



Study on Livelihood Status of Slum Dwellers in the North Dhaka City Corporation

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Abstract: The study was undertaken to determine the livelihood status of slum dwellers in some selected areas of North Dhaka City Corporation and to explore the relationship between livelihood statuses of slum dwellers with the selected characteristics. Data were collected from 130 slum households by using interview schedule from July to October 2012 in following a stratified random sampling procedure. Majority (43.08%) of the respondents were young in the study area. Almost one half (43.07%) of the respondents was illiterate to could sign only. Majority of the slum people were found in the low annual income category, low media contact, low training exposure and medium environmental knowledge. Overall livelihood status of the slum people was found low and majorities (65.37%) of the respondents were found having high problems (such as lack of proper waste management system, lack of proper sanitation and drainage system, water crisis than necessary and lack of proper health facilities). Relationship among the variables was determined by using the Pearson's Product Moment correlation co-efficient (r). The computed value of correlation coefficient showed that education, annual income, media contact, training exposure, and knowledge about environment showed significant positive relationship at 0.01 level of probability with their livelihood status. On the other hand, age, family size and credit had no significant relationship with their livelihood status.

Key Words: Livelihood status, Slum Dweller.

Introduction

Bangladesh is one of the least developed countries of the world. The vast majority of the people live under poverty line. The country is characterized by its low per capita Gross National Product (GNP), dominance of cereals in food intake and low standards of nutrition. The vast majority of the people are still ill fed, ill clothed, ill housed and ill educated and percentage of absolute poor in Bangladesh is one of highest in the world. Bangladesh is trapped in the vicious circle of poverty which is characterized by large scale unemployment and underemployment, low level of income, low productivity, weak technological base, market imperfections and lack of skill (Hossain, 2006).

Dhaka currently is one of the fastest growing megacities in the world with a population of 15 million and an annual growth rate of 5 percent (World Bank, 2007). According to World Bank (2007), the city has more than 4500 slums and squatter settlements within its territory accommodating more than 35 percent of its population in approximately 112670 households. An estimated 0.3 to 0.4 million migrants mostly poor; flocks at the city annually (World Bank, 2007). Dhaka's population of 15.4 million is expected to grow to around 20 million in 2020, and Dhaka is projected to be the world's third most populous city (Census, 2011). This rapid growth of urban population is fuelled by migration of the rural poor perceiving the city as the nuclei of better opportunities.

Dhaka is a city characterized by extreme inequality and poverty. Though poverty in Dhaka City has somewhat declined over time, the magnitude of poverty in Dhaka City, in terms of both the percentage and absolute number of people below the poverty line still remains quite staggering. Islam *et al.* (1997) reported that about 55% and 32% of the city's population are absolute poor and hardcore poor respectively. Centre for Urban Studies (1990) shows the per capita annual income in Dhaka City as only US\$327, which is perhaps the lowest among the world's megacities. Significant portions of the city's population are living in slums and squatter settlements. The adverse surroundings of low income settlements, coupled with a highly dense population, gives rise to a myriad of social, health and environmental problems (Siddiqui *et al.*, 2000; Hossain, 2001).

Dhaka City is noted for a serious shortage of housing facilities. The private sector provides 90% of the housing in the city while the government provides 10% of the housing for government employees (Siddiqui *et al.*, 2000). Land is a scarce commodity in the city. More than 70% of the city's populations have no access to land. The distribution of land among the remaining 30% is also highly unequal (Stubbs and Clarke, 1996). Willcox (1979) shows that due to physiographic factors such as low-lying agricultural land and natural barriers such as rivers, canals, depressions, the expansion of Dhaka City has been seriously constrained. Dhaka City faces serious problems in almost all areas of its infrastructure, e.g.

shortage of water, anomalies in sewerage and excreta management, solid waste management. Among all of these facilities electricity is possibility the best provided, yet there are areas of the city experiencing problems of inadequate supply, and most areas experience frequent breakdowns (Hossain, 2001). With these views mentioned above the present working was under taken to evaluate the livelihood status of slum dwellers in the North Dhaka city corporation.

Materials and Methods

The study was conducted in North Dhaka City Corporation (NDCC) which is situated in the northern part of Dhaka City which consists of 36 (Thirty Six) wards. The total area of NDCC is about 82.638 sq. km. NDCC is confined Longitude within 90°20' to 90°28' and Latitude within 23°44' to 23°54'. The total number of slums in the Dhaka city corporation area is approximately 4,342. For the study only four slums were selected in North Dhaka City Corporation (NDCC) regarding location, type of structure, density and size such as Bhashantek and Rupnagar Tinsheed at Mirpur, Beribad at Mohammadpur, Karail at Mohakhali. The slum people (usually head of the household) constituted the population for this study. The data for this study was collected from four areas in NDCC such as Bhashantek at Mirpur, Rupnagar Tinsheed at Mirpur, Beribad at Mohammadpur and Karail at Mohakhali. The number of households in Bhashantek at Mirpur was 480, Rupnagar Tinsheed at Mirpur was 360, Beribad at Mohammadpur was 240 and number of households in Karail at Mohakhali was 1520. Thus, 5% of the households are selected randomly from each study area. Hence, 24 slum people from Bhashantek, 18 slum people from Rupnagar Tinsheed, 12 slum people from Beribad and 76 slum people from Karail were selected randomly as respondents. As a result total 130 slum people were selected randomly as respondents. Livelihood status of the slum people was taken as dependent variable which was operationalized through using the "Asset Pentagon" consisting of human capital, physical capital, natural capital, social capital and financial capital. Each of these five capitals was measured by putting 5 statements against a five point rating scale. The score obtained against each of the capitals were added together to get the livelihood status score. The independent variables (e.g. age, education, Family size, Annual income, Media contact, Training exposure, Credit received and Knowledge on

Environment) were however, measured through using suitable scales and techniques. The Data was collected based on primary and secondary sources. The Primary data was collected from the field level through intrinsic study during the period from July to October 2012. The secondary data was collected from published literature, reports, write-ups, seminar and conference papers, census reports including the basic statistics available with Dhaka City Corporation (Slum Department), and nongovernment organization (NGO) such as UNDP/UNESCO. Moreover, some data and information were collected from website of DCC & slum area. The collected data were compiled, coded and tabulated according to the objectives of the study. The respondents were classified into several categories for clear and easy description of different variables. These categories were developed by considering the nature of distribution of data (normal, ordinal, interval and ratio), general understanding prevailing in the social system and possible scoring system. The SPSS (Statistical Package for Social Science) computer package was used to perform the data analysis. Descriptive analysis such as mean, range, number and percentage, standard deviation, rank order was used wherever applicable. In order to find out the relationships between the concerned variables, Pearson's Product Moment Correlation Coefficient (r) was computed. Five percent (0.05) level of possibility was used to reject any null hypothesis. Besides, necessary care may take to ensure the validity and reliability of data.

Results and Discussion

Data presented in Table 1 indicate that Age of the respondents ranged from 18 to 60, with a mean of 38.62. Major proportions (43.08%) of the respondents were young. About 71.54 percent slum dwellers had more than 4 family members. The educational qualification having 26.92 percent of the respondents had fully illiterate, 16.15 percent respondents can sign only, 30.77 percent in primary educated, 22.31 percent in secondary level educated and only 3.85 percent had higher secondary level educated. The annual income of all the respondents ranged from 54 thousand to 130 thousand with mean of 84415.38 Tk. and standard deviation of 23459.61. Majority (51.54 percent) of the respondents were found to have low annual income while 20.77 percent had medium annual income and rest of them (27.69 percent) had high annual income.

Table 1. Selected characteristics of the respondents

	Category	Frequency	Percent	Mean	SD
Age	Young (Upto 35)	56	43.08	38.62	17.81
	Middle (36-50)	27	20.76		
	Old (>50)	47	36.16		
Education	Illiterate (0)	35	26.92	3.14	3.62
	Can sign only (0.5)	21	16.15		
	Primary (1- 5)	40	30.77		
	Secondary (6- 10)	29	22.31		
	Above Secondary (>10)	5	3.85		
Family size	Small Family (upto 4)	37	28.46	5.80	1.99
	Medium Family (5-6)	55	42.31		
	Large Family (>6)	38	29.23		
Annual income	Low income (upto 75000Tk.)	67	51.54	84415.38 Tk.	23459.61
	Medium income (75001-100000Tk.)	27	20.77		
	High income (>100000Tk.)	36	27.69		
Media contact	Low (0- 8)	57	43.85	10.08	4.29
	Medium (9-16)	52	40.0		
	High (17- 24)	21	16.15		
Training exposure	Short training (1- 2 days)	56	43.08	3.12	1.45
	Medium training (3- 4 days)	38	29.23		
	Long training (5- 6 days)	36	27.69		
Credit received	No credit received (0)	27	20.77	5284.62 Tk.	3552.99
	Small credit received* (upto 5000 Tk.)	38	29.23		
	Medium credit received* (5001 to 7000 Tk.)	19	14.62		
	Large credit received* (>7000 Tk.)	46	35.38		
Environmental knowledge	Low (0- 10)	24	18.46	14.64	4.14
	Medium (11-20)	85	65.39		
	High (21- 30)	21	16.15		
	Total	130	100		

Media contact was found to vary from 6 to 21 in which 43.85 percent of the respondents had low media contact while 40 percent had medium media contact and rest (16.15 percent) of them had low media contact. The training exposure score of all the respondents ranged from 1 to 6 days with a mean of 3.12 days in which 43.08 percent of the respondents were found to have short training exposure while less than third (29.23 percent) of them had medium

training exposure and rest (27.69 percent) had high training exposure. The credit received score of the respondents ranged from 0 to 10 thousand with a mean of 5284.62 Tk. in which majorities (79.23 percent) of the respondents were found to be credit recipients while one-fifth (20.77 percent) of them had received no credit The environmental knowledge scores of all the respondents ranged from 9 to 24 with a mean of 14.64 in which highest proportion (65.39

percent) of the respondents fell in medium knowledge categories while 18.46 percent of the respondents fell in the low knowledge categories and rest (16.15)

percent of the respondents fell in the high knowledge categories.

Table 2. Livelihoods status of the respondents

Categories of the respondents	Frequency	Percent	Mean	Standard deviation
Low status (0- 45)	59	45.38	51.65	25.46
Medium status (46- 90)	49	37.69		
High status (91-125)	22	16.93		
Total	130	100.0		

Possible scores for livelihood status of the respondents ranged from 0 to 125 and observe range was 34 to 105. Majority (45.38 percent) of the respondents were in low livelihood status while 37.69

percent were in medium livelihood status and only (16.93 percent) of the respondents were high livelihood status.

Table 3: Relationship between the selected characteristics of the respondents and their livelihood status

Dependent variable	Independent Variable	Computed value of 'r' (N=130)
Livelihood status of the slum dwellers	Age	-0.060 NS
	Education	0.446(**)
	Family size	0.019 NS
	Annual income	0.947(**)
	Media contact	0.582(**)
	Training exposure	0.621(**)
	Credit received	-0.025 NS
	Knowledge about environment	0.609 (**)

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

NS = Not Significant

Relationship between age of the respondents and their livelihood status

This led to the following observations regarding the relationship between the variables under consideration:

- i. The relationship showed a tendency in the negative direction between concerned variables.
- ii. A non significant relationship was found between concerned variables.
- iii. The computed value of 'r' (-0.060) was found at 0.01 level of probability.

The findings indicated that age of the respondents had no significant relationship with, their livelihood status. Thus, it might be said that age was not so important factor for improving the living status of the concerned respondents.

Relationship between education of the respondents and their livelihood status

This led to the following observations regarding the relationship between the variables under consideration.

- i. The relationship showed a tendency in the positive direction between concerned variables.
- ii. A significant relationship was found between concerned variables.
- iii. The computed value of 'r' (0.446) was found at 0.01 level of probability

Based on the findings, the education of the respondents had a positive significant relationship with their livelihood status. It means that, a person having more education used to have higher livelihood status. Education brings desirable change in human behavior. It broadens the horizon of knowledge of an individual which ultimately help him/her increase mobility and be able to make contact with the extension personal and also be able to access to the resources, which combine make a positive effect on the improvement of his/her livelihood status.

Relationship between family size of the respondents and their livelihood status

This led to the following observations regarding the relationship between the variables under consideration.

- i. The relationship showed a tendency in the positive direction between concerned variables.
- ii. A non significant relationship was found between concerned variables.
- iii. The computed value of 'r' (0.019) was found at 0.05 level of probability

The findings indicate that family size of the respondents had no significant relationship with their livelihood status. Thus, it might be said that family size of the respondents was not so important factor for improving livelihood status. However, it may also be argued that large family size act as barrier for improving livelihood status of an individual

Relationship between annual income of the respondents and their livelihood status

This led to the following observations regarding the relationship between the variables under consideration.

- i. The relationship showed a tendency in the positive direction between concerned variables.
- ii. A significant relationship was found between concerned variables.
- iii. The computed value of 'r' (0.947) was found at 0.01 level of probability

The researcher concluded that annual income of the respondent had significant and positive relationship with their livelihood status. This indicated that high income makes strong economic base of family and contributes improving their livelihood status.

Relationship between media contact of the respondents and their livelihood status

This led to the following observations regarding the relationship between the variables under consideration.

- i. The relationship showed a tendency in the positive direction between concerned variables.
- ii. A significant relationship was found between concerned variables.
- iii. The computed value of 'r' (0.582) was found at 0.01 level of probability

The findings indicate that the media contact of the respondents had significant and positive relationship with their livelihood status.

Relationship between training exposure of the respondents and their livelihood status

This led to the following observations regarding the relationship between the variables under consideration.

- i. The relationship showed a tendency in the positive direction between concerned variables.
- ii. A significant relationship was found between concerned variables.
- iii. The computed value of 'r' (0.621) was found at 0.01 level of probability

The findings indicate that the training experience of the respondents had significant relationship with their livelihood status.

Relationship between credits received of the respondents and their livelihood status

This led to the following observations regarding the relationship between the variables under consideration.

- i. The relationship showed a tendency in the negative direction between concerned variables.
- ii. A non significant relationship was found between concerned variables.
- iii. The computed value of 'r' (-0.025) was found at 0.05 level of probability

The findings indicate that credit received of the respondents had no significant relationship with their livelihood status. Thus, it might be said that small amount of credit received by the respondents was not so important factor for improving livelihood status. However, it may also be argued that repayment procedure of micro credit at one week interval installment also acts as barrier for improving livelihood status of the slum dwellers. On the other hand, timely loan distribution was the major factor for utilization of money to the income generating activities.

Relationship between environmental knowledge of the respondents and their livelihood status

This led to the following observations regarding the relationship between the variables under consideration.

- i. The relationship showed a tendency in the positive direction between concerned variables.
- ii. A significant relationship was found between concerned variables.
- iii. The computed value of 'r' (0.609) was found at 0.01 level of probability

Based on the above findings the researcher concluded that environmental knowledge of

respondents had significant and positive relationship with their livelihood status. This means that the more knowledge about environment,

the more was the rate of possibility for improving living status.

Table 4. Problems faced by the slum dwellers

Categories of the respondents	Frequency	Percent	Mean	Standard deviation
Low (0- 6)	10	7.69	11.92	4.08
Medium (7- 12)	35	26.94		
High (13-20)	85	65.37		
Total	130	100.0		

These findings reflected that most of the respondents faced high problems among them most severe problems wastes spread here and there, lack of

adequate dustbins and also proper wastes management systems etc. Major problems (Table 5) identified are discussed below:

Table 5. Current status of facing problems by slum dwellers

Rank SL. No.	Facing problems	Percent Respondents
1	Spread of wastes here and there	19.23
2	Lack of adequate dustbins	16.15
3	Lack of proper waste management system	13.07
4	Lack of proper sanitation	10.78
5	Lack of proper drainage system	10.00
6	Water crisis than necessary	9.23
7	Lack of proper health facilities	7.69
8	Promote disease on human health	6.15
9	Uncomfortable toilets for the people	4.62
10	Unhealthy foods	3.08
	Total	100.00

In the study area most of the respondents expressed their views that the spread of various wastes here and there hampered their livelihood status, which was ranked at the top considering the livelihood vulnerability. Some municipal dustbins were found in slum areas for solid waste disposal, but not sufficient and the inhabitants have to dispose solid wastes in open spaces and road sides that were very vulnerable for the deterioration of environment, also livelihood, which was ranked at second. 13.07 percent respondents said that waste management system was very also poor, which was ranked at three. Sanitation situation was very unhygienic in study areas, which was ranked at four. From the above Table, we observed that 10.00 percent respondents said that they faced poor drainage system, which was ranked at five. The slum people also have little access to the municipal water supply, which was ranked at six. Besides, lack of proper health facilities, promote disease on human health, uncomfortable toilets for the people, unhealthy foods were the sequential output of livelihood vulnerability.

Conclusion

In accordance with the above findings, the following conclusions were drawn:

1. The study revealed that low livelihood status was observed in the slum areas, which included: human capital, physical capital, social capital, and financial capital. Thus, it could be concluded that planned interventions played a positive role in improving livelihoods of the respondents of the study area.
2. The findings revealed that age of the respondents had no significant relationship with their livelihood status. In view of this fact, it may be concluded that age of the respondents is not an important factor for improving livelihood status.
3. Family size of the respondents had no significant relationships with their livelihood status. It may be included that family size of

the respondents is not an important factor for improving their livelihood status.

4. It was found that some initiatives such as awareness building, environmental knowledge, revolving fund development, training, increased well being, reduced vulnerability, improved food security, income generating activities, etc. were duly considered by the concerned authorities who helped in bringing positive change in their livelihood status.
5. Credit received of the respondents had no significant relationships with their livelihood status. It may be included that livelihood status and credit received of the respondents are independent to each other.

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