## **Summary of results from DHS 2007 and MOOP 2013 (Bangladesh)**

#### Overview

As of the latest 2011 census, the population of Bangladesh is 144.04 million, among which 76.7% live in rural and 23.3% in urban areas (Bangladesh Bureau of Statistics, 2015). The country's urban population has an annual growth rate of 6.0% as internal migration plays an important role in Bangladeshi people's livelihood strategies. Rural-urban migration plays a crucial role in poverty alleviation in the country. It can respond to various reasons, such as employment, environmental factors (natural disasters), and family reunification purposes. There is also increasing female migration, particularly resulting from growing work opportunities in Dhaka and Chittagong in the garment industries.

Our analysis shows that, in general, migrant households are poorer on average than urban non-migrant households. Specifically, as measured by wealth index, migrant households are more likely to be in the two poorest wealth quintiles and less likely to be in the richer quintiles (Table 1). But at the same time, it is worth noting that the economic well-being of rural-urban migrants follow a bi-modal distribution: while many of them are in the poor quintiles, a large fraction of these migrants are in the two richest groups. Hence, it is important to examine migrants of different socioeconomic groups separately.

When we restrict to migrants living at or below the poverty line and examine their characteristics (Table 2), we find that they tend to be young (65% are 35 years old or younger) and the majority of them are Muslim. Also, these migrants tend to have very little education. About 88% have no education or some primary school education. Only 11.5% have some or complete secondary school education. About half are currently working. Among those working, the primary occupations are agricultural related, service, and manual labor. With respect to the geographic distribution of these migrants, 15% live in capital city or cities with over 1 million people; 41% live in medium-size cities (over 50,000 people); and 44% live in small-size cities (fewer than 50,000 people).

Although migrants have gained higher wages in urban areas, they are often socially and economically excluded from access to food, sanitation, education and housing. Our data provide some information on household standards of living (Table 3). In general, rural-urban migrant households in poverty have extremely limited access to safe water (piped), clean toilet, and electricity. Only 10% of poor migrant households have access to electricity. Not a single migrant household have access to safe drinking water (piped water). Almost all of them used semi-safe water (from protected well and spring). Only 4% use flush toilet and more than half of these households share toilet with other households. Many of these households (71%) have children between the age of 0 and 15.

Poor migrant households also seem to have suboptimal access to health services (Table 4). The good news is that all of them live in communities with health facilities and doctors. But 82% of them live in communities with health and family planning workers and only 66% have easy access to pharmacy. These numbers are slightly lower than poor urban nonmigrant households. A study by Islam et.al in 2016 showed that migrants and non-migrants did no differ in their use

of modern contraceptives and treatment for STIs, but migrants were less likely to receive antenatal care. The study also showed that more migrants had home births, did not take Vitamin A post-delivery and had no medical examination post-birth. We are not able to evaluate the health use behavior of migrants because of lack of information.

There are some geographical differences in the economic well-being of rural-urban migrant households (Table 5). In general, migrants in medium-size cities tend to fare worse off than those in both large and small-size cities. Migrants in the Dhaka region fare especially well, whereas migrants in Barisal are the poorest comparing to those in other regions.

When we examine destination (Table 6) and regional differences (Table 7) in standard of living among poor migrant households, we find that those in medium and small cities are relatively more disadvantaged than those living in large cities. The exception is access to health services, for which poor migrants in large cities are sometimes worse off than their peers in smaller-size cities. With respect to regional variations, poor migrants in the Barisal region are particularly vulnerable to poor sanitation, unsafe drinking water, and lack of electricity. The patterns of access to health services are not entirely clear.

Based on interviews with returned migrants (Table 8), we find that about one third had negative experiences at work, defined as at least one of the following experiences: verbal abuse, sexual abuse, physical abuse, physical injury, hazardous chemicals, racial discrimination, religious discrimination, gender discrimination, and occupational discrimination. Also, the return immigrants were asked to compare their quality of life and financial situation from five years ago. About 42% report easier life, whereas the rest do not experience significant improvement in life. Almost 42% of migrants report being worse off financially than five years ago.

### **DHS 2007: Data and Methods**

DHS (2007) is a national representative household survey of ever-married women (age 15-49; N=10,996) in each sampled household and ever-married men (age 15-54; N=3,771) in every second household. See Figure 1 for sampling points.

In our analysis, we restricted the sample to rural-to-urban migrants and urban residents (those who have always lived in the current residence in urban areas). To determine who are rural-to-urban migrants, we use the questions: 1) how long have you been living continuously in the current place of residence?; and 2) Just before you moved here, did you live in a city, in a town, or in a countryside? We define those who currently live in urban areas but have moved from the countryside as rural-to-urban migrants.

In the sample, there are 1,233 (34%) urban residents and 2,352 (66%) rural-to-urban migrants. Among the migrants, the average length of stay in the urban destination is 12.6 years.

Because of the interest in migrants at or below the poverty line, we use two approaches to determine the poverty status of a household (note that there is no direct information on individual or family income to permit other operationalization). The first is a household wealth index, created by DHS using 50 items. The variable assumes 5 categories from the poorest to the riches.

We consider those belonging to the two poorest categories as people at or below the poverty line (https://www.dhsprogram.com/programming/wealth%20index/Bangladesh%20DHS%202007/bangladesh%202007.pdf).

As sensitivity analysis, we created our own measure of poverty status using an asset list. The list includes 15 household items, including radio, television, phone, mobile phone, refrigerator, bicycles, electricity, car/truck, watch, boat, almirah/wardrobe; table, chair, animal-drawn cart, and ricksha/van. We sum up the total number of items owned by each household and divide all households into five equal quintiles. We then took the two lowest quintiles (lowest 40% of households) as those at or below the poverty line. In general, results from the two definitions of poverty status are largely similar. We thus present results from the first definition (wealth index) as the main results because it is more comprehensive.

## Migration Out Of Poverty (MOOP) 2013: Data and Methods

MOOP is a survey conducted by the UK's Department for International Development, with the focus on the relationship between internal, regional and international migration and poverty. It is a national survey conducted in 6 districts located in 6 administrative divisions of Bangladesh. The sample was purposively drawn through quota sampling within each district. The survey interviewed a total of 1,205 households, of which 905 were households with migrants and 300 with no migrants.

The survey is based on origin households of migrants (sample of sending households) and contains information on both domestic out-migration and international out-migration. Many of the households have sent out international migrants and thus not included in the analyses. The survey also includes specific questions asked of return migrants about their experiences in migratory destinations while they were away. Whereas such a survey design does not allow us to compare migrants to urban residents (as in the DHS data), the dataset provides some useful information on the experiences of migrants when they were out for work (from reports of return migrants).

To identify return migrants, we use the question: "Has (NAME) ever lived away for 3 months or more over the past 10 years, but has already returned for the last 12 consecutive months?" In the sample, there are 31 domestic return migrants, all of which are included in the analysis. Note that there is no sufficient income information and sample size that permits determining migrants at or below the poverty line at their destinations.

# Appendices

Figure 1.1 Map of 2007 Bangladesh Urban and Rural Sampling Points

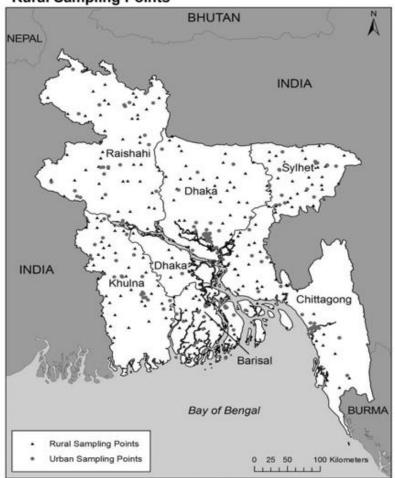


Table 1. Wealth Index by Migration Status, DHS 2007

Percentage	Urban residents	Rural-urban migrants
Poorest	6.8	7.5
Poor	10.9	11.8
Middle	13.1	16.4
Rich	23.8	21.7
Richest	45.4	42.6
N	542	1,994

Table 2. Characteristics of Rural-urban Migrants in Poverty (N=445)

	Percentage
Age	1 creemage
15-19	10.1
20-24	15.7
25-29	18.9
30-34	20.0
35-39	15.1
40-44	11.0
45-49	8.3
50-54	0.9
	0.5
Education	
No education	51.0
Some or complete primary	37.1
Some or complete secondary	11.9
Religion	
Islam	92.8
Hinduism	7.2
Currently working	47.6
Occupation (among those working)	
Agricultural	38.1
Home manufacturing	13.5
Manual labor	27.8
Service	10.8
Professional and managerial	9.9
Destination type	
Capital, large city (over 1 million population)	14.6
Medium-size city (over 50,000 population)	41.1
Small-size city (<50,000 population)	44.3
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Region of residence	
Barisal (1)	21.6
Chittagong (2)	17.5
Dhaka (3)	15.1
Khulna (4)	16.2
Rajshahi (5)	16.4
Sylhet (6)	13.3

Table 3. Living Standards of Households of Rural-urban Migrants in Poverty (N=385)

	Percentage
Has electricity	10.1
Drinking water	
Piped water (safe)	0.0
Protected well or spring (semi-safe)	99.0
Unprotected, surface water (unsafe)	1.0
Toilet	
Flush toilet	4.4
Pit toilet/Latrine	71.2
No facility/bucket	24.4
Share toilet with other households	51.4
Whether children age 0-15 living in the households	70.7

Table 4. Access to Health Services for Rural-urban Migrants in Poverty (N=445)

	Percentage
Has health facilities in the community	100
Has health and family planning workers in the community	81.6
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Has pharmacy in the community	65.6

Table 5. Wealth Index of Rural-urban Migrants by Destination Type and Region (N=1,994)

Percentage	Poorest	Poor	Middle	Rich	Richest
Destination type					
Capital, large city (over 1 million population)	2.8	5.8	10.8	22.9	57.6
Medium-size city (over 50,000 population)	13.0	18.5	18.5	21.4	28.7
Small-size city (<50,000 population)	8.0	12.5	19.7	20.8	39.1
Region of residence					
Barisal (1)	11.4	19.4	25.1	22.1	22.1
Chittagong (2)	4.8	11.6	20.8	24.8	28.0
Dhaka (3)	7.1	5.6	10.0	17.7	59.7
Khulna (4)	8.0	12.4	14.7	24.8	40.1
Rajshahi (5)	9.0	11.2	15.6	20.9	43.3
Sylhet (6)	5.9	16.1	16.1	21.2	40.7

Table 6. Characteristics of Poor Migrant Households by Destination Type (N=385)

Percentage	Large city	Medium size city	Small city	
Has electricity	13.8	10.6	8.4	
Drinking water				
Piped water (safe)	0	0	0	
Protected well or spring (semi-safe)	98.3	99.4	98.8	
Unprotected, surface water (unsafe)	1.7	0.6	1.2	
Toilet				
Flush toilet	5.7	3.1	5.4	
Pit toilet/Latrine	75.9	69.4	71.3	
No facility/bucket	19.0	27.5	23.4	
Has health/family planning workers in comm.	62.1	81.3	89.2	
Has pharmacy in the community	67.2	73.1	59.3	

Table 7. Characteristics of Poor Migrant Households by Region (N=385)

Percentage	1	2	3	4	5	6
Has electricity	2.5	8.1	13.1	10.9	18.5	9.6
Drinking water						
Piped water (safe)	0	0	0	0	0	0
Protected well or spring (semi-safe)	100	98.4	100	98.4	100	96.2
Unprotected, surface water (unsafe)	0	1.6	0	1.6	0	3.9
Toilet						
Flush toilet	0	9.7	4.9	1.6	3.1	9.6
Pit toilet/Latrine	74.1	51.6	82.0	87.5	69.2	59.6
No facility/bucket	25.9	38.7	13.1	10.9	27.7	30.8
Has health/family planning workers in	87.7	88.7	82.0	90.6	64.6	75.0
comm.						
Has pharmacy in the community	79.0	50.0	57.4	100.0	49.2	55.8

Note: Region label corresponds to regions in Table 2.

Table 8. Negative Experiences and Subjective Well-being of Return Migrants (N=31)

	Percentage
Negative experiences at work	29%
Compare quality of life between now and five years ago	
Much easier	3.2
Easier	38.7
Neither easier nor harder	35.5
Harder	22.6
Compare household's financial situation between now and five years ago	
Adequate	22.6
Just adequate	35.5
Inadequate	41.9