' account for 21%. This category includes miscellaneous expenses, such as for tea, cigarettes and betel leaf (a kind of leaf filled with spices and nuts), toilet articles (soap), leisure (e.g. attending cinemas), and sending money to relatives in the villages;
- 3) 'housing' represents 9%;
- 4) 'health care', 'clothing' and 'occupation-related expenses' each account for 3 to 4% of overall household expenditure; and finally,
- 5) 'education' and 'GEWS' contribute each 1.5% to overall household expenditure.

#### 3. HOUSEHOLD EXPENDITURE PATTERN OVER THE SURVEY-MONTHS

The distribution over the survey-months (see Annex 3 for the tables), shows the following, when the means are considered:

- 1) the overall household expenditure level remains constant over the survey-months;
- 2) the mean expenditure per item is statistically similar for all items over the survey months, except for:
  - 'food', that is slightly lower in the last two survey-months;
  - 'clothing', that is higher for the first survey-month. This month corresponded to the month of May: the Muslim Eid-ul-Azha Festival was in 1993 on 2 June. People in the slums buy clothes for that occasion instead of slaughtering animals, which is left to the better-off in the urban society.

However, it should be noted that when the medians are considered, 4 items, i.e. 'education', 'clothing', 'GEWS', and 'occupation-related expenses' have in all surveymenths median values of zero (except 'clothing' in survey-month 1). In each survey-month, there was no expenditure regarding these items for more than half the households, (but not the same households in every survey-month, because the overall medians per item on the previous page are not zero).

#### 4. HOUSEHOLD EXPENDITURE PATTERN BY INCOME QUINTILE

When the distribution over income quintiles is considered (see Annex 4 for the tables), the following is observed:

With regards to the overall mean household expenditure level:

- there is a gradual increase from Taka 1370 for the lowest income quintile up to Taka 3843 for the highest one. This is comparable with the relative increase observed for income in the previous section;
- for income quintile 5, the standard error is about 3 times the number in the other income quintile: this indicates that more variability is found in the overall household expenditure, as well as item-wise expenditure in this income quintile.

There are substantial differences and important trends in the <u>relative</u> contribution of expenditure items when <u>mean expenditure per item</u> over the income quintiles is considered:

- there is a steady decline in relative importance of the items 'food' and 'rice' with rising income levels (from 63% in the lowest quintile to 50% in the highest quintile). In addition, expenditure on 'food' compared to 'rice' becomes relatively more important for higher income categories, indicating a higher quality food intake with the increase of income;
- conversely, expenses for 'education', 'clothing' and 'GEWS' become relatively more important with increase in income level;
- expenses for 'housing' are 50% lower for the highest income quintile compared to all other quintiles, and 'other expenses' are almost double in the two highest income quintiles; 'occupation-related expenses' are about 50% lower in the lowest quintile compared to all the others;
- finally, there is no particular trend in expenditure for 'health care' from income quintile 1 to 4; only in the highest quintile it is about 75% higher in relative terms than in the other quintiles.

In <u>absolute terms</u>, the <u>mean contributions per item</u> over the income quintiles show the following, when the lowest income quintile is compared with the two highest income quintiles:

- expenses for 'rice' and 'food' combined are 1.6 and 2.2 times higher for the fourth and the fifth quintile respectively;
- expenses for 'education' are 13 and 40 times higher;
- expenses for 'health care' are 1.8 and 4.3 times higher;
- expenses for 'clothing' are 3.1 and 5.2 times higher;
- expenses for 'housing' are 1.8 and 1.5 times higher;
- expenses for 'GEWS' arc 3.3 and 10.1 times higher;
- 'occupation related expenses' are 3.6 and 5.3 times higher;
- 'other expenses' are 2.3 and 4.3 times higher.

In conclusion, it can be said that expenses for 'housing' and food items have in absolute terms the smallest difference. Housing is the least 'compressible' household expense. The factors leading to the increase of food roughly corresponds to the factors that conform to the increase of household size between income quintile 1 at the one hand and income quintiles 4 and 5 at the other hand. (See section H.3. of this chapter for the association between household size and household income) In contrast, those for 'education' have by far the biggest difference, followed by expenses for 'GEWS', expenses for 'clothing' and 'occupation-related expenses', and finally by 'other expenses' and expenses for 'health care'.

The <u>medians per item</u> over the income quintiles generally confirm the differences and trends found for the means per item.

#### C. OCCUPATION PATTERN

This section describes a number of aspects on (1) income earners, (2) occupations that generate income, including female occupation, and, (3) child and adolescent occupation.

### 1. NUMBER OF INCOME EARNERS PER HOUSEHOLD

Overall, nearly 50% of the households in our suvey have only one income earner (Table 21). About 28% and 14% of them have 2 to 3 income earners respectively. Another 9% account for those households that have 4-5 income earners each. These proportions remain similar during the 6 survey-months. In each month a few households, however, had no income-earning occupation at all.

Table 21: Number of income earners per household: average and by survey round

No of income earners per HH	Mon No	th 1	Mon No	th 2	Mon No	th 3	Mon <sup>a</sup> No	th 4	Mon:	th 5	Mon No	th 6	Ave:	age ,
0	2	. 2	7	. 8	1	, 1	2	. 2	2	. 3	3	, 4	3	.41
1	417	47	406	47	405	48	395	48	387	48	385	47	399	48
2	268	30	249	29	245	29	223	27	219	27	232	29	239	28
3	122	14	126	14	111	13	122	15	116	14	117	14	119	14
4	47	5	58	7	54	6	48	6	59	7	46	6	52	6
5	23	3	18	2	18	2	22	3	19	2	22	3	20	2
6	4	. 5	6	.7	б	.7	5	. 6	7	. 9	5	.6	6	. 7
7	2	. 2	1	. 1		-				-	1	. 1	1	.1
8		-		-	1	.1	1_	. 1	1	.1		_	1	. 1
Total	885	100	871	100	841	100	818	100	810	100	911	100	839	100

It should be noted that the data in the table above and the next tables in this section include household members whose *primary* occupation is income-generating. As will be shown later, some members (income-earners as well as non-income-earners) may have a second or third occupation that is income-generating.

#### 2. DEMOGRAPHIC CHARACTERISTICS OF INCOME EARNERS

Overall, when there is *one income earner* in the household, this is almost invariably the household head, with a limited number of single female headed households. (Table 22, next page)

If there are two income-earners in the household, this is mostly the household head and his spouse or another household member exceeding the age group of 15 years. In addition, in 15% of the cases with two income earners, the second income earner is less than 15 years of age. The most likely combinations in the case of three income-earners are the household head and two adults, or the head plus one adult and one child.

These demographic characteristics do not go through considerable changes over the six survey-months.

Finally, the combinations where children are involved represent 18% of all categories considered.

Table 22: Demographic characteristics of income earners

			-	_										
Categories	Mont	h 1	Mont	h 2	Mont	h 3	Mont	h 4	Mont	h 5	Mon	th 6	Ave	rage
No of Income Earners (with >1 income earning occupation)	14! (20		143		13: (22	-	13 (2 <b>2</b>		13 (21			13 18)	_	373 (14)
HOUSEHOLDS WITH:	No	8	No	Ĉ.	No	æ	No	શ્રુ	No	8	No	8	No	9
Single Income Earners Head Male Female	391 13	44	381 15	44	372 19	44	<b>36</b> 6 16	45 2	363 9	45 1	359 15	44	372 15	<b>44</b> 2
Non-Head Male Female	9	1 . 5	7	1,3	9 5	1 .6	8 5	1 .6	11 4	1 .5	8	1 .4	9 4	.5
Two Income Earners Head(M)+Spouse	97	11	93	11	80	10	74	9	72	9	76	9	<b>8</b> 2	10
Head+Adult(>15 yrs)	109	12	101	12	102	12	97	12	99	1.2	101	12	101	12
Head+Child<15 yrs	50	6	46	5	53	6	40	5	38	5	42	5	45	5
Other combination	12	1	_9	1	10	1	12	1	10	1	13	2	11	1
Three Income Earners Head+Spouse+Adult(>15 yrs)	20	2	13	1	18	2	12	1	18	_2	16	2	16	2
Head+Spouse+Child<15 yrs	21_	2	20	2	12	1	13	2	17	2	19	2	17	2
Head+2 Adults(>15 yrs)	35	4	38	4	30	4	37	5	32	4	35	4	35	4
Head+2 Children <15 yrs	8	1	11	1	11	1	11	1	10	1	9	1	10	1
Head+Adult+Child	29	3	35	4	31	4	40	5	31	4	28	3	32	4
Other Combination	9	1	9	1	9	1	9	1	8	1	10	1	9	1
All other combinations All adults Adults + Children	76 31 45	9 4 5	83 27 56	10 3 7	79 26 51	9 3 6	76 29 47	9 4 5	86 31 55	11 4 7	74 27 47	9 3 6	79 29 50	9 3 6
Total N of Households	885	100	871	100	841	100	818	100	810	100	811	100	839	100

#### 3. TYPE OF INCOME EARNER BY WAGE UNIT

Table 23 details the number of income-earners with income for the considered month. An equal proportion (i.e. a little less than 50%) of income earners are daily or monthly wagers. Only 7% are weekly wagers. These proportions remain constant over the survey period.

Survey-	Mont	hly	Week	:1у	Dai	Total	
month	No	E	No	8	No	8	No
May	727	46	112	7	741	47	1580
June	728	47	111	7	721	46	1560
July	709	47	99	7 -	714	47	1522
August	694	46	95	6	710	47	1499
September	705	47	99	7	697	46	1501
October	706	47	92	6	694	47	1492
Average	712	47	101	7	713	47	1526

Table 23: Distribution of income earners by wage unit

Considering the income earners' gender and status in the household, Table 24 shows that, as indicated above, there are overall only a limited number of income-earning female household heads. They represent, however, more than 10% of the heads in the category of monthly wage-earners. In this category there are also substantially more female than male 'other' income-earners, while in the other two categories they only constitute about 45% (daily earners) and 25% (weekly earners) of the other income-earners respectively.

	<u> </u>	Da	ily			Wee	kly		•	Mont	hly	
Survey-	Нe	ad	Oth	ers	Не	ad	Oth	ers	Н€	ead	Oth	ers
month	Male	Fema le	Male	Fema le	Male	Fema le	Male	Fema le	Male	Fema le	Male	Fema le
May June July August September October	519 501 478 467 452 439	8 12 12 6 5	150 142 148 162 163 168	64 66 76 75 77 80	24 22 19 16 20	1 1 - 1 1	67 71 67 62 58 59	20 17 13 16 20	258 261 256 252 262 270	32 29 30 31 29 34	168 178 181 180 174 176	269 260 242 231 240 226

Table 24: Distribution of income earners by wage-unit, household status and gender

#### 4. OVERALL INCOME GENERATING OCCUPATION PATTERN

Islam et al. indicate that most slum dwellers find employment in the informal sector that accounts for about 65% of all employment in Dhaka. The main occupation categories in the slums include manual labour (such as on construction sites)(16%), transport workers (such as rickshaw pullers)(14%), small business and street trading (12%), domestic and other services (10%), and, in the formal sector low-level office work (13%) and factory work (6%). However, much of this is on an irregular or daily basis.<sup>24</sup> The overall income-

generating occupation pattern in our study is given in Table 25 for survey-month 3 (whether income-generating or not for this month). It shows that about one third of the total population are income earners. Amongst the income earners, there are about equal proportions (12-15%) of rickshaw/pushcart pullers, service workers, sales workers, and textile/garment workers. Less important categories are labourers (5%), small business workers (4%), and vehicle drivers.(3%)

As mentioned above in the section on income, data have been gathered on possible second and third occupations for a given individual. For survey-month 3, 227 secondary (86% male) and 25 tertiary (92% male) income generating occupations were reported. No specific occupation categories can be found to be prominent in these occupations.

In survey-month 3, data on 847 households were collected. So, per household, there are 1578/847= 1.86 income-earners, and, (1578+227+25)/847= 2.16 income-earning occupations.

Table 25: Primary income-generating occupations(survey-	/-month :	3)
---	-----------	----

Categories	No	(8)	n	8
1. Production, construction &	839	(53)		
transportation workers	1			
-rickshaw/pushcart pullers			230	15
-textile/garments workers			194	12
-labourers	1		81	5
-small business workers (food/beverage/			67	4
clothing/furniture/shoe wear/smith)			•	
-vehicle drivers	j		50	3
-brick/stone breakers	f		21	3 1
-house builders/masons	Ì		23	1
-others	1		173	11
2. <u>Service workers</u>	227	(14)		
-housemaids, ayahs		, ,	73	5
-janitors/peons	ŀ		49	5 3 2 2 1
-cooks/bearers			33	2
-barbers/hairdressers			27	2
			19	1
-sweepers			26	2
-others	217	(14)	***	_
3. <u>Sales workers</u>	~~ ′	( /	56	4
-street vendors	- 1		51	
-shop proprietors			11	<b>3</b> 1
-traders			13	1
-scavengers -others	ļ		86	5
	295	(19)		-
4. Other occupations		(+-/		
Total (%)	1,5	578 (	37)	
Total population	4.3			

#### 5. FEMALE OCCUPATION

When income generating activities of females are considered for the same surveymenth 3, we notice in Table 26 that, overall, about one fourth of the income earners are female. Typically female occupations for income generation are textile/ garment workers

(33%), service workers (22%), particularly house personnel, such as housemaids and 'ayahs' (this is house personnel taking care of the children of the family where they are employed), and finally brick/stone breakers, labourers and other construction workers (15%).

Main Categories	No	(ક) ક
<ol> <li>textile/garments workers</li> <li>service workers (housemaids,</li> </ol>	130 86	33 22
<pre>ayahs, cooks/bearers etc.) 3. brick/stone breakers, labourers,     other construction worker</pre>	60	15
4. sales workers 5. all other	20 96	. 5 25
Total Female	392	(25) 100
TOTAL (Male and Female)	1,578	(100)

Table 26: Female income generating occupation

In Annex 5, the overall and female income generating occupation patterns for the survey-months 1 and 5 are presented. The proportions found for these months of the different occupation categories presented above, are similar to those found for survey-month 3.

#### 6. INCOME GENERATING OCCUPATION BY INCOME LEVEL

The tables in Annex 6 on overall and female income generating occupations by income quintiles suggest a number of associations. These particularities have been summarised in Table 27:

- compared to the total number of individuals in each income quintile, the proportion
  of income earning occupations is similar in all the income quintiles. However, the
  number of income earning occupations per household increases with household
  income;
- there is a statistically significant downward trend in the percentage of female income-earning occupations with increasing income level ( $\chi^2$  for trend = 10.14; p=.00145);
- there are more rickshaw pullers, service workers, such as housemaids/ayahs and cook/bearers, and, less garment/textile workers and sales workers amongst income earning individuals in the lower income quintiles;
- about female occupation categories: with increasing household income level, there
  is an important increase in the proportion of working women employed in the
  textile/garments industry (from 18% and 31% in the two lowest income quintiles
  to 45% and 35% in the two highest income quintiles) and a corresponding decrease
  of service workers (particularly house personnel).

Table 27: Summary on the relation between income level and income generating occupation

the lower th	e household income
Overall income generating occupation	Female income generating occupation
-proportion of income earning occupations out of total number of individuals is similar as for other income levels, but their number per household increases with increasing household income -more .rickshaw pullers .housemaids/ayahs .cooks/bearers -less .garment/textile workers .sales workers	-the more females have an income- generating occupation  out of total number of working women: -more .housemaids/ayahs .cooks/bearers -less .garment/textile workers

# 7. INCOME-GENERATING OCCUPATION CATEGORIES BY TYPE OF INCOME EARNER AND WAGE

Table 28 indicates that typical income-generating occupations on a daily basis are rickshaw/pushcart pullers, brick-stone breakers, barbers and sales workers. In contrast, monthly income earners are for instance textile/garment workers, and house personnel.

Overall, the monthly income level of daily wagers is slightly lower than that of monthly wagers, and is approximately one third higher than that of weekly wagers. Furthermore, the overall monthly income for female wagers is about 2.5 times lower than for males. This difference is clearly greater for weekly earners (i.e. 4 times).

Occupation categories with the lowest monthly income (less than taka 1300 or US\$ 32.5) for males are labourers, service workers, street vendors, and textile/garment workers (except those on a weekly basis). For females, only a few categories have a monthly income of more than taka 1000.- or US\$ 25. These are service workers other than housemaids and ayahs, and sales workers. Street vendor is the sole occupation where monthly income of females is only about one third smaller than of their male counterparts.

Annex 7 indicates that the picture given here for survey-month 3 is fairly similar for survey-months 1 and 5.

Table 28: Distribution of income earners by wage unit, occupation category and monthly income (Survey-month 3)

Туре	Male occupat	ion		Female occup	atio	n
income earner	Category	No	Monthly income	Category	No	Monthly income
Daily income	Rickshaw/pushcart Labourers	220 42 30	1558 1262 2045			
earners	Vehicle drivers Brick/stone/house	27	1442	Brick/stone/	18	575
	Small business Other PCT*	21 60	2107 1753	labourers Other PCT	13	375
	Barbers Cooks/bearers Other servic workers	22 14 8	1293 1151 1089	Service workers	7	488
	Street vendors Shop proprietors Traders Other sales workers	40 29 6 56	1294 2165 2064 1457	Sales workers	14	958
	All others	51	1658	All others	36	564
	Overall	626	1585	Overall ,	88	595
Monthly income earners		47 34 19	872 1400 1432	Textile/garment	120	636
:	Vehicle drivers Other PCT	18 62	2661 1332	Other PCT	20	417
	Janitors/peons Sweepers Cooks/bearers/house	42 18 8	1650 1547 1663			
į	maids/ayahs Other service workers	22	2025	House maids/ayahs Other service workers	63 13	
:	Shop proprietors Street vendors Scavengers Traders Other sales workers	15 9 8 3 22	2807 1262 2009 5900 1619	Sales workers	4	1095
,	All others	110	2495	All others	52	947
	Overall	437	1828	Overall	272	684
Weekly income earners	Textile/garment Other PCT	10 40	1 <b>540</b> 807	PCT	9	293
	Service workers Sales workers All others	4 6 26	1063 2033 955	- Sales workers All others	1 3	
	Overall	86	1034	Overall	13	254
All	-	1149	1636	_	373	648

\*PCT = Production/construction/transport workers

#### 8. CHILD/ADOLESCENT OCCUPATION

A study by Razzaq et al. conducted for Radda Barnen-Bangladesh reveals that only about 20% of children attend school, while the others remain at home or are often relegated to streets as the consequence of household violence and disruption, or simply to find some supplement to the meager household income.<sup>25</sup> The findings of our study confirm this fact. Table 29 shows that overall, in the *male* group, 38% are non-school/non-income earners, one third are school attenders and 29% income-earners. In comparison, in the *female* group, the proportion of those not attending school nor having any income generating activity, is much higher (56%), while the proportions of those attending school and earning a living are much lower (26 and 18% respectively).

The proportion of girls attending school in the 6 to 12 years age-group is only 6% lower than that of boys, in the 13 to 15 years age-group it is similar (and drops for both from about one third in the first age-group to 20%). However, in the highest age-group the gender difference dramatically increases in favour of the boys. School attendance for boys only drops after the age of 12, while for girls there is a gradual decrease from 33% in the youngest age-group to a more 6% above 15 years of age, i.e. after class 10 in the Bangladesh school system.

Fifteen percent of the boys in the 6 to 12 years age-group earn income and this increases dramatically to about 60% in the following age-groups. In the female group, the highest proportion of income-earners is in the 13-15 years age-group (42%), while it is 11% and 23% in the 6-12 and 16-18 years age-groups respectively.

Finally, a large proportion of females in the 16 to 18 years age-group do not attend school, nor earn income (71%), irrespective of marital status (57 are married).

Table 29: Child and adolescent occupation pattern Survey-month 3)

	6 -	12	13 -	- 15	16 -	- 18	Total		
MALE	No	8	Ио	*	No	*	No	ş	
Income earners	63	1.5	69	57	51	61	183	29	
School	162	39	26	21	18	22	206	33	
Non-school/ Non-income	194	46	27	22	14	17	235	38	
Total	419	100	122	100	83	100	624	100	

	6 -	12	13 -	- 15	16	- 18	To	tal
FEMALE	No	8	No	8	No	8	No	8
Income earners	54	11	51	42	30	23	135	18
School	166	33	26	:22	8	6	200	26
Non-school/ Non-income	286	57	44	36	92	71	422	56
Total	506	100	121	100	130	100	757	100

In Annex 8, the distribution of child and adolescent occupation is given for the other survey-months. The patterns are fairly similar to the one presented here for surveymenth 3.

A look at the main income-earning occupations of these children and adolescents gives us the following data. (Table 30) More than two thirds of the females are employed in the garment/textile industry. More than one third of the boys work in the production/construction sector, about 20 % in the garment/textile industry, and 16% as sales workers.

Table	30:	Main	income	categories	in	child	and	adolescent
		j	income	geņerating	0001	apation	1	

Main income categories	Mal	e	Fema	le
	No=183	%	No=135	%
Garment/textile Prod/construct/Transport Service workers Sales workers All others	35 69 15 29 35	19 38 8 16	96 13 6 5	71 10 4 4 11

### D. INCOME-EARNING DISABILITY

# 1. INCOME-EARNING INCAPACITY AND WAGE-UNIT

We already discussed in section 3. of this chapter that in our study sample there are equal proportions of daily and monthly wagers (each about 47%), with the remaining 6 to 7% being weekly earners. Table 31 reveals that, overall, income-earning incapacity is reported in about 14% of the total number of 9154 wage-months registered during the longitudinal survey for all income-earners combined.

More than 90% of the wage-months with income-earning incapacity are reported by daily wagers. This corresponds to about one fourth of their wage-months. This is about 13 times and 6.5 times more than monthly and weekly earners respectively. It follows thus that households depending upon income from daily wagers, are by far the most vulnerable slum households, as far as income-earning incapacity is concerned.

Table 31: Income-earning incapacity by wage unit

Wage unit		al No of months	No of wa with ear inca	% (2) ×100	
	No (1)	8	No ·(2)	8	(1)
Daily Weekly Monthly	4277 608 4269	46.7 6.6 46.6	1141 24 87	91.1 1.9 6.9	26.7 4.0 2.0
Total	9154	100	1252	,100	13.7

# 2. CAUSES OF INCOME-EARNING INCAPACITY BY WAGE-UNIT

The main causes of income-earning incapacity by wage-unit are listed in Table 32. Environmental factors and illness combined to represent more than 70% of the causes that lead to incapacitation, regardless of the wage-unit.

However, it may be deferred that illness is by far the main cause of income-earning incapacity for monthly wagers (about 60%), whereas it is only about 31% for daily wagers. Factors contributing to this difference include:

- When the absolute numbers of wage-months with income-earning incapacity due to illness for each wage-unit are compared to the total number of wage-months per wage-unit, illness is seen as a cause of income-earning incapacity in more than 8.3% (353/4277) of daily wagers wage-months and in only 1.3% (54/4269) of monthly wagers wage-months. Presented in this way, illness serves as a much more important factor of impediment in daily wagers than in monthly wagers;
- We consider now the main cause for daily wagers, i.e. environmental factors, such as rain and floods. The longitudinal survey was conducted from May up to October 1993. Thus this period included the whole of the monsoon season: in 1993 rains started fairly early (in May) and it rained quite heavily throughout July, August and the first half of September. In addition, there were temporary floods in August in many slums.
  - In such conditions, all 'street' activities from which most of the daily wagers get earnings, such as rickshaw/pushcart pullers, street vendors, construction workers, like brick/stone cutters, and others (see the previous section for more details) are seriously hampered, if not totally disrupted. Hence, the presence of environmental factors, such as rains and floods, as main causes for income-earning incapacity in daily wagers.
- Finally, the total number of wage-months with earning incapacity for monthly earners is relatively small (87), and for weekly earners very small (24). The related findings should thus be taken with caution.

Table 32: Causes of income-earning incapacity by wage-unit

Causes of income-	Wage-unit							
earning incapacity	Da No	aily	We No	ekly %	Mor No	thly &	Total No	
Environment	483	42.3	10	41.7	10	11.5	503	
Illness	353	30.9	8	33.3	54	62.1	415	
Religious	88	7.7	2	8.3	2	2.3	92	
Visit to country-home	39	3.4	ŀ	-	5	5.8	44	
Birth	8	. 7	l	_	. 3	3.5	11	
Wedding .	3	.3		-	1	1.2	4	
Funeral	1	. 1	ļ	-	1	1.2	2	
Other	166	14.5	4	16.7	11	12.6	181	
Total	1141	100	24	100	87	100	1252	

The fluctuating contribution of illness into overall income-earning incapacity over time is illustrated in Table 33, that gives details about household-level loss of income during the 6-months longitudinal survey. It shows that:

1) Overall, (see column 4) loss of income tends to be higher in full monsoon months

- (15 July-15 September). In addition, on 2 June, there was an important Muslim religious event, Eid-ul-Azha, which is traditionally accompanied by visits to relatives in the country-side:
- During these months, the contribution of illness into income-earning incapacity (column 6) dramatically decreases (from about 50-55% down to 25%-35% during May and October);
- The lowest contribution of illness is noted in the month of August (24%), the month where as mentioned above rains were associated with floods in several slum areas of Dhaka-City.

1	No of HHs under		% of HHs s of Income	No and % of HHs with loss of Income due to Illness		
Period	investigat'n	No	% (4)	No	ક (6)	
May	866	161	19	88	55	
June	851	191	22	62	32	
July	847	198	23	61	31	
August	829	259	31	63	24	
September	813	152	19	53	35	
October	810	133	16	69	52	
Total household- months	5016	1094	22	396	36	

Table 33: Household-reporting on loss of income

Finally, Table 33 indicates that about one fifth of the households experienced loss of income at any time. The total number of *household-months* with income-earning disability during the survey period is 1094. However, the total number of *wage-months* with income-earning disability is 1252. (Table 3) Similarly, the total number of household-months with loss of income due to illness is 396, whereas the total number of wage-months with loss of income due to illness is 415. This indicates that in some households, there are more than one income-earners with income-earning disability per one given survey-month with reported income-earning incapacity.

# 3. INCOME-EARNING INCAPACITY BY HOUSEHOLD INCOME LEVEL

When income-earning incapacity is considered by household income level, the following can be considered as valid (Table 34):

- The absolute number of household-months with reported loss of income decreases with almost 60% from the lowest to the highest income quintile (while the number of all household-months combined only increases with about 10%);
- As a result, percentages of household-months with reported loss of income by income quintile decrease with increasing household income. For the lowest income quintile it is one third of all household-months, whereas for the highest incomequintile it is 'only' 12%;

The inter-quintile decrease is about one fourth between the lowest and the second quintile, and another 18% between the second and fourth quintile, and between the fourth and fifth quintile.

Table 34:	Income-earning	incapacity	by	household	income
				<del></del>	_

Income	No of HH-months	No and % of HH-months with loss of Income		
Quintile	under investigat'n	No	9,	
1 (lowest) 2 3 4 5 (highest)	951 974 1005 1034 1052	314 236 227 188 129	33 24 22 18 12	
Total household- months	5016	1094	22	

#### 4. HOUSEHOLD INCOME FORGONE DUE TO INCOME-EARNING INCAPACITY

# 1) Absolute and relative loss of household income due to income-earning incapacity

Table 35 shows the absolute and relative overall average loss of household income resulting from income-earning incapacity. It was worked out in order to assess the household-months in which such loss has been reported. It shows that

- the estimated value of income forgone due to income-earning incapacity represents about one fourth of the average household income earned during those householdmonths;
- 2) The sum of the average monthly household income in these months plus the average loss of income (i.e. taka 2879) is similar to the average (mean) household income presented in section A of this chapter (taka 2758).

Table 35: Absolute and relative income forgone due to income-earning incapacity

Total N of HH-months with loss of income due to income-earning incapacity	Average monthly HH income (Mean),	Average loss of income due to income-earning incapacity
1094	2284	595
	100%	26%

2) Absolute and relative loss of household income due to income-earning incapacity by household income level

Table 36 shows the average income forgone due to income-earning incapacity by income quintile. It indicates that:

- the absolute levels of income forgone due to income-earning incapacity increase with increasing household income-level;
- 2) in contrast, income forgone as a percentage of income earned decreases with increasing household income level. From 35% in the lowest income-quintile, it drops to half this percentage in the highest quintile.

Table 36: Absolute and relative loss of household income due to income-earning incapacity by household income level

Income quintile	Average monthly income (1)	due to in	oss of income ncome-earning apacity as % of (1)
1 2 3 4 5	1313 1792 2297 3010 4464	458 558 615 728 766	35 31 27 24 17
All	2284	<b>5</b> 95	26

# CHAPTER 4 PROXIMATE INDICATORS OF SOCIO-ECONOMIC STATUS

In this section, data on a series of variables are presented which are commonly called 'proximate indicators of socio-economic status'.

#### A. LAND OWNERSHIP

The break-down of land ownership is summarised in Table 37. The surface measure is a decimal (100 decimals = 1 acre). Thirty-three decimals constitute one 'bigha', a surface measure commonly used in Bangladesh, and which is thus equal to one third of an acre.

Overall, out of the 905 households under investigation in our study, 198 or 22% own land in the urban and/or rural areas.

Ninety-seven percent of households owning land do so in the rural areas, 7% do so in the urban areas. Four percent own lands in both the areas. In the urban areas, all but two households own less than one bigha. In the rural areas, about two-thirds own maximum one bigha, and another 21%, 2 to 3 bighas. Most of these rural lands however, are of little use for agricultural purposes and some are permanently submerged due to river erosion.

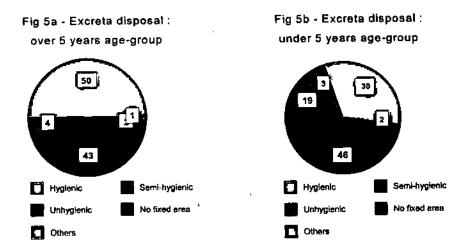
Categories	Ru	ral	Url	Urban		
(decimals)	No	8	No	8		
0 1-33 34-66 67-99 > 99 unknown	5 127 30 11 17 8	3 64 15 6 9	185 11 2	93 6 -		
Total	198	100	198	100		

Table 37: Household landownership

#### B. DISPOSAL OF EXCRETA

Sanitation in the slums is appallingly unhygienic with 90% of the families sharing latrines (mostly makeshift latrines) and 26% defaecating in open spaces. This situation is further aggravated by open sewerage with no system for drainage facilities for surface water and the almost total absence of organised rubbish clearing facilities with families leaving their rubbish on the ground or roads. <sup>24,26</sup> Fig. 5a and b show for our study that two-thirds of the under-fives defaecate in non-hygienic conditions, such as no-fixed or open areas, or

hanging latrines. In comparision, 54% of the other household members use hygienic or semi-hygienic disposal facilities (latrines connected to a sewerage system or a septic tank, pit or dughole latrine).



However, in only 5 to 6% of the households a latrine is shared only by the household members, as Table 38 shows.

Table 38: Sharing conditions for excreta disposal by age group

All excreta disposal conditions		ver 'ears ,	Under 5 Years		
combined	No	ક	No	8	
sharing with : -HH members -other HHs	54 851	6 94	31 583	5 95	
Total	905	100	614	100	

#### C. SUURCE OF WATER FOR DOMESTIC COL

Water connections are almost always absent in illegal slums, unless the connections themselves have been made unlawfully. Even if connections are there, in many slums there is not sufficient water for all.<sup>24,26</sup> In our study, as may be noticed from Fig. 6a, b and c, water from tap and tubewell are by far the main water sources for all domestic purposes, particularly for drinking and cooking.

Almost all households share the same water sources with other households. (Table 39)

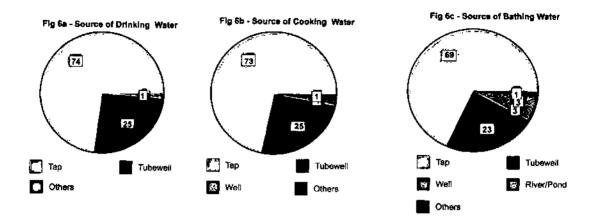
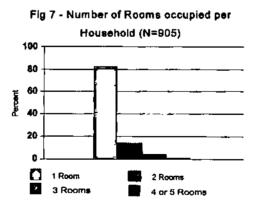


Table 39: Sharing water sources for domestic purposes

Categories	Drinking		Cooking		Bathing	
	No %		No	8	No	8
sharing with : -HH members only -other HHs	47 858	5 95	50 855	6 94	50 855	6 94
Total	905	100	905	100	905	100

# D. NUMBER OF ROOMS OCCUPIED PER HOUSEHOLD

The vast majority of the households (82%) have only one room to live in. Only about 4% occupy 3 to 5 rooms, and 14% two rooms. (Fig. 7)



### E. HOUSE STRUCTURE

Dwellings in slum settlements are mostly built with temporary or non-permanent materials. Occasionally, a two-storied small building may be visible, generally the bastee's owner's house.

In order to reflect the reality of the slums in Dhaka, three indicators for housing structure have been used in our study, namely the roof, wall and floor structure. Questions were addressed using all six construction materials listed in parenthesis given in Table 34 hereunder. These six categories are for presentation purposes, classified into three main categories of construction materials: non-permanent, semi-permanent and permanent materials.

A typical slum dwelling consists of a bamboo or tin roof, a wall most often made of bamboo, and a mud or sometimes concrete floor. (Table 40)

Construction	P	Roof		Wall		.oor
materials	No	ષ્ટ	No	8	No	. 8
-Non-permanent (jhupri, mud)	61	7	46	5	626	69
-Semi-permanent (bamboo, wood)	384	43+	747	83++	63	7
-Permanent (tin, concrete)	447	49*	107	12	213	24
Others	13	1	5	1	3	. 3
Total	905	100	905	100	905	100

Table 40: Materials used for house construction

#### F. TYPE OF FUEL FOR COOKING PURPOSES

Forty-five percent of the households use leaves or dry wood as fuel for cooking purposes, while about one third and 17% use kerosene and gas respectively. (Fig. 8)

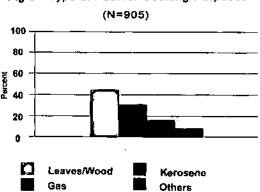


Fig 8 - Type of Fuel for Cooking Purposes

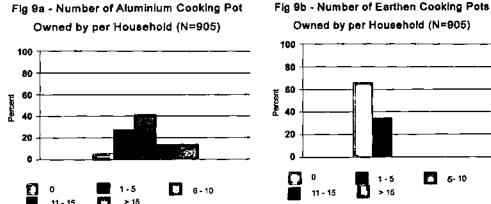
<sup>\* =</sup> wood and concrete each one representing less than 3% of semi-permanent and permanent materials respectively.

<sup>\*\* =</sup> wood representing less than 1% of semi-permanent materials.

#### G. HOUSEHOLD ASSETS

#### 1. COOKING POTS

More ore than two-thirds of the households own between one and ten aluminium cooking pots, whereas about the same proportion do not even own earthen cooking pots. (Fig. 9a and b) One-third of the proportion owns one to five earthen cooking pots and about 28% own more than ten aluminium cooking pots.



Owned by per Household (N=905) 6- 10

# 2. OTHER ASSETS

Besides cooking pots, slum households have little other assets. (Table 41) Slightly more than half of them have one bed and another 11% own two beds, while about one third of the households has no bed at all. A mere 18% have one or two tables, 82% have none. Similar proportions are found for the ownership of a radio. One third of the households own one or two fans, and, about 30% own one to three watches. Less than 10% own TVs and less than 5% have bicycles.

No items	Be Nofil	ed H <b>s</b> %	Tah NoHi		Fa NoHi		Wat NoHi		Rac NoH!	-	noHH	rv Is %	Bicy NoHH	
0 1 2 3 4-7	274 512 95 18 6	30 57 11 2	737 146 20 2	82 16 2 0.	596 270 30 8	66 30 3 1	645 185 48 20 7	71 21 5 2	760 144 1 -	84 16 0. -	836 67 2 -	92 8 0. -	877 27 1 -	97 3 0.
Total	905	100	905	100	905	100	905	100	905	100	905	100	905	100

Table 41: Other assets owned per household

Summarising all our survey data on the assets (other than land) owned by slum households, we find that:

```
the majority of households own:
        -1 to 10 aluminium cooking pots (82%), and,
        -1 (57%) or 2 beds (11%);
and a minority of households owns:
        -gold (40%),
        -1 to 5 earthen cooking pots (36%),
        -fan (34%),
        -watch (29%),
        -wooden shelve (27%),
        -table (18%),
        -suitcase or trunk (17%),
        -radio (16%),
        -tin or plastic/melamine (sometimes ceramic) plate (15%),
        -bucket (13%),
        -wooden closet (12%),
        -pitcher (12%),
        -silver (11%),
        -wardrobe (10%),
        -jug (2 liters) (10%),
        -TV (8%),
        -chair (8%),
        -cassette-player (7%),
        -grinder-stone (7%),
        -container (6%),
        -rice plate (5%),
        -glass (4%),
        -bowl (4%).
```

All other items are owned by less than 4% of the households. (See Annex 7 for the complete list of assets owned by the slum households in our survey)

# H. ASSOCIATION BETWEEN HOUSEHOLD INCOME AND DEMOGRAPHIC, SOCIO-CULTURAL VARIABLES AND PROXIMATE INDICATORS FOR SOCIO-ECONOMIC STATUS.

In this section a number of demographic and socio-cultural variables and proximate indicators of socio-economic status are tested upon their association with the household income. For the socio-cultural and proximate indicators, the same categories are used as above, and for the variable income, quintiles of mean household income are used. All data are taken from the baseline survey, except for gender of the household head which are taken from survey-month 3, and household income which are the income quintiles presented in section A. of this chapter.

### 1. GENDER OF HOUSEHOLD HEAD

Overall, about 8% of the household heads are female. (Table 42) The proportion is particularly high in the lowest income quintile, i.e. 17%. In the other income quintiles, the proportion of female household heads ranges between 4 and 7%. In addition, about 8% of the spouses are younger than 18 years of age.

Ta	ble	42:	Gender	of	household	head
by	inc	ome	quintil	e (	Survey-mon	th 3)

Income quintile	M/ No	ALE %	FEI No	MALE %
1 2 3 4 5	130 157 155 163 165	82.8 96.3 92.8 92.6 93.8	27 6 12 13	17.2 3.7 7.2 7.4 6.3
TOTAL	770	91.8	69	8.2

During survey-month 3, 11 male household heads were absent for a certain period of time for occupational reasons, for instance transport workers. During these periods, the spouses took over all of the responsibilities of the absence and were, therefore, entered in the recording system as household heads for that specific time span.

#### 2. MARITAL STATUS OF HOUSEHOLD HEAD

The proportions of never married, divorced and widowed household heads are all greater in the lowest income quintile than in the other quintiles. (Table 43) The proportion of widowed heads is 10 times higher in the lowest income quintile. All widowed household heads are female, while only 3 out of the 28 divorced household heads are male (one in each of the three highest income quintiles), and one out of the four unmarried household heads is male (in the lowest quintile).

Table 43: Marital status of household head by income quintile

Income quintile	1	VER RIED	CURRENTLY MARRIED No %		DIVC No	RCED %	WIDOWED No %	
1 2 . 3 4 5	2 1 0 0	1.1 0.6 - - 0.6	160 177 176 174 172	88.4 97.8 97.2 96.1 95.0	8 2 5 6 7	4.4 1.1 2.8 3.3 3.9	11 1 0 1 1	6.1 0.6 - 0.6 0.6
TOTAL	4	0.4	859	94.9	28	3.1	14	1.5

#### 3. HOUSEHOLD SIZE

There is a positive association between the size and income of the household. (Table 44) The household size ratio between the highest and the lowest income quintile is 1.83 (6.96/3.80) It appears that in the slum households, those being among the poorest of Dhaka-City, are simply too poor to have a similar household size as the better-off ones. The proportions of households with 1 to 2, and, 3 to 4 members substantially decrease with increasing income, while the proportions of households with 5 to 6 and more than 6 members increase with increasing income. More than half the households in the highest income quintile have more than 6 members.

Income	1	-2	з	- 4	5	6-6	>	· 6	Mean
quintile	No	*	No	٤	No	- B	No	8	HH size
1	38	21.0	96	53.0	37	20.4	10	5.5	3.80
2	23	12.7	84	46.4	57	31.5	17	9.4	4.55
.3	18	9.9	70	38.7	60	33.2	33	18.2	4.87
4	12	6.6	54	29.8	78	43.1	37	20.4	5.44
5	4	2.2	32	17.7	51	28.2	94	51.9	6.96
TOTAL	95	10.5	336	37.1	283	31.3	191	21.1	5.17

Table 44: Household size and household income (Survey-month 3)

#### 4. EDUCATION

Table 45 shows that the proportion of household heads with illiteracy decreases with increasing household income, while the proportion of heads with 1 to 5 years of schooling slightly increases. Proportions of heads with educational background above 5 years of schooling, are much higher in the highest income quintile(s).

					1.000	~ ,		
Income		0		-5	6-	-10	> 10	
quintile	No	9,	No	ê	No	ક	No	*
1	128	70.7	34	18.8	18	9.9	1	0.6
2	119	65.7	36	19.9	26	14.4	0	-
3	123	68.0	36	19.9	19	10.5	3	1.7
4	109	60.2	41	22.7	24	13.3	7	3.9
5	96	53.0	39	21.5	39	21.5	7	3.9
TOTAL	575	63.5	186	20.6	126	13.9	18	2.0

Table 45: Education of household head by income quintile

When the education level of the spouses of the household heads is considered (Table 46), one observes similar trends as that of the household heads. However, the proportions of spouses without schooling compared to household heads, are higher in all income quintiles. Consequently, the proportions of spouses with 1-5, 6-10 (especially) and above 10 years of education are lower than those for household heads in the same categories.

by income quintife										
Income quintile	0 %		1-5 No %		6-10 No %		No >	10		
1 2 3 4 5	137 148 141 134 118	86.2 83.1 80.6 79.3 69.8	17 27 27 22 36	10.7 15.2 15.4 13.0 21.3	5 3 6 13 13	3.1 1.7 3.4 7.7 7.7	0 0 1 0 2	0.6		
TOTAL	678	79.8	129	15.2	40	4.7	3	0.4		

Table 46: Education status of spouse of household head by income quintile

# 5. LAND OWNERSHIP

With exception to the second income quintile, the proportion of households that do not own land slightly decreases with increasing household income. On the other hand, owning more than one bigha of land increases with the increase in the household income. (Table 47)

Table	47:	Land	ownership	status	οf	household	head
			by income	quintil	lе		

Income		0	1.	-33	> 33		
quintile	Νo	£	No	8	No	ઢ	
1 2 3 4 5	153 142 146 138 136	84.5 78.5 80.7 76.2 75.1	23 30 27 29 23	12.7 16.6 14.9 16.0 12.7	5 9 8 14 22	2.8 5.0 4.4 7.7 12.2	
TOTAL	715	79.0	132	14.6	58	6.4	

It was shown above that, only 22% of the households own some land, the great majority of whom are situated in the rural areas. According to income quintiles, this is from the lowest to the highest 15%, 22%, 19%, 24%, and 23%, thus they are relatively equally distributed, although the total area owned increases with increasing household income. It was further indicated above that most of the land owned in rural areas is of low value, estimated by the study's research team at taka 10,000 per bigha. Using this estimate, the total mean values of rural land owned per household by income quintile are:

- taka 1405 for income quintile 1.
- taka 2126 for income quintile 2,
- taka 1539 for income quintile 3,
- taka 3049 for income quintile 4,
- taka 6625 for income quintile 5, or 4.72 times more than the lowest income quintile with a gradual increase over the income quintiles (except quintile 3). Values double between the lowest and the fourth quintile, and, between the fourth and the fifth quintile.

The overall mean value is taka 2949. However, it should be noted that some of the land is only in theory owned by the respondents, because it currently belongs to the respondents' parents, so no claim can be made on it as long as the parents live.

The 11 owners of urban land are all but 3 from the highest income quintile. The mean surface owned is small, namely 5.5 decimals.

# 6. DISPOSAL OF EXCRETA ·

Our data suggest that the use of <u>hygienic</u> devises for excreta disposal increases in both the under-fives and above fives with increasing household income, particularly in the age-group above 5 years. (Tables 48a and b) Conversely, the use of <u>unhygienic</u> conditions and disposal of excreta in no fixed areas combined, appears to decrease with increasing household income for the same age-group.

Table 48a: Disposal of excreta for over 5 years old by income quintile

Income quintile	HYGIENIC		SEMI- HYGIENIC		ÚN- HYGIENIC		NO FIXED AREA		OT! No	HERS %
*	No .	18	No	• •	No .	4	No	ક	l	
1	72	39.8	8	4.4	83	45.9	17	9.4	1	0.6
2	86	47.5	12	6.6	78	43.1	2	1.1	3	1.7
3	84	46.4	6	3.3	88	48.6	1	0.6	2	1.1
4	97	53.6	8	4.4	76	42.0	0	-	0	-
5	116	64.1	1	0.6	62	34.3	0	-	2	1.1
TOTAL	455	50.1	35	3.9	387	42.8	20	2.2	8	0.9

Table 48b: Disposal of Excreta for under fives by income quintile

Income quintile	HYG	IENIC		MI- IENIC		IN- IENIC		FIXED REA	OT No	HERS
[ ]	No	. · ·	No	*	No	*	Νo	8		_
1	30	25.6	5	4.3	22	18.8	56	47.9	4	3.4
2	36	27.5	6	4.6	30	22.9	55	42.0.	4	3.1
3	35	29.2	1	0.8	16	13.3	66	55.0	2	1.7
4	37	31.1	3	2.5	27	22.7	52	43.7	0	-
5	48	37.8	1	0.8	22	17.3	51	40.2	5	3.9
TOTAL	186	30.3	16	2.6	117	19.1	280	45.6	15	2.4

# 7. SOURCE OF WATER FOR DOMESTIC USE

Only a small percentage of households in all income quintiles use other sources of water than tap and tubewell for *drinking* purposes. However, this percentage is clearly the highest for the lowest income quintile. (Table 49a) The data are similar for the sources of water used for *cooking* purposes. (Table 49b)

Table 49a: Source of drinking water by income quintile

Income	TAP		TUB	EWELL	0	THER
quintile	No	¥.	ИО	8	No	ક્ષ
1 2 3 4 5	125 132 139 133 141	69.1 72.9 76.8 73.5 77.9	49 48 40 48 40	27.1 26.5 22.1 26.5 22.1	7 1 2 0 0	3.9 0.6 1.1 -
TOTAL	670	74.0	225	24.9	10	1.1

C -170. 1101		90100		CONTING	11100	me quin	
lncome	7	PAP	TUB	EWELL	OTHER		
quintile	No	. 6	ИО	8	No	8	
1	124	68.5	49	27.1	8	4.4	
2	128	70,7	48	26.5	5	2.8	
3	139	76.8	40	22.1	2	1.1	
4	131	72.4	48	26.5	2	1.1	
5	138	76.2	40	22.1	3	1.7	
TOTAL	660	72.9	225	24.9	20	2.2	

Table 49b: Water source for cooking income guintile

The category of 'other water sources' for *hathing* purposes is clearly more important than for drinking and cooking purposes. (Table 49c) Again the lowest income uses 3 times more 'other sources' than the other income quintiles.

Table 49c:	Source of	water	for	bathing	by	income	quintile
------------	-----------	-------	-----	---------	----	--------	----------

lncome	Т	'AP	TUB	EWELL	OTHER			
quintile	No	ÿ	МО	¥	No	8		
1	112	61.9	43	23.B	26	14.4		
2	125	69.1	46	25.4	10	5.5		
3	130	71.8	40	22.1	11	6.1		
4	128	70.1	44	24.3	9	.5.0		
5	132	72.9	37	20.4	12	6.6		
TOTAL	627	69.3	210	23.2	68	7.5		

#### 8. NUMBER OF ROOMS OCCUPIED PER HOUSEHOLD

There is a clear connection between the level of household income and the occupation of one or more than one room per household. (Table 50) Almost all the poorer households live in only one room, while in the highest income quintile only about 55% of the households is obliged do so.

Table 50: Number of rooms occupied per household by income quintile

Income	l I	ROOM	> 1	ROOM
quintile	ok		No	*
1	174	96.1	7	3.9
2	170	93.9	11	6.1
3	151	83.4	30	16.6
4	144	79.6	37	20.4
5	100	55.3	81	44.8
TOTAL	739	81.7	166	18.3

# 9. HOUSE STRUCTURE

For this indicator, there are also substantial associations with household income. (Tables 51a, b and c)

Use of <u>non-permanent</u> materials is 3 to 5 times higher in the lowest income quintile than in the other ones for the roof and the wall respectively, and, it gradually declines with increasing household income for the floor. <u>Permanent</u> materials are gradually more used as the household income increases. With the exception of roof construction, use of <u>semi-permanent</u> materials does not seam to have an association with household income.

Table 51a: House structure (roof) of household by income quintile

Income quintile		ON- IANENT		MI- IANENT	PERM	ANENT	OTHERS				
	No	€	No	8	ИО	*	No	*			
1	29	16.0	87	48.1	60	33.2	5	2.8			
3	5	5.0 · 2.8	83 85	45.9 47.0	90	47.5 49.7	1	1.7			
4 5	11 7	6.1 3.9	69 60	38.1 33.2	99 112	54.7 61.9	2 2	1.1			
TOTAL	61	6.7	384	42.4	447	49.4	13	1.4			

Table 51b: House structure (wall) of household by income quintile

Income quintile		ON- IANENT		EMI-	PERN	IANENT	OTH	ERS
<u>.</u>	Мо	<b>&amp;</b>	No	8	No	8	No	ક્ર
1	28	15.5	145	80.1	8	4.4	0	
2	6	3.3	165	91.2	9	5.0	1	0.6
3	3	1.7	157	86.7	18	9.9	3	1.7
4	6	3.3	138	76.2	37	20.4	0	_
5	3	1.7	142	78.5	35	19.3	1	0.6
TOTAL	46	5.1	747	82.5	107	11.8	5	0.6

Table 51c: House structure (floor) of household by income quintile

Income quintile	PERM	ON- IANENT	PERM	MI- ANENT	PERM	IANENT	ОТ	HERS
	No	*	ЙО		No	*	Nо	8
1 2 3 4 5	151 136 127 113 99	83.4 75.1 70.2 62.4 54.7	12 16 15 13 7	6.6 8.8 8.3 7.2 3.9	17 29 38 55 74	9.4 16.0 21.0 30.4 40.9	1 0 1 0	0.6 0.6 0.6
TOTAL	626	69.2	63	7.0	213	23.5	3	0.3

# 10. TYPE OF FUEL FOR COOKING PURPOSES

The poorest households tend to use less gas and kerosene, and more wood as fuel for cooking purposes. (Table 52)

Income quintile	(	GAS	KER	OSENE	W	OOD	COW	-DUNG	1 ' 3	ARDED	OTHERS		
	Nо	9,	No	8	No	S	No	8	No	F	No	용	
1	20	11.1	48	26.5	95	52.5	3	1.7	4	2.2	11	6.1	
2	31	17.1	55	30.4	83	45.9	] 1	0.6	1	0.6	10	5.5	
3	30	16.6	4.9	27.1	86	47.5	4	2.2	5	2.8	7	3.9	
4	37	20.4	57	31.5	72	39.8	0	-	0	0	15	8.3	
5	30	16.6	66	36.5	71	39.2	3	1.7	0	0	11	6.1	
TOTAL	148	16.4	275	30.4	407	45.0	11	1.2	10	1.1	54	6.0	

Table 52: Type of fuel for cooking by income quintile

#### 11. HOUSEHOLD ASSETS

Income quintile-wise possession of the asset items (listed above under section G.) by number of asset item samples owned per household is given in Tables 53.a and 53.b on the next two pages. From these tables we can gather the following details:

## General comments:

- 1. Overall, there are clear trends in the percentages of households owning any asset, when income quintiles are applied.
- 2. The poorer the households, the higher the probability of not having any sample of almost all types of assets.
- 3. The poorer the households, the higher the likelihood of having only one or a limited number of samples for all types of assets, except for a plate, a bucket, a pitcher, a grinder-stone, a container, a rice plate, and earthen cooking pots. As the answer for only a few of these assets was probed (they are indicated with 'PRO' in Table 53.b), it may well be that relatively richer households did not spontaneously report assets of lesser monetary value, such as the exceptions mentioned above.
- 4. Only 3 households (one in each of the three lowest quintiles) reported no assets at all.

## Some item-wise comments:

- Half of the households in the lowest quintile do not own a bed, while this is only 10% in the highest quintile.
- 2. Almost all households, irrespective of income, own aluminium cooking pots. However, about 90% of the households in the lowest quintile have between 1 and 10 pots, while in the highest quintile 50% of the households own more than 11 pots.
- 3. For all the other items (except gold), the probability in the lowest quintile of not having any sample is 90% and more in most of the cases, and, between 80% and 90% in the other.
- 4. Few households in all income quintiles own silver. In contrast, gold is owned by one third of the households in the lowest quintile and 46% in the highest one. However, average quantities of gold owned per household are clearly higher the higher household income.

The mean and median total values of asset item samples owned per household are estimated at:

- taka 1822 and taka 1360 for income quintile 1,
- taka 2448 and taka 1680 for quintile 2,
- taka 3692 and taka 2650 for quintile 3,
- taka 4504 and taka 2905 for quintile 4, and
- taka 9450 and taka 5840 for quintile 5, or 5.19 times higher than for the lowest income quintile with a gradual increase from the lowest to the highest quintile.

The overall mean and median total values are taka 4384 and taka 2440. All medians are smaller than the means; the distribution of values in each quintile is thus skewed to the right.

The complete list of asset items with their estimated 1993 monetary value is given in Annex 7. Values were estimated independently by four members of the research team. Any deviation of more than 100% from the value of other estimations was discarded. The mean was calculated out of the remaining estimations.

Table 53a - Percentage of households owning assets by household income quintile

									_		
No items"	1	Gol 2		4	5 <sup>‡</sup>	No items³	1	5il 2	ver 3	4	5
0			-	57		0	94		88		85
l ,¹.				27		1 1	1	2	2	2	3
2-4	6	4	5	9	11	2-4	1	2	2	2	2
5-8	2	3 2	6	4	4	5-8	٦ ا	2	3	3	3
9-16 >16	1 -	Z	3	2	7	9-16	2	1	2	2	1
1 710	-	_	2	1	,	17-32 >32	1.6	3	2	2	2
	<del>  -</del>						ļ	1			4
Total <sup>:</sup>	35	35	39	43	46	Total <sup>2</sup>	6	11	22	23	15

<sup>1,2,3,4,5 =</sup> household income quintiles. Column-wise percentages.
2 Percentage of households per income quintile owning at least 1 ani.

Unit of gold and silver is ani, which is .8438 grammes.

# 12. HOUSEHOLD LOCATION (SLUM TYPE)

Table 54 shows little association between the type of slums where households live and income level. There are relatively more households in income quintile 5 living in public slums.

Table 54: Household location and income level

Income	PUI	BLIC	PRI	VATE
quintile	No		No	8
1	84	46.4	97	53.6
2	91	50.3	90	49.7
3	75	41.4	106	58.6
4	79	43.7	102	56.4
5	100	55.3	81	44.8
TOTAL	429	47.4	476	52.6

Table 53b: Percentage of households owning assets by household income quintile

No items	Bed 1	1-PI	RO 3	4	51	F.	an-1	PRO 3	4	5	W. 1	atci	1-PF	RO 4	5	W 1	ode 2	en s	he:	lve 5	1 1	abl 2	e-Pi 3	RO 4	5	Su 1	itc 2	ase 3	tri 4	ink S	Ra 1	dio 2	)—PF	₹O 4	5
	49 4	11 :	29	23	10	87	77	66	59	41	88	82	76	62	48	84	80	72	70	59	96	90	85	76	60	80	89	83	85	76	92	92	89	80	67
_	47 5		61	62	57	13	22	32	39		10	17	20	28		13	17	22	23	31	4	9	14	23	30	17	9	12	12	17	8	8	11	20	33
2	4	4	9	13	23	-	2	2	2	11	1 6	1 -	3	8	13 8	3	. 6	- -	. 6	8	۰, ۱	. b	. 6	_	.6	] -	. 6	.6	د 6.	3	-	_	_	- 0	_
4-7	.5	-	.5	-	2	-	_	_	_	.6	-	-	.6	-	3	-	-	-	-	. 6	-	-	-	-	-	] -	-	_	-	. 6	١.	-	-	-	-
Total <sup>2</sup>	51 5	9	71	77	90	13	23	34	41	59	12	18	24	38	52	16	20	28	30	41	4	10	15	24	40	20	11	17	15	24	8	8	11	20	33

1 1,2,3,4,5 = household income quintiles. Column-wise percentages. Sums not always equal to 100 due to rounding off.

2 Percentage of households per income quintile having at least 1 item.

No items	Plate <sup>3</sup> 1 2 3 4 5*	Bucket 1 2 3 4 5	Wooden closet Pitcher 1 2 3 4 5 1 2 3 4 5	Wardrobe Jug 1 2 3 4 5 1 2 3 4 5	TV-PRO 1 2 3 4 5
	83 87 88 87 80 12 8 8 4 4 5 4 2 6 10 6 1 2 4 1 1 3	80 85 86 90 93 19 11 9 8 3 .6 3 3 1 3 6 2 .6 - .66	97 92 90 83 77 88 87 86 90 90 3 6 9 15 20 10 11 8 6 6 - 2 .6 2 2 2 3 2 1 62 1 .2 66 1 .6	96     89     92     92     81     92     88     89     92     93       3     11     7     7     17     7     10     7     6     2       .6     .6     1     -     2     .6     1     3     2     5       -     -     -     -     6     .6     -     .6       -     -     -     -     6     .6     1     -	- 2 3 7 24 1
Total:	17 13 12 13 20	20 15 14 10 7	3 8 10 17 23 12 13 14 10 10	4 11 8 8 19 8 12 11 8 7	0 2 3 8 25

1 1,2,3,4,5 = household income quintiles. Column-wise percentages. Sums not always equal to 100 due to rounding off.

Percentage of households per income quintile having at least 1 item.

1 Categories for plates : none; 1-5, 6-10, 11-15, >15 pots.

No items	Chair 1 2 3 4 5*	Cassette-player Grinder-stone 1 2 3 4 5	Container Rice plate 1 2 3 4 5 1 2 3 4 5	Alu cook pots   Earth coo -PRO	c pots <sup>3</sup>
0 1 2 3 4-7	96 96 94 91 85 4 2 2 4 7 - 2 2 4 4 1 - 1 1 3	98 98 93 91 86	97 94 93 94 93 94 94 95 94 98 3 4 6 4 4 3 3 1 2 .6 6 2 .6 2 1 2 1 3 4 .6 66 .6 .6 1 66 1 1 .6 -	1 4 6 7 8 55 70 65 42 39 23 22 9 45 30 34 45 41 42 42 33 6 4 7 13 12 32	36 22 .6 2 6
Total	4 4 6 9 15	2 2 7 9 14 6 7 6 10 5	3 6 7 6 7 6 6 5 6 2	99 96 94 93 92 45 30 35	38 24

1,2,3,4,5 = household income quintiles. Column-wise percentages. Sums not always equal to 100 due to rounding off.

Percentage of households per income quintile having at least 1 item.

Categories for cooking pots: none: 1-5, 6-10, 11-15, >15 pots.

# CHAPTER 5 POVERTY MEASUREMENTS

In many slum households the earnings from the occupations discussed above are barely sufficient for them to make ends meet. In 1990 for instance, it was estimated that for a family of six, taka 2,600% per month was needed to cover only basic needs (food, clothing, housing, health care, education). Taka 1724 would be enough only to keep the family at the level of physical survival. In this study, it was found that 50% percent of the urban dwellers did not have an earning of taka 2600, and 30% fell on or below the level of pure physical survival.

It is not the purpose here to discuss at length what the different methods are that can be used to define who is poor and who is not poor. Poverty can be defined in a comprehensive way as "a lack of access to and control over the social, economic and political resources to meet basic human needs with dignity, such as food, clothing, shelter, education and health care (the so-called material dimensions), and lack of opportunity or of choice, powerlessness and fear of oppression (the so-called non-material dimensions)<sup>27</sup>

One way of measuring poverty in a community is to define the absolute level of poverty, this is the income (or nutritional intake) needed to be physically fit, i.e. US\$ 11.12 per capita per month (equal to 1993 taka 445) or a daily calorie intake of 2122 per capita. A second indicator refers to the level of 'hard core' poverty or a daily calorie intake of 1600 per capita (corresponding to taka 335 per capita per month or US\$ 8.38). These indicators are extensively used by institutions, such as the World Bank. Their inability to define poverty is largely attributable to firstly, their limitations to pure physical-biological and economic variables, ignoring other dimensions of poverty, such as the ones outlined in the definition above including lack of access to other basic amenities than food, social deprivation and lack of control and power over resources by certain household members, such as women and children, and, secondly, to the fact that other necessities are derived from nutritional requirements.<sup>29</sup>

In an extensive review of the situation of the urban poor in Bangladesh, the Centre for Urban Studies of Dhaka University<sup>24</sup> considered two other levels of poverty:

- a poverty level below which no survival is possible, i.e. a daily per capita intake of 1804 calories or per capita monthly income of US\$ 9.45 or 1993 taka 378. This level refers to the hard-core poor;
- a poverty level with the same indicators to be physically fit, increased by 30% to meet the basic requirements of clothing, housing, health care and education, i.e. a monthly per capita income of US\$ 14.46 or 1993 taka 578.

These four levels of poverty are calculated in Table 55 for the income quintiles considered in our study, while accounting for the disparity in household size among income

 $<sup>^{10}</sup>$  In 1990, Taka 37.5 was equal to 1 US\$.  $^{\prime\prime}$  See Ref. 24, pp. 4 and 5.

# quintiles found in our study.

Table 55: Estimated monthly household income by income quintile for four levels of poverty

Income quintile	Mean HH monthly income	нн	Monthly income tk 335/cap or US\$8.38	Monthly income tk 378/cap or US\$9.45		Monthly income tk 578/cap or US\$14.46
1 2 3 4 5	1250 1815 2312 3086 5328	3.80 4.55 4.87 5.44 6.96	1525	1436 1720 1841 2056 2631	1691 2025 2167 2421 3097	2196 2630 2815 3144 4023
Calorie/ day/capita	_	-	1600	1804	2122	2122 + 30%

Comparing these data with the mean household income for each income quintile, the following may be deferred:

# According to the World Bank indicators:

- (1) about 20% of the households in the study sample belong to the group of hard-core poor,
- (2) 20 to 30% of the households have income levels between the hard-core poverty level and the absolute poverty level;
- (3) 50 to 60% live above the absolute poverty level.

# According to the Centre for Urban Studies indicators:

- (1) 30 to 40% of the households in the study sample belong to the group of hard-core poor.
- (2) 20 to 30% of the households have income levels between the hard-core poverty level and the absolute poverty level increased by 30% to meet basic requirements;
- (3) about 20% live on the absolute poverty level increased by 30% to meet basic requirements;
- (4) about 20% live above the absolute poverty level increased by 30% to meet basic requirements.

# CONCLUSION ON THE DEMOGRAPHIC, SOCIO-CULTURAL AND ECONOMIC PROFILE OF THE STUDY SAMPLE

From a demographic point of view, the slums have a young population with more than 50% belonging to the age group less than 19 years. The composition of households is varied, and their average size is 5.2. Furthermore, the slum dwellers are highly mobile. This mobility is reflected in the high proportions of in-, re- and out-migrations compared to the total population followed up. Over the survey-period, about 26% of the individuals in the survey cohort were long-term out-migrants. However, about two-thirds of the out-migrants were replaced by in-migrations, and about one fourth by births.

Hindus are less represented in the slums than in the total Bangladeshi population. There is the specific problem of repartriation of the Biharis. Education levels of household heads and spouses are appallingly low and limited income is earned through semi- and unskilled labour. Total estimated value of land and assets owned is low.

Slum dwellers are a heterogeneous population group in terms of a number of socioeconomic aspects. These include (1) the variety of jobs through which income is earned, (2) degree of inequality among households with respect to household income and total values of land and assets owned, which are 4.5, 4.7 and 5.2 times higher respectively in the highest income quintile compared to the lowest quintile, (3) education levels of household heads, (4) differences in house structure, and (5) differences in household size.

However, whatever be the extent of diversity among slum households, all slum dwellers represent individuals in poverty. The findings of the survey indicate that expenditures on rice and food represent more than 50% of total average monthly expenditure. About 82% of the families live in just one room, with a bamboo wall, and only about 20% of the households are living above the absolute poverty level defined by a package of basic requirements. Similarly, owning 'luxury' goods, such as a table, is only the privilege of less than 20% of the households, while nearly 90% of households have to sleep on the ground or share one bed.

The findings further suggest that the 'poorest of the poor' households - the estimated 25% 'hard core' poor which are found in the lowest income quintile - show several socio-economic indicators that are strikingly different from all other households. The proportion of female headed households - usually divorced or widowed women - is double, education levels of household heads and of their spouses are clearly lower, almost all are living in a one-room quarter, and the use of non-permanent materials for the construction of walls and roofs is 4 to 5 times higher.

Finally, the findings illustrate the precarious situation of females and children in the slums. Women are less educated, they face more often desertion by spouse and are more often widowed. Although they constitute one fourth of the labour force, they receive a lower income than their male counterparts from similar jobs. Ten to 15% of children start working as early as 6 years to have income, while half of 13 to 15 years old are regular income-earners and only one fifth of them attend schools.

#### REFERENCES

- Albala D. Primary Health Care for the urban poor in Bangkok. World Hospitals. 1987; 23(1): 26-31.
- 2. Bapat M, Crook N. Behind the technical approach to slum improvement. Waterlines. 1989; 8(1): 24-6.
- 3. Aksoylu Y. Voluntary associations in urban squatter settlements. Habitat International. 1985; 6(3/4): 225-33.
- Nientied P, Meijer E, vd Linden J. Karachi squatter settlement upgrading. Bijdragen tot de Sociale Geografie en Planologie No 5, Free University of Amsterdam, 1982.
- UNICEF. Urban basic services: reaching children and women of the urban poor. Report by the Executive Director. Occasional Paper Series No.3. UNICEF, New York, 1984.
- Alaska Beach Residents Association. A squatter community and its problems of land ownership. Assignment Children. 1977; 40: 116-21.
- Rossi-Espagnet A. Primary health care in the context of rapid urbanization. Community Development Journal. 1983; 18: 104-19.
- Faerstein E. Land tenure systems and displacement in Brazilian upgrading projects. Open House International. 1989; 14(1): 27-31.
- de Wit J. Slum dwellers, slum leaders and the government apparatus. Relations between actors in slum upgrading in Madras. Urban Research Working Papers, No.8. Free University of Amsterdam, 1985.
- 10. Harpham T, Stephens C. Policy directions in urban health in developing countries. The slum improvement approach. Social Science & Medicine. 1984; 35(2):111-20.
- 11. Harpham T, Blue I. Linking health policy and social policy in urban settings: the new development agenda. Transactions of the Royal Society of Tropical Medicine and Hygiene. 1984; 91:497-98.
- 12. Urban FP/MCH Working Paper Series. A survey of Slums in Dhaka Metropolitan Area-1991, Eds. Arifeen SE, Mahbub AQM. Urban Health Extension Project Working Paper No.11. International Centre for Diarrhoeal Disease Research, Bangladesh, and, Centre for Urban Studies, Dhaka, Bangladesh, 1993: 2-3.
- 13. Mouchiroud A, UNFPA Resident Representative in Bangladesh at the presentation in Dhaka of the 1996 UNFPA State of World Population.
- 14. Islam N. Urban Research in Bangladesh since the 1960s and an Agenda for the 1990s. In: Urban Research in Bangladesh. Review of recent trends and an Agenda for the 1990s. Ed. Islam N. Centre for Urban Studies, Dhaka, 1995: 4.
- 15. UNFPA. State of World Population, 1996.
- 16. Bangladesh Bureau of Statistics. Preliminary report, Population Census 1991. Dhaka, Bangladesh Bureau of Statistics, Government of Bangladesh, 1991.
- 17. Islam N., Mahbub A.Q.M. Slum and squatter in Dhaka City, Centre for Urban Studies, University of Dhaka, 1988.
- 18. This slum survey was conducted the first half of 1991 by the Centre for Urban Studies, University of Dhaka, and the Urban Health Extension Project of the International Centre for Diarrhoeal Disease Research, Bangladesh.

- 19. Islam N. Dhaka. From City to Megacity. Perspectives on people, places, planning and development issues. Bangladesh Urban Studies Series, No.1. Urban Studies Programme, University of Dhaka, 1996:96-9.
- Islam F, Zeitlyn S. Ethnographic profile of Dhaka bastis.
   Oriental Geographer. 1987; 31(1&2): 103-12.
- 21. Afsar R. Migration and women: the need for gender-based urban poverty alleviation strategy, paper presented at WID Network. UNICEF-Bangladesh, 1991.
- 22. WEPP/UVP Study Team and Naripokkho Study Team (1993) Violence in the slums of Dhaka City, Women's Empowerment Pilot Project. Urban FP/MCH Working Paper No. 7, International Centre for Diarrhoeal Disease Research, Bangladesh, 1993.
- 23. Blanchet T. Lost innocence, stolen childhoods. University Press Limited, 1996: 123-42.
- 24. Islam N. et al. The Urban Poor in Bangladesh. Comprehensive Summary Report. Centre for Urban Studies, University of Dhaka, 1990: 4-5.
- 25. Razzaq A et al. A study on the situation of street children in Bangladesh and the UN Convention of the Rights of the Child. Radda Barnen, Bangladesh, 1991.
- Naripokkho. Women in urban poverty. A report. NOVIB, Dhaka, 1991.
- 27. ACTIONAID. Giving People Choices: ACTIONAID and Development. ACTIONAID-UK, International Division, 1994: 3-4.
- 28. World Bank. Poverty Reduction Handbook. World Bank, Washington, 1993.
- 29. Sen A. Poverty and Famines. An essay on Entitlement and Deprivation. Oxford University Press, 1981: 12-4.

#### MAP

Map 1: Slums of Dhaka-City, Slum Survey 1991

Map 2: Distribution of slums with survey sample households

#### ANNEXES

Annex 1: Age-sex structure of the survey sample for surveymonths 1, 2, 4, 5 and 6

Annex 2: Two examples to illustrate the difference between revenue and income

Annex 3: Monthly Household expenditure pattern by survey month

Annex 4: Monthly Household expenditure pattern by income quintile

Annex 5: All and Female Income generating occupations in surveymonths 1 and 5

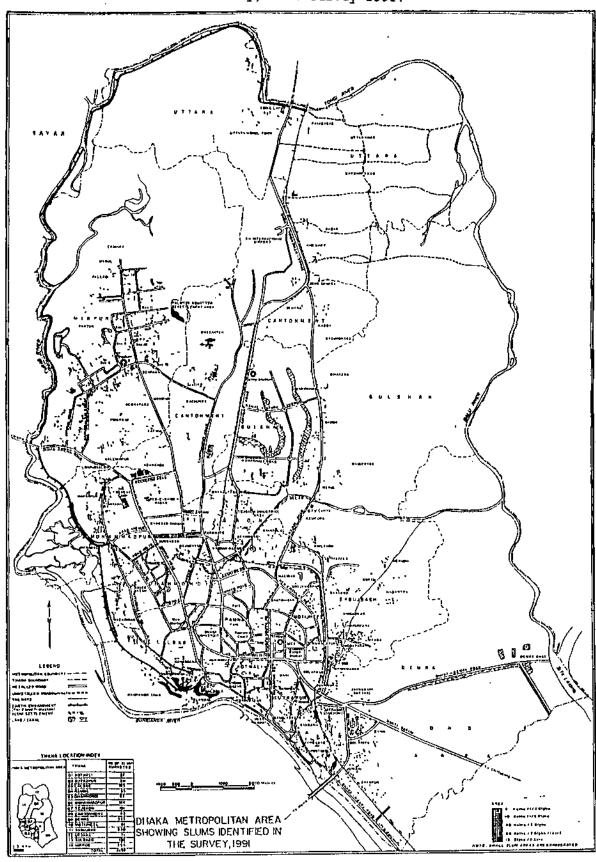
Annex 6: All and Female income generating occupations by income quintile for the month of July (Survey-month 3)

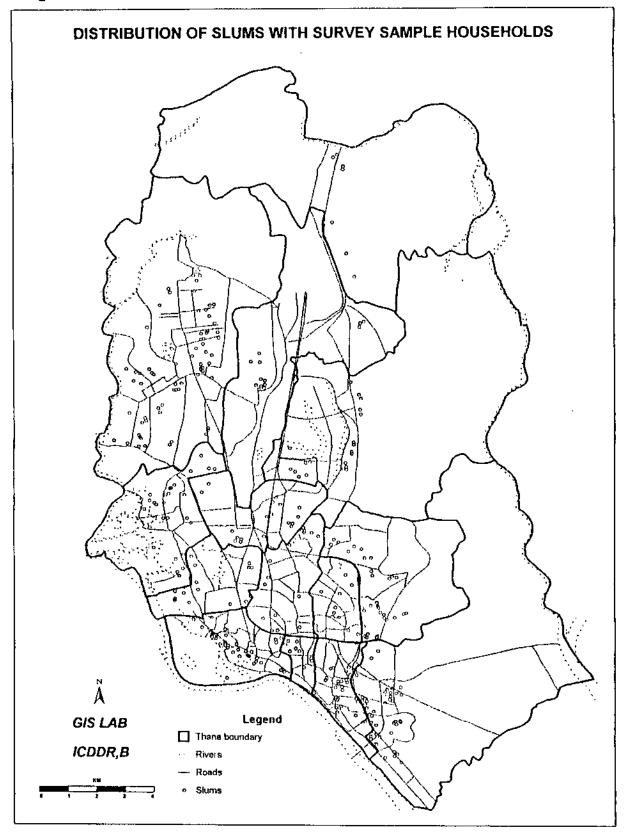
Annex 7: Distribution of income-earners by wage-unit, occupation category, and monthly income for survey-months 1 and 5

Annex 8: Child and adolescent occupation pattern for surveymonths 1,2,4,5 and 6

Annex 9: List of asset items with estimated monetary value

Map 1: Slums of Dhaka-City, Slum Survey 1991.





Annex 1: Age-sex structure of the survey sample for surveymonths 1, 2, 4, 5 and 6.

Month 1 Age	Male		Fem	Female		Total	
Categories	No	98	No	8	No		
0 - 5 6 - 12 13 - 18 19 - 45 > 45	406 438 209 950 169	(47) (46) (44) (52) (51)	455 520 266 889 163	(53) (54) (56) (48) (49)	861 958 475 1,839 332	(19) (21) (11) (41) (7)	
Total	2,172	(49)	2,293	(51)	4,465	100	

Month 2 Age	Ma	Male		Female		al
Categories	No	8	No	8	No	8
0 - 5 6 - 12 13 - 18 19 - 45 > 45	422 427 203 924 172	(48) (46) (44) (52) (50)	451 510 259 868 172	(52) (54) (56) (48) (50)	873 937 462 1,792 344	(20) (21) (10) (41) (8)
Total	2,148	(49)	2,260	(51)	4,408	100

Month 4 Age	Male		Fem	ale	Total	
Categories	No	ą,	No	કુ	No	·
0 - 5 6 - 12 13 - 18 19 - 45 > 45	489 413 202 876 169	(50) (45) (45) (51) (51)	483 502 249 834 161	(50) (55) (55) (49) (49)	972 915 451 1,710 330	(22) (21) (10) (39) (8)
Total	2,149	(49)	2,229	(51)	4,378	100

Month 5 Age	Ма	Male		Female		al
Categories	No	8	No	8	No	8
0 - 5 6 - 12 13 - 18 19 - 45 > 45	518 417 203 863 166	(51) (46) (45) (51) (52)	505 491 248 818 153	(49) (54) (55) (49) (48)	1,023 908 451 1,681 318	(23) (21) (21) (10) (38) (7)
Total	2,166	(49)	2,215	(51)	4,381	100

Month 6 Age Categories	Ma	Male		Female		al
	No	8	Йо	8	No	*
0 - 5 6 - 12 13 - 18 19 - 45 > 45	522 420 204 864 159	(51) (46) (45) (51) (51)	508 492 247 817 153	(49) (54) (55) (49) (49)	1030 912 451 1,681 312	(23) (21) (10) (38) (7)
Total	2,169	(49)	2,217	(51)	4,386	100

# Annex 2: Two examples to illustrate the difference between revenue and income.

- Total household expenditure of a labour contractor was reported at taka 6500. But a closer examination of the expenditure categories reveals that a part of the expenditure is actually business-related which generates income for him. So, we need to deduct this expenditure from the total. The labour contractor hired two labourers at a monthly cost of Therefore, for this household, monthly expenditure should be monthly income of taka 4000 from labour-contracting, which is the household.
- A street vendor buys and sells vegetables on a daily basis. He reports daily revenue of taka 400, and a daily occupation-related expenditure of taka 300 (for the replenishment of his vegetable stock). Computed monthly household revenue equals expenditure of taka 300x30= 9000. Other household expenditure was reported at taka 300x, and, therefore total household expenditure becomes taka 12000. In this case, the revenue earned was adjusted with the monthly household income of taka 3000 (i.e. 12000-9000). Note taka 12000 by business-related costs (i.e. taka 9000), the

# Annex 3: Monthly Household expenditure pattern by survey month.

# Mean expenditure

D	Average Expenditure						
Expenditure item	May (N≖880) Mean % SE			June (N=858) Mean % SE			
RICE FOOD EDUCATION HEALTH CLOTHING HOUSING GEWS OCCUPATION OTHER	579 756 39 85 130 222 36 84 455	24.3 31.7 1.6 3.6 15.4 9.3 1.5 3.5	9.3 12.8 4.0 6.1 7.5 9.3 3.3 5.9 20.9	590 759 38 99 84 226 33 97 524	24.1 31.0 1.6 4.0 3.4 9.2 1.3 4.0 21.4	9.8 12.9 3.8 19.7 7.6 9.9 2.7 6.8 41.1	
Overall Average Expenditure	2386	100	41.8	2448	100	60.5	

Expenditure		Average Expenditure						
item	July (N=827) Mean % SE			August (N=802) Mean % SE				
RICE FOOD EDUCATION HEALTH CLOTHING HOUSING GEWS OCCUPATION OTHER	575 725 40 93 56 222 41 100 462	24.8 31.3 1.7 4.0 2.4 9.6 1.8 4.3 20.0	9.3 12.9 4.3 15.8 4.9 10.4 4.3 8.0 2.2	575 729 39 90 49 213 36 100 495	24.7 31.3 1.7 3.9 2.1 9.2 1.5 4.3 21.3	9.4 13.5 4.5 12.0 6.5 10.3 3.3 7.6 26.6		
Overall Average Expenditure	2315	100	46.1	2326	100	46.5		

		1	Average E	Expenditu	ıre		
Expenditure item	September (N=807) Mean % SE			Mea	October (N=806) Mean % SE		
RICE FOOD EDUCATION HEALTH CLOTHING HOUSING GEWS OCCUPATION OTHER	585 704 41 97 55 215 38 99 537	24.7 29.7 1.7 4.1 2.3 9.1 1.6 4.2 22.6	10.2 13.5 4.8 16.0 5.2 10.2 5.9 9.0 55.6	577 687 48 110 81 214 36 96 543	24.1 28.7 2.0 4.6 3.4 8.9 1.5 4.0 22.7		
Overall Average Expenditure	2371	100	70.0	2393	100	54,4	

# Median expenditure

Mnth	No	RICE	FOOD	EDUC	нітн	СГТН	ноиѕ	GEWS	occu	OTHR	TOTAL MEDIAN
May June July Aug Sep Oct	880 858 827 802 807 806	540 540 540 540 540 540	600 750 600 600 600 600	0 0 0 0 0	30 15 20 20 26 25.5	41.7 0 0 0 0 0	150 150 100 50 100 100	00000	00000	305 329 323 338 330 370	2129.2 2118.5 2051.0 2030.0 2017.0 2040.0

Annex 4: Monthly Household expenditure pattern by Income Quintile

# Mean expenditure

			Average	Expendit	ıre	
Expenditure item	Mean	Quintile (N=181 %		Mean	Quintile (N=185 %	
RICE FOOD EDUCATION HEALTH CLOTHING HOUSING GEWS OCCUPATION OTHER	405 462 3 48 29 156 9 31 227	29.6 33.7 .2 3.5 2.1 11.4 .7 2.3 16.7	5.5 11.1 1.4	495 588 9 63 49 209 19 88 362	26.3 31.3 .5 3.3 2.6 11.1 1.0 4.7 19.2	2.3 5.9 3.8 14.1 2.7
Overall Average Expenditure	1370	100	33.0	1881	100	27.1

5		i	Average H	Expendit	ure	
Expenditure item	Quintile 3 (N=181)		Quintile 4 (N=181)			
	Mean	8	SE	Mean	8	SE
RICE FOOD EDUCATION HEALTH CLOTHING HOUSING GEWS OCCUPATION OTHER	543 671 19 64 63 223 25 77 363	26.5 32.8 0.9 3.1 3.1 10.9 1.2 3.8	13.1 10.7 3.8 4.9 5.4 16.6 3.5 9.7	607 770 39 86 92 284 30 113 533	23.8 30.1 1.5 3.4 3.6 11.1 1.2 4.4 20.9	15.9 16.1 6.6 7.0 8.6 21.9 4.0 12.1 24.0
Overall Average Expenditure	2048	100	26.7	2555	100	41.0

Expenditure	Ex	Average penditu	
item	Q: Mean	uintile (N=183) %	_
RICE FOOD EDUCATION HEALTH CLOTHING HOUSING GEWS OCCUPATION OTHER	807 1095 119 206 151 243 91 163 967	21.0 28.5 3.1 5.4 3.9 6.3 2.4 4.2 25.2	22.5 31.6 15.8 36.5 9.6 30.1 11.4 21.6 75,9
Overall Average Expenditure	3843	100	116.8

# Median expenditure

Y-Q	No	RICE	FOOD	EDUC	нгтн	CLTH	HOUS	GEWS	occu	OTHR	A11
1	181	390	450	0	25.0	10	145	0	2	202	1329
2	181	450	600	0	42	32	200	2	20	331	1848
3	181	540	690	0	45	50	200	10	18	343	2047
4	181	600	750	0	10	69	250	6	52	440	2512
5	181	780	990	32	100	113	0	25	63	699	3577

Annex 5: All and Female Income generating occupations in surveymonths 1 and 5.

All occupations

			Mor	ith 1			Mon	th 5	
L	Categories	No	(%)	no	8	No	(%)	no	8
2.	Production. construction & transportation workers -rickshaw/pushcart pullers -textile/garments workers -labourers -small business workers (food/beverage/clothing/furniture/shoewear/smith) -vehicle drivers -brick/stone breakers -housebuilders/masons -others Service workers -housemaids, ayahs -janitors/peons -cooks/bearers -barbers/hairdressers -sweepers -others Sales workers -streetvendors -shop proprietors -traders	250	(54) (15)	259 198 91 69 47 23 27 176 91 49 38 23 21 28	12 5 4 3 1 1 1 1 1 5 3 2 1 1 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	225	(14)	223 191 81 68 49 21 17 157 73 47 27 20 24 58 54	14 12 5 4 3 1 1 10 5 3 2 2 1 2
4.	-scavengers -others Other occupations	312	(19)	8 11 80	0. 0.6 5	303	(19)	12 15 80	1 1 5
	Total (%) Total population	1,60 4,38	<b>60</b> (3	8)	100	1,59 4,37	<b>54</b> (3	6)	100

Number of 2nd + 3rd occupations: 225 + 19 213 + 23 82 89 90 100

# Female occupation

	М	lonth	1	М	onth	5
Main Categories	No	(%)	8	No	(8)	8
<ol> <li>Textile/garments workers</li> <li>Service workers         (housemaids, ayahs, cooks/bearers etc.)</li> </ol>	136 105		32 25	123 89		32 23
3. Brick/stone breakers, labourers, other construction worker	69		16	60		16
4. Sales workers 5. Others	19 90		5 21	15 97		4 25
Total Female	419	(25)	100	384	(25)	100
TOTAL (Male and Female)	1,660	(100)		1,546	(100	<u> </u>

Annex 6: All and Female Income generating occupations by Income quintile for the month of July (Survey-month 3)

# Income quintile 1 (lowest) and 2

# ALL OCCUPATIONS

Occupation Categories	Income	e qui	nti	le 1	Inco	ome qu	inti	le 2
	No (%)	)	no	8	No	(%)	no	8
1. Production, construction &	130 (	58}			147	(62)		
transportation workers								
-rickshaw/pushcart pullers			51	23			57	24
-textile/garments workers			17	9			24	10
-labourers			24	11			10	4
-small business workers			7	3			7	3
(food/beverage/clothing/								
<pre>furniture/shoewear/smith) -vehicle drivers</pre>			_	2			_	2
-venicle drivers -brick/stone breakers			5 8	2 4			5 4	2 2
-housebuilders/masons			4	2			11	
-others			14	6			29	12
2. <u>Service workers</u>	32 (		11	Ü	31	(13)		12
-housemaids, ayahs	"- ''	/	16	7		,,	13	5
-janitors/peons	İ		4	2			6	3
-cooks/bearers	ŀ		9	2				2
-barbers/hairdressers			1	_	1		5 3 3 2	1
-sweepers	İ		1	-			3	1
-others			1	-			2	1
3. <u>Sales workers</u>	29 (	13)			24	(10)		
-streetvendors	ŀ		8	4			10	4
-shop proprietors			3	1			1	_
-traders			2	1	1		0	-
-scavengers	İ		4	2			1	- 5
-others	35 /	161	12 35	5 15	36	(16)	11 36	15
4. Other occupations	35 (:	13)	35	15	30	(15)	20	13
Total (%)	226	(38)		100	23	8 (32	1	100
Total population	588	,50,			709		•	

# FEMALE OCCUPATION

Main Occupation Categories	Inc	ome qu	inti	le 1	Inc	ome qu	inti.	le 2
	No	(%)	no	8	No	(%)	no	8
1. Production, construction & transportation workers -textile/garments workers -brick/stone breakers -labourers -others 2. Service workers -housemaids, ayahs -cooks/bearers -others		(35)	14 6 3 4 16 5	8 4 5 21 6		(47)	16 2 0 6	31 4 - 12 25 2
3. <u>Sales workers</u> 4. <u>Other occupations</u>		(12) (27)		12 <b>27</b>		(2) (24)	1 12	2 <b>24</b>
Total Female	78	(35)		100	51	(22)		100
TOTAL (Male and Female)	226	(100)			238	(100)		

# Income quintile 3 and 4

ALL OCCUPATIONS

	OCCUPATIONS Occupation Categories	Inc	ome o	quinti	le 3	Inco	we dn	inti	le 4
		No	(%)	n¢	8	No	(%)	no	8
1.	Production, construction & transportation workers	162	(54)	)		204	(57)		
	<pre>-rickshaw/pushcart pullers -textile/garments workers</pre>	:		47 35	16 12 5			46 61 16	13 17 4
	-labourers -small business workers (food/beverage/clothing/ furniture/shoewear/smith)			16 11	4			15	4
	-vehicle drivers -brick/stone breakers -housebuilders/masons			9 6 2	3 2 1			14 3 4	4 1 1
2.	-others Service workers	41	(14	36 ) 19	12 6	35	(10)	45 9	13
	<pre>-housemaids, ayahs -janitors/peons -cooks/bearers</pre>			7	2			5 7	1 2
	-barbers/hairdressers -sweepers -others			5 1 5	2 - 2	l l		7 2 5	2 1 1
3.	Sales workers -streetvendors -shop proprietors -traders -scavengers	33	(11	) 11 3 3	4 1 1	51	(14)	13 18 2 3	4 5 1
4.	-others Other occupations	63	(21	15	5 21	67	(19)	15 67	4 19
	Total (%) Total population	<b>2</b> 9	<b>99</b> (. 6	36)	100	<b>35</b> 93	5 <b>7</b> (38 3	)	100

# FEMALE OCCUPATIONS

Main Occupation Categories	Inc	ome q	uinti	ile 3	Income q	uinti	.le 4
	No	(%)	no	F	No (శ)	no	8
1. Production, construction & transportation workers -textile/garments workers -brick/stone breakers -labourers -others 2. Service workers -housemaids, ayahs -cooks/bearers -others 3. Sales workers 4. Other occupations	18	(52) (22) (1) (24)	28 4 1 10 16 1 1 20	34 5 1 12 20 1 1 24	11 (12) 2 (2) 22 (25)	39 3 5 5 9 2 0 22	45 3 6 6 10 2 - 2 25
Total Female	82	(27)		100	87 (24)		100
TOTAL (Male and Female)	29	9 (100	))		357 (10	0)	

# Income quintile 5

# ALL OCCUPATIONS

Occupation Categories	No	(%)	no	8
1. Production, construction &	196	(43)		
transportation workers				
-rickshaw/pushcart pullers			29	6
-textile/garments workers			57	12
-labourers			15	3
-small business workers (food/beverage/			27	6
clothing/furniture/shoewear/smith)				
-vehicle drivers			17	4
-brick/stone breakers			0	-
-housebuilders/masons			2	_
-others			49	11
2. Service workers	87	(19)		
-housemaids, ayahs			16	3
-janitors/peons	İ		27	6
-cooks/bearers			8	6 2
-barbers/hairdressers	j		11	2 3 3
-sweepers	1		12	3
-others			13	3
3. Sales workers	81	(18)		
-streetvendors			14	3
-shop proprietors	ļ		26	6
-traders	i i		4	6 1
-scavengers	ļ		4	1
-others	-		33	7
4. Other occupations	94	(21)	94	21
Total (%)	45	8 (37	}	100
Total population	124		•	•

# FEMALE OCCUPATIONS

Main Occupation Categories	No	8)	no	8	
1. Production, construction &	44	(47)			
<u>transportation workers</u>					
-textile/garments workers			33	35	
-brick/stone breakers	1		1	1	
-labourers			3	3	
-others			8	9	
2. Service workers	22	(23)			
-housemaids, ayahs			16	17	
-cooks/bearers			. 1	1	
-others			5	5	
3. Sales workers	7	(7)	7	7	
<del></del>		(22)		22	
4. Other occupations	21	(22)	21	22	
Total Female	94	(21)		100	
TOTAL (Male and Female)	458	(100	)		

Annex 7: Distribution of income-earners by wage-unit, occupation category, and montly income for survey-months 1 and 5.

Survey-mo	onth 1					
Type income	Male occupat	tion		Female occup	atio	מי
earner	Category	No	Monthly income	Category 	No	Monthly income
Daily income earners	Rickshaw/pushcart Labourers Vehicle drivers Brick/stone/house	249 43 27 32	1406 1231 2006 1323	Brick/stone/		
	Small business Other PCT*	22 61	2421 1702	labourers Other PCT	25 7	459 904
	Barbers Cooks/bearers Other service	18 13	1290 1370	Service workers	.5	731
	workers	8	1713			
	Street vendors Shop proprietors Traders Other sales workers	40 37 2 50	1543 2261 3675 2131	Sales workers	9	984
	All others	67	1490	All others	26	435
	Overall	669	1600	Overall	72	578
Monthly income earners	Textile/garment Small business Labourers	42 31 21	951 1513 1537	Textile/garment	129	587
	Vehicle drivers Other PCT	16 63	2331 1479	Other PCT	24	489
:	Janitors/peons Sweepers Cooks/bearers/house	45 18	1827 1615			
	maids/ayahs Other service workers	13 26	1700 2273	House maids/ayahs Other service workers	78 16	567 751
	Shop proprietors Street vendors Scavengers Traders	11 8 6 3	3436 1458 1850 6000	Sales workers	8	541
	Other sales workers	18	1542			
	All others Overall	105	<del></del>	All others	46	<del> </del>
Weekly	Textile/garment	10	1842	Overall	301	645 382
income earners	Other PCT	42	1024		14	382
	Service workers	2	2975	-		
ļ	Sales workers	4	2725	Sales workers	1	240
	All others	33	951	All others	6	360
	Overall	91	1207	Overall	21	369
A11 *PCT = P	- roduction/constructio	1186		-	394	618

Survey-month 5

Type	Male occupat	tion		Female occup	patio	n
income earner	Category	No	Monthly income	Category	No	Monthly income
Daily income earners	Rickshaw/pushcart Labourers Vehicle drivers Brick/stone/house Small business	219 39 26 21 22	1512 1255 1702 1339 2252	Brick/stone/	24	456
	Other PCT*	55		Other PCT	5	377
	Barbers Cooks/bearers Other service	21 13	1235 1183	Service workers	8	494
	workers	44	1083	Sales workers	.10	714
	Street vendors Shop proprietors Traders Other sales workers	35 6 54	1361 2122 2175 1534	Sales Workers	.10	,14
	All others	53	1436	All others	35	472
_	Overall	615	1564	Overall	82	493
Monthly income earners	Textile/garment Small business Labourers	55 29 19	883 1377 1397	Textile/garment	119	653
	Vehicle drivers Other PCT	20 56	2618 1531	Other PCT	17	502
	Janitors/peons Sweepers Cooks/bearers/house	41 18	1664 1546			<u>.</u>
	maids/ayahs Other service workers	20	1886	House maids/ayahs Other service workers	13	571 767
	Shop proprietors Street vendors Scavengers Traders Other sales workers	14 6 8 4 24	2520 1550 1872 3425 1548	Sales workers	3	1100
:	All others	115	2126	All others	54	899
	Overall	436	1741	Overall	269	684
Weekly income earners	Textile/garment Other PCT	10 38	1615 977	PCT	11	216
COTHETS	Service workers	5	760	Service workers	3	İ
	Sales workers	5	2243	Sales workers	1	
	All others	20	802	All others	6	<del> </del>
	Overall	78	1081	Overall	21	
A11	- Production/construction	1129		<u></u>	372	617

\*PCT = Production/construction/transport workers

months 1,2,4,5 and 6.

Survey-month 1

MALE	6 - 12 No %		13 - No	· 15	16 - No	- 18	To No	tal %
Income earners	63	15	69	57	51	61	183	29
School	162	39	26	21	18	22	206	33
Non-school/ Non-income	194	46	27	22	14	17	235	38
Total	419	100	122	100	83	100	624	100

FEMALE	6 - 12 No %	13 - 15 No %	16 - 18 No %	Total No %
Income earners	54 11	51 42	30 23	135 18
School	166 33	26 22	8 6	200 26
Non-school/ Non-income	286 57	44 36	92 71	422 56
Total	506 100	121 100	130 100	757 100

Survey-month 2

MALE	6 - No	12	13 - No	- 15 %	16 - No	· 18	To No	tal %
Income earners	63	15	69	57	51	61	183	29
School	162	39	26	21	18	22	206	33
Non-school/ Non-income	194	46	27	22	14	17	235	38
Total	419	100	122	100	83	100	624	100

FEMALE	6 - No	12 %	13 ·	- 15 %	16 - No	- 18 %	To:	al %
Income earners	54	11	51	42	30	23	135	18
School	166	33	26	22	8	6	200	26
Non-school/ Non-income	286	57	44	36	92	71	422	56
Total	506	100	121	100	130	100	757	100

Survey-month 4

	6 -	12	13	- 15	16	- 18	Тс	tal
MALE	No	8	No	*	No	*	No	8
Income earners	63	15	69	57	51	61	183	29
School	162	39	26	21	18	22	206	33
Non-school/ Non-income	194	46	27	22	14	17	235	38
Total	419	100	122	100	83	100	624	100

FEMALE	6 - No	12	13 - No	- 15 %	16 - No	- 18 %	To:	tal %
Income earners	54	11	51	42	30	23	135	18
School	166	33	26	22	8	6	200	26
Non-school/ Non-income	286	57	44	36	92	71	422	56
Total	506	100	121	100	130	100	757	100

Survey-month 5

MALE	6 - 12 No %	13 - 15 No %	16 - 18 No %	Total No %
Income earners	63 15	69 57	51 61	183 29
School	162 39	26 21	18 22	206 33
Non-school/ Non-income	.194 46	27 22	14 17	235 38
Total	419 100	122 100	83 100	624 100

FEMALE	6 - No	12 %	13 No	- 15 %	16 No	- 18 %	To:	al %
Income earners	54	11	51	42	30	23	135	18
School	166	33	26	22	8	6	200	26
Non-school/ Non-income	286	57	44	36	92	71	422	56
Total	506	100	121	100	130	100	757	100

survey-month 6

MALE	6 - No	12	13 - No	· 15	16 - No	· 18	To No	tal %
Income earners	63	15	69	57	51	61	183	29
School	162	39	26	21	18	22	206	33
Non-school/ Non-income	194	46	27	22	14	17	235	38
Total	419	100	122	100	83	100	624	100

	6 -	12	13 -	- 15		18	Tot	
FEMALE	No	8	No	8	No	8	No	· · · · · · · · · · · · · · · · · · ·
Income earners	54	11	51	42	30	23	135	18
School	166	33	26	22	8	6	200	26
Non-school/ Non-income	286	57	44	36	92	71	422	56
Total	506	100	121	100	130	100	757	100

Annex 9: List of asset items with estimated monetary value.

	Probed items	Estimated monetary Value (1993 Taka)
1	Fan	1300
2	TV	6000
3	Radio	200
4	Cycle	3000
5	Table	400
6	Bed	500
7	Watch	200
8	Aluminium cooking pot	80
9	Earthen cooking pot	20
	Non-probed items	
1	Wooden closet	550
2	Wooden shelve	300
3	Golden ornaments	380
4	Vacuum flask	225
5	Grinder (stone)	125
6	Wooden stool	70
7	Cassette player	1000
8 9	Dressing table	1000
10	Tea set Plates	17 20
11	Places Silver bowl	140
12	Wardrobe	730
13	Bucket	110
14	Truck	230
15	Silver	15
16	Rickshaw	7000
17	Steel Almirah	3375
18	Brass glass	100
19	Tiffing carrier	140
20	Mosquito net	150
21	Pitcher	100
22	Bowl	40
23	Lantern	125
24	Stove	150
25	Sewing machine	2800
26	Jug	25
27	Glass	15
28	Wooden piece	40
29	Bamboo piece	30 133
30	Umbrella	133
31 32	Bamboo almirah Bamboo basket	300 75
33	Frying pan	50
34	Rice plate (big)	75
35	Kettle	110
36	Mortar & pestle	100
37	Bamboo shelve	150
38	Heater	56
39	Wrist watch	200
40	Mattress	380
41	Pillow	60
42	Bag	80
43	Spoon	10
44	Container	30
45	Shoe	200

	Non-probed items (cont'd)	Estimated monetary Value (1993 Taka)
46	Chair	233
47	Plastic basket	100
48	Push cart	2500
49	V. C. R.	9000
50	Cane tool	115
51	Bedding	200
52	T. V.	5000
53	Goat	700
54	Design Frame	150
55	Tube well	1200
56	Hen	60
57	Charger	350
58	Hot Box	120
59	Torch	150
60	Iron (pressing cloth)	500
61	Dhenki	1000
62	Shop	1500
63	Steel rack	325
64	Sofa set	2500
65	Dinner set	100
66	Fishing net	1000
67	Tools for mason	600
68	Curtain	100
69	Machine for Vanarashi	5000
70	Cow	4000
71	Speaker	500
72	Shovel	200
73	Mirror	60
74	Old clothing	100
75	Musical instruments	750
76	Baby cycle	300

;