IOSR Journal Of Humanities And Social Science (IOSR-JHSS)
Volume 27, Issue 10, Series 6 (October, 2022) 43-53
e-ISSN: 2279-0837, p-ISSN: 2279-0845.
www.iosrjournals.org

A Socio-economic Study on Slum Areas of Sylhet City Corporation: Food Security and Migration Perspective

Md. Sherf-Ul-Alam[1*], Dabasis Sharma[2], Bibi Marium[3], Tabia Binte Shan[4], and Jasim Uddin Ahmed[5]

[1,3,4,5,] *Department of Agricultural Economics and Policy, Sylhet Agricultural University, Sylhet-3100, Bangladesh*

[2]*Department of Agricultural Marketing and Business Management, Sylhet Agricultural University, Sylhet-3100, Bangladesh*

Abstract

The study was conducted to explore the socio-economic profile, food security status and migration condition of slum dwellers in Sylhet City Corporation. Data were collected from 200 selected slum households by using convenience sampling technique. A pre-structured questionnaire was used during face-to-face interviews to collect primary data. The socio-economic and migration conditions of the sampled respondents were discovered using descriptive statistics, and their level of food security was examined using the direct calorie intake approach. In order to find out the linkage between different socio-economic variables and level of food security, a logit model was utilized. For analyzing the data, MS excel and SPSS were used. The results of descriptive statistics showed that average household size of the respondents was 4.97. In the study area, 83.5% of households had at least four or more members and most of them (81%) lived in the nuclear family. About 49% of the respondents had no formal education. Almost half of the total households lived in the semi-pucca houses, and 99.5% of households had electricity access. It was noticed that 87.5% households used joint latrine and 56.5% had the facility to use tube well water. Although, the majority of respondents worked as rickshaw pullers (29%), day laborers (22%), and CNG drivers (18%), diversified occupational status was prevailing in the region. As a result, 70% of sampled households were found to be food secured and 30% were food insecure. Also, 79.5% of all sampled households were migrated in Sylhet city from different areas of Bangladesh. Economic cause, such as seeking employment, was identified as the main reason for migration. The results of the binary logistic regression model revealed that family size and migration status had significantly negative effect on household's food security status, while age, education, and gender of household head, as well as family type had insignificant effect on food security. However, slum dwellers reported about various problems that they had to deal with. Finally, the study made several recommendations based on its findings in order to improve the living standard of slum dwellers.

Keywords: Socio-economic, slum areas, food security, migration perspective, binary logit model, Sylhet City Corporation.

Date of Submission: 10-10-2022 Date of Acceptance: 23-10-2022

I. Introduction

Slums are unofficial urban neighborhoods with inadequate housing, resentful and depressing living conditions. The causes of slums are frequently inadequate policies, weak governance, ineffective regulations, corruption, broken land markets, unfriendly finance institutions, and a severe lack of political will (Kamruzzaman and Hakim, 2016; Shirin, 2012). The area is crowded with numerous people who have cramped quarters (Achal and Padhya, 2014). The main causes of the expansion of slums include industrialization, migration, urbanization, and a high birth rate (Islam *et al*., 2014). First, during the early stages of the industrial revolution, a slum was developed close to the city's core and a factory gate (Sharmin and Luna, 2015). During the early stages of industrialization, the lowest-paid workers in industrial centers in England and the United States typically resided in slums (Kamruzzaman and Hakim, 2016). Ali *et al.,* (2016) explored that River erosion, the need for job, poverty, insecurity, and other factors are among the main causes of people moving into slum areas. People who reside in slum areas have poor access to health-care, electricity, and social services (Cameron, 2010). Moreover, a section of people live in urban residential areas with poor physical and hygienic conditions, where they are forced to live due to economic depression (Hossain, 2014). In terms of calorie intake and cost of basic needs methods, most of the people of slum live under the poverty line. The people have inadequate access to economic and social structure of city though they are living for long periods of time

(Hossain, 2008). They are distinguished by substandard living conditions, unhygienic environment and lack of essential amenities like as waste disposal facilities, sanitation and water, as well as very low socio-economic position and poor environmental services (Rahman *et al*., 2015). Besides, they are more vulnerable to diseases and starvation, and they are also at a higher risk of workplace accidents (Kamruzzaman and Hakim, 2015). The social, economic and environmental problem in urban areas is stirring owing to squatter settlement and speedy expansion of slum (Sundari, 2003). Not only that, the way of life that slum inhabitants lead is a barrier to metropolitan region's ability to develop sustainably. From last three decades, the growth rate of slum in rural and urban is 2.3% and 6.7%, respectively (Alam, 2013).

Slum areas in Bangladesh are in similar condition to other parts of the world. Khan *et al*., (2021) stated that increasing number of slum houses were straining urban infrastructure and services while also lowering social standards and the quality of the environment. Crowded and unsanitary dwelling, vulnerable security profiles, ill health, malnutrition, risky social and environmental settings, demonstrated variation of sustainable life in the slums. Nearly, two-thirds (67.4%) of the households moved to Dhaka city from their native location only because of searching employment opportunities. However, 58.4% of them had no assets, whereas 11.6% had loan liabilities. Ali *et al.,* (2016) identified that there were much lower fundamental amenities connected to cultural practices, while investigating the social structure and practices of slum in north Bengal of Bangladesh. It was discovered that 40% of slum dwellers were affected by poverty, whereas 7% had a variety of uncertainty-related problems. According to McNamara *et al*., (2016) migrants from rural areas were frequently exposed to new risks as they have settled in unstable urban environments devoid of the resources and services required to provide for basic human needs. Yasmin (2016) identified that majority of slum dwellers (94.1%) experienced illness as a result of climate change and they were deprived from regular food during hazardous condition. Jahan and Urba (2015) reported about the slum children who were frequently suffering from waterborne disease, while analyzing the inhabitant's health condition and accessibility of the selected basic services in slum areas of Khulna city. According to the study, only 10% of children were able to complete their secondary school certificate. Alam *et al.,* (2013) identified the significantly low hygienic practice of slum households in Rajshahi City Corporation of Bangladesh. Slum dwellers were extremely suffered from pure water supply and adequate sanitation facilities. Rokanuzzaman *et al*., (2013) established significantly positive association between livelihood situations of slum residents in North Dhaka City Corporation and their education, annual income, media interaction, training exposure, and environmental understanding. Majority of them were found to have low yearly incomes and they had to face significant problems, like as inadequate waste management system, poor drainage and sanitation system, pure water shortage, and lack of adequate health services. Suha and Haque (2013) explained the reasons behind carrying poor health and its future impacts on adolescent girls, who lived in urban slums of Tejgaon rail gate, Dhaka, Bangladesh. They found the major causes of losing the capabilities of adolescent girls were gradual degradation of environmental health. Gruebner *et al*., (2012) worked on mental health in the slums areas of Dhaka and presented that factors such as quality of the house, risk of flooding, cleanliness, sanitation**,** sufficiency, and durability all had a substantial impact on slum inhabitant's well-being. Biplob *et al*., (2011) found that hygiene awareness and practices of Korail slum dwellers were considerably low. They were exposed to various water and fecal borne diseases due to lack of sufficient pure water supply and sanitation, which exacerbated their poverty situation. Alamgir *et al*., (2009) talked about the improved economic, social, and decision-making abilities of slum dwellers as a result of their involvement in NGOs.

Various studies have looked at different facets of slums. Most of the studies (Uddin, 2018; Kamruzzaman and Hakim, 2016; Hossain *et al*., 2010) have focused mainly on socio-economic condition, environmental services, and livelihood perspective of the slum dwellers in different metropolitan cities of Bangladesh. Despite the fact that there have been several studies on Bangladesh's food security challenges, the majority of them only considered the issue from a national perspective (Muniruzzaman, 2013; Akhter and Rahman, 2012; Kashem and Faroque, 2011; Rahman and Khan, 2005). The study of household food security got less attention compared to national level food security (Rahman *et al*., 2012). In addition, relatively little study has been done on food security in Bangladeshi urban poor households (Jakaria *et al*., 2015).

Sylhet is an important city located in the north-eastern region of Bangladesh. It also has slum sections with the same issues just like other cities. There are 670 slums in the city corporation in total, with 11,891 households (BBS, 2014). So far our knowledge, very less attention has been given regarding the condition of slum areas in Sylhet city. Although, numerous academics have looked into various aspects of slum life, including the socio-economic position, the efficiency of microcredit, as well as the health and hygiene conditions, but several studies have focused specifically on the perspectives of women and children. But, there have been no studies conducted on the issue of food security in the slum communities of Sylhet region.

In this context, to close this knowledge gap, the study made an effort to evaluate the socio-economic circumstances of the slum households, the degree of their food security, and the factors impacting their food security status. The study also attempted to evaluate the causes of local residents' migration. Finally, it listed some problems the slum people faced and suggested solutions. As a result, it is anticipated that the study's

findings will assist various government and non-government organizations to formulate different plans and policies regarding the slum inhabitants.

II. MATERIAL AND METHODS

2.1 Selection of the study area and sample

Suitable areas from the Sylhet City Corporation were selected based on the objectives. The study used mainly field level primary data. A total of 200 sampled households were selected by using convenience sampling technique. Nessary informations had been collected from the head of selceted household through face to face interview using a pre-structured questionnaire. However, before collecting the primary data, the researcher clearly explained the true academic purpose of the study. The relevant secondary data was collected from different journals, reports, publications, etc.

2.2 Analytical techniques

Following a thorough assessment of the completed interview schedules, any discrepancies and mistakes in the data were corrected by editing and coding. Descriptive statistics (sum, averages, frequencies, percentages, etc.) were used to analyze the socio-economic conditions, ascertaining the reasons behind the local resident's migration, and finding out the problems confronted by the slum dwellers. By using Food Calorie Intake Method, the food security status of each family was evaluated in accordance with the food security line. According to government guidelines, a household is deemed to be food secure, if the per-person calorie consumption is equal to or higher than 2122 kcal/day (Afza *et al*., 2015). In order to measure the household food security status the following equation (Ahmed *et al*., 2017) was used:

$$HFS_i = \sum_{i=1}^{n} FS_i - Th \geq 0$$

Where, HFS_i is the household food security for i^{th} household, which takes value "1" if household is food secure, and "0" if household is food insecure, and Th stands for the threshold level (per capita 2122 Kcal/day). In addition, the study had also used some other measurements to explore the food security situation.

Surplus or Shortfall Index

The index was designed to measure how secure or vulnerable a household's access to food is. According to Seid (2007), the index is as follows:

$$P = \frac{1}{N}\sum_{J=1}^{m} G_J$$

$$G_j = (X_j - L) / L$$

Where,
P = Surplus/Shortfall Index;
L = Recommended daily per capita requirements (2122 Kcal.);
Gj = Calorie deficiency faced by household j;
Xj = Per-capita food consumption available to household j;
N = Number of households that are food secure (for surplus index) or food insecure (for shortfall index).

Head-Count Index:

The index can be written as:

$$H = FI / N$$

Where,
H = Head-count index;
N = Population size; and
FI = Number of individuals below food security threshold level.
Because of binary nature of the dependent variable - 'food security status', logit model was utilized to find out its association with other independent variables. The model can be written as:

$$HFS_i = \beta X_i + e_i$$

Where,
HFS_i = Food security status of i^{th} household;
X_i = Vector of explanatory variables;
e_i = Error term; and
β = Vector of parameter estimates.
Table 1 shows the description and types of variables used in the estimated model.

Table 1: Description of variable used in binary logistic regression model

Variables	Description	Variable types
Dependent variable		
Food security status	Food security status of the household, which takes value 0 and 1 for insecure and secure households, respectively.	Binary
Independent variables		
Age	Age of household head in years	Continuous
Family size	Total number of household member	Continuous
Education	Educational level of household head, where the value is 1 for illiterate; 2 for primary; 3 for secondary and 4 for tertiary level education.	Categorical
Gender	Gender of the household head. It takes 1 for male and 2 for female	Dummy
Family type	It takes value 1 for nuclear families and 2 for joint families	Dummy
Migration status	It takes value 1 for migrated households and 2 for non-migrated households	Dummy

III. RESULTS AND DISCUSSION

This section discussed about the socio-economic, food security condition, migration status of the sampled respondents in the selected slum areas of Sylhet City Corporation. The results also assessed the problems faced by the slum dwellers and suggested some possible solutions.

3.1 Demographic profile of the respondents

The socio demographic information of the slum dwellers is represented in Table 2. It was seen that, average household size of the respondents was 4.97 whereas, 88% household heads were male and 12% were female. In terms of marital status, most of the respondents (80%) were unmarried, while married and divorced accounted for 14% and 6%, respectively. Approximately, 83.5% of households had at least four or more members. Majority of the slum dwellers (81%) lived in the nuclear family due to their financial crisis, where only 19% lived in the joint family. About 49% of the respondents were illiterate with no formal education, where only 11.5% and 6% had completed their secondary and tertiary education, respectively.

Table 2: Socio-economic conditions of the sampled households

Particulars	Percentage	Particulars	Percentage
Average household size (No.)	4.97 (Male: 88.0%; Female: 12.0%)		
Marital status		Cough	34.0
Married	14.0	Dental problem	10.0
Unmarried	80.0	Diabetes	3.0
Divorcee	6.0	Headache	26.5
Household size		Asthma	5.5
1 member	None	Dysentery	13.0
2-3 members	16.5	Others	9.5
4-5	52.5	**Latrine types**	
6+ members	31.0	Single	8.5
Family type		Joint	87.5
Joint family	19.0	City Corporation	4.0
Nuclear family	81.0	**Power source**	
Educational level		Electricity	99.5
No formal	49.0	Solar	None
Primary	33.5	Others	0.5
Secondary	11.5	**Sources of treatment**	
Tertiary	6.0	Private hospitals	66.5
Types of houses		Government hospital	29.5
Kancha	41.0	Dispensary	4.0
Semi pucca	50.5	**Occupational status of the household head**	

Pucca	8.5	Day labor	22.0
Sources of drinking water		Service	10.0
Pond	0.5	Household worker	6.0
Tube Well	56.5	Rickshaw puller	29.0
Ditch	2.0	Masons	3.0
Wasa	41.0	Street hawker	7.0
Diseases		CNG driver	18.0
Fever	79.5	Business	0.5
Jaundice	12.5	Others	4.5
Skin disease	14.0		
Back pain	13.5		
Diarrhea	14.5		

Source: Author's estimation, 2017.

In the study area, diversified occupational status was prevailing. The majority of respondents were rickshaw pullers (29%). This result is consistent with the study of Ali *et al*., (2016) in North Bengal region of Bangladesh. The rest important occupations were day laboring, and CNG driving, with respective percentages of 22% and 18%. Noticeable numbers of respondents drank tube well water and used joint latrine which were 56.5% and 87.5%, respectively. Nearly, 80% of the respondents were suffering from fever, where only 3% had the diabetes problem. Most of the slum dwellers (66.5%) received medical treatment from private hospitals. Maximum families in the study area had access to electricity and resided in semi-pucca dwellings; these percentages were 99.5% and 50.5%, respectively (Table 2). Latif *et al*., (2016) also found that maximum dwellers (86.3%) in Kalyanpur slum had the electricity facilities.

3.2 Food security condition

Daily per capita calorie consumption method has been used to find out the food security condition of the sampled households. The threshold level of calorie requirement to be food secured was considered as 2122 Kcal per day per adult equivalent. The food insecurity condition has been classified into three categories, such as mildly food insecure (1801 Kcal/day - 2121 Kcal/day), moderately food insecure (1501 Kcal/day - 1800 Kcal/day) and severely food insecure (less than or equal to 1500 Kcal/day).

Table 3: Food security condition of the sampled households:

Categories	Number of respondent	% of respondent
Food secured (≥2122 Kcal/day)	140	70.0
Food insecure (<2122 Kcal/day)	60	30.0
mildly food insecure (1801-2121 Kcal/day)	24	40.0
moderately food insecure (1501-1800 Kcal/day)	24	40.0
severely food insecure (≤1500 Kcal/day)	12	20.0
Surplus Index	0.8194	
Shortfall Index	- 0.0665	
Head-Count Index	food secure households (0.70), food insecure households (0.30)	

Source: Author's estimation, 2017.

Table 3 shows that maximum respondents (70%) were food secure and only 30% were food insecure. Among the food insecure, 40% were mildly food insecure, while 40% were moderately food insecure and 20% were severely food insecure. The surplus index shows that the food secure households exceeded the food poverty line by 81.94%, while intake of food insecure households was short of the required calorie intake by 6.65%. This finding is consistent with some studies. According to the study of Mannaf and Uddin (2012), 33.33% of households were found to be food insecured, while 66.67% were food secured households. Afza *et al*., (2015) checked the food security status of rural household in Gazipur District of Bangladesh and revealed that 50% of the sample farmers were food secured and the rest 50% were food insecure. On the contary, Gunawardhana and Ginigaddara (2021) calculated 'Household Food Insecurity Access Score' (HFIAS) of slum dwellers in Colombo Municipality, Srilanka and found that 72% of the households were highly food insecure and 28% were less food insecure.

3.3 Factors affecting food security of the households

To find out the effect of different factors on food security status of the household, a logit model was used. In this study, six independent variables have been considered as the determinants of probability to be food secured. These were the age of household head, family size, education level of the household head, gender of household head, family type and migration status.

Table 4: Estimated coefficient and related statistics of the determinants of food security status of slum dwellers

Variables	Coefficient	Standard error	Exp. (B)
Age	0.021	0.014	1.021
Family size	-0.355***	0.142	0.701
Education (No formal education)			
Education (Primary)	0.380	0.582	1.462
Education (Secondary)	0.300	0.592	1.350
Education (Tertiary)	-0.116	0.678	0.890
Gender (Male)			
(Female)	-0.199	0.562	0.820
Family Type (Nuclear)			
(Joint)	0.272	0.445	1.313
Migration status (migrated)			
(non-migrated)	-1.006**	0.474	0.366
Constant	2.052	1.169	7.783
-2 Log likelihood	227.420		
Cox and Snell R square	0.086		
Nagelkerke R square	0.121		
Hosmer and Lemeshow test	7.379		

Source: Author's estimation, 2017.
Note: *** significant at 1% level, ** significant at 5% level

It can be seen from the table 4, the specified binary logistic regression model fits well the data as measured by Cox and Snell R square, Nagelkerke R square, and Hosmer and Lemeshow test. The value of Pseudo-R^2 (8.6% and 12.1%, respectively for Cox and Snell, and Nagelkerke) indicate a good predictive ability of the model. Table 4 revealed that the family size had a negative and significant effect on the food security status. From the result it was found that a unit increase in family size, decreases the probability of household to be food secured by 0.701 times. This result is to be expected given that a household with a large number of members can have less food when compared with the household having few numbers of members. Moreover, increase in the household members indicates more people are consuming food from the same sources, which increases the likelihood that the household members may not be able to eat sufficient food, and it also increases the possibility of the household to be food insecure. Besides, it is very difficult to maintain proper diversity of food for the large sized families. Gunawardhana and Ginigaddara (2021); Diallo and Toah (2019); Aidoo *et al*., (2013); Oluyole *et al*., (2009); Babatunde *et al.,* (2007), and Seid (2007) also reported about the similar findings. The migration status of the respondents was found to be significantly and negatively related to the food security status in the study area. This variable is significant at 5% level of significance and the odds ratio takes the value of 0.366. It indicates that the migrated households were probably better off in terms of food security than the non-migrated households. Given that non-migrated families often spend more on social and cultural activities than migrated families, which forces them to reduce their food expenditures. Therefore, the outcome in this situation is not unexpected. Additionally, the majority of families had moved to the study area for economic reasons with capable partners to earn more. Families that have already moved often aimed to increase their income as well as diversify their income sources in order to cover their housing and other costs. It aids in the people's ability to gross further money, which leads to greater wellbeing and food security.

3.4 Migration status

It is seen that 79.5% of all sampled respondents were migrated in Sylhet city from different areas of Bangladesh and 20.5% were non-migrated. The average year of migration was 14.49 years with maximum 65 years and minimum 0.25 years. Most of the people (37%) have been migrated here from three districts (except Sylhet district) out of four districts of Sylhet division. The main reason of migration was economic causes, which was responsible for 77.50% of total migration (Table 5). This finding is consistent with several studies. Islam *et al*., (2022) identified economic causes along with social, political, and personal reasons behind the

migration from various rural areas to Dhaka city. Khan *et al*., (2021) mentioned about the economic and natural reasons of rural-urban migration. Also, Sharmin and Luna (2015) marked economic causes behind women's migration. Apart from economic context, Alamgir *et al*., (2009) observed family related causes of migration. The migrants primarily belong to lower strata of the society and are dominantly illiterate or informally educated. Banerjee (2016) revealed that poor migrants were mainly drawn from economically depressed areas.

Table 5: Migration status of the sampled households

Category		Frequency	Percentage
Migration Status	Migrated	159	79.5
	Non-migrated	41	20.5
	Total	200	100.0
	Average years of migration	14.49	
	Maximum years of migration	65.00	
	Minimum years of migration	0.25	
Places from Migration	Dhaka	31	15.5
	Chattogram	39	19.5
	Rangpur	21	10.5
	Rajshahi	6	3.0
	Mymensingh	15	7.5
	Khulna	8	4.0
	Barishal	6	3.0
	Sylhet (Except Sylhet District)	74	37.0
Causes of Migration	Economic cause	155	77.5
	Family cause	30	15.0
	Disaster cause	15	7.5

Source: Author's estimation, 2017.

3.5 Constraints faced by the slum dwellers and some possible solutions

The slum dwellers faced some major problems, like as: lack of safe drinking water, overpopulation, drainage and sanitation problem, unhealthy living condition, and problem of kitchen for cooking. Majority of the sampled households (53%) claimed that they had serious problem of safe drinking water. A total 36% of the sampled households had drainage problems. Rokanuzzaman *et al*., (2013) also found the severity of drainage and sanitation problems along with other problems in the slum areas of North Dhaka city. Due to this problems, in the rainy season the inundated water made their household's environment awkward, where living with small childrens was much difficult and it often caused various diseases.

Table 6: Problems faced by the sampled households

Name of Problem	Frequency	% of Total
Problem of safe drinking water	106	53.0
Drainage problem	72	36.0
Sanitation problem	56	28.0
Unhealthy environment for living	49	24.5
Problem of kitchen for cooking	43	21.5
Problem of overpopulation	3	1.5
Possible solutions		
Ensure pure drinking water from the city corporation	90	45.0
Improve drainage system	47	23.5
Homeowner should construct sufficient amount of latrine	43	21.5
Homeowners should look after the living condition of people	27	13.5

Source: Author's estimation based on field survey, 2017.

Besides these two, 28% of households reported about sanitation problems. In the study area, only few latrines were built. Maximum households (87.5%) had to use joint latrine, which was much unhealthy. Overall living environment was also not so good in the slum areas of Sylhet City Corporation as claimed by nearly 25% of the total sampled respondent. The finding is supported by the research results of Alam *et al*., (2013). Here, "overall environment" refers to things like the home's architectural styles, communication and transportation infrastructure, etc. Due to improper construction, the homes frequently remained in dread of collapsing after any natural disasters. The owners of the homes in which the slum residents were renting out, did not properly care

for the upkeep and repairs. Furthermore, most of the sampled households had to use the shared cooking system. The lack of a gas burner frequently made it difficult to prepare food on time. Sometimes majority of the housewives also required serial for cooking their family meals. Approximately, 22% of households talked about the problems of cooking (Table 6).

Despite lots of these problems, they still live with dreams and hope that one day those may be solved. In addition, they have offered some suggestions for how they could alleviate their sufferings. A total 45% of the sampled respondent opined that City Corporation can solve their problem of safe drinking water. In order to eradicate the water logging condition, 23.5% of total sampled respondent considered that the drainage system should be improved. Building sufficient amount of latrines whether by the City Corporation or by the house owner can solve the problems of sanitation, as claimed by 21.5% of slum population. The latrine should be built in hygienic way. Moreover, 13.5% of respondents thought that, the house owner should look after for improving the living condition of slum peoples.

IV. Summary and conclusion

Slums areas are a prevalent occurrence in Bangladesh and throughout the world. (Kamruzzaman and Hakim, 2016; Khan, 2013). Urban slums have developed and expanded across the nation as a result of the significant urban population expansion since independence (Khan *et al*., 2015). Slum residents lack access to basic necessities like housing, healthcare, employment opportunities, sanitary conditions, education, etc. These low-income communities are located in slum regions characterized by dense population, crumbling housing, and limited access to public services. The lower life expectancy and increased infant mortality among slum inhabitants have negatively affected the viability of urban life (Uddin, 2018). In the study area, most of the household were operated by male though female also made an important contribution in the total earnings. Slum dwellers had average household size of 4.97, and most of them (80%) were unmarried. Among them, 49% of the respondents had no formal education, while 33.5% and 11.5% of respondents had primary and secondary level of education, respectively. In this context, awareness among the families is necessary to educate their children properly. The present study found that, maximum slum dwellers (81%) belonged to the nuclear family, and 83.5% of the households contained at least four or more people. The majority of respondents worked as rickshaw pullers (29%), day laborers (22%), and CNG drivers (18%), although the region was characterized by a diverse occupational status. Significant numbers of families (99.5%) had electricity access, but 87.5% of them had to use joint latrine. For urban households residing in Bangladeshi slums, food security is a serious issue. However, the food security condition of the slum areas selected for the present study was in better position. Most of the families (70%) were food secure. The reason behind this is that, there was ample earning potential in the area, which was helpful in meeting the demand for quality food in the right quantity. While family size and migration status had significant and negative effect on household's food security status; age, education, and gender of the household head, as well as family type had insignificant effect on food security. Only 16.5% of families were found having 2-3 members. So, it is necessary to maintain proper family planning. Because of having employment prospect, 79.5% of sampled respondents were migrated here from different areas of Bangladesh. About 77.50% of slum dwellers migrated here for economic causes. They mainly reported about the problems of overpopulation, drainage and sanitation, problem of safe drinking water, unhealthy living condition, and problem of kitchen for cooking. With urbanization, the ratio of urban poverty to overall poverty incidence has increased, and the poor have urbanized more quickly than the general population (Ravallion *et al*., 2007). Cities are frequently threatened by the "urbanization of poverty," which is a growing concern. Therefore, rural urbanization is needed to improve economic prospects of the rural poor, increase their employment in rural areas and reduce migration flows. Sufficient job opportunities with appropriate payment must be ensured in rural areas. Training on leadership, financial management, creative business, and other skill development initiatives can be an excellent way to increase the slum dweller's empowerment. Furthermore, a policy concern for the government is the progressive replacement of slums and squatter settlements with improved living spaces. The government and NGOs can offer lending facilities in order to build suitable dwellings for low and middle income earners in rural as well as slum areas. Private sector with the government can step forward with public-private partnership concept to help the slum peoples. The study also suggests developing suitable safety net programs for urban slums, boosting availability of free schools and school feeding program for slum children, as well as enhancing access to diversified nutritious food. Besides, family planning awareness as well as health and sanitation condition should be improved. Slum dwellers usually lack information (Uddin, 2016) and therefore dissemination of information on health, nutrition, child care, and job opportunities is equally important for them. Moreover, construction of roads and other infrastructures facilities are necessary to enhance their livelihood status. After all, a comprehensive strategy involving the coordination of government and non-government organization, as well as other diverse actors would be beneficial to deal with the various issues related to urban slums and improve their livelihood.

CONFLICT OF INTEREST
The authors declare no conflict of interest.

ACKNOWLEDGMENTS

The authors gratefully acknowledge the SAURES (Sylhet Agricultural University Research System, Sylhet Agricultural University) funded by UGC (University Grants Commission, Bangladesh) for their financial support during the entire work.

AUTHOR'S CONTRIBUTIONS
Md. Sherf-Ul-Alam: Gathered, examined, analyzed the data with preparing the draft manuscript, evaluated, and finalized the manuscript.
Dabasis Sharma: Contributed in literature searching and preparing the draft manuscript, analyzed the data, interpret the results, evaluated, and finalized the manuscript.
Bibi Morium: Designed, prepared and approved the draft manuscrift.
Tabia Binte Shan, Jasim Uddin Ahmed: Contributed to the literature search and preparing as well as reviewed the draft manuscript with final approval.

ETHICAL APPROVAL
This article is original and contains unpublished materials. The corresponding author confirms that all of the authors have read and approved the manuscript and no ethical issues are involved.

REFERENCES

[1]. Achal, P. and Padhya, H. J. (2014). Rehabilitation of Slum: A Case Study of West Zone of Surat City. International journal of engineering development and research, 2(3): 2891-2896.
[2]. Afza, J., Tama, R. A. Z., Begum, I. A. and Ethen, D. Z. (2015). Livestock and Rural Household Food Security: A Case of Gazipur District of Bangladesh. International Journal of Innovation and Applied Studies, 12 (3):747-755.
[3]. Ahmed, U, I., Ying, L., Bashir, M. K., Abid, M. and Zulfiqar, F. (2017). Status and determinants of small farming households' food security and role of market access in enhancing food security in rural Pakistan. PLOS ONE, 12 (10):1-15.
[4]. Aidoo, R., Mensah, J. O. and Tuffour, T. (2013). Determinants of household food security in the Sekyere-Afram plains district of Ghana. In proceedings of 1st Annual International Interdisciplinary Conference, AIIC, Portugal.
[5]. Akhter, Y. and Rahman, P. M. M. (2012). The State of Food Security in Bangladesh: An Econometric Analysis. BRAC University Journal, 9 (1&2):5-13.
[6]. Alam, M. Z., Rahman, M. A., Firoz, M. A. A. (2013). Water supply and sanitation facilities in urban slums: a case study of Rajshahi city corporation slums. American Journal of Civil Engineering and Architecture, 1 (1):1-6.
[7]. Alamgir, M. S., Jabbar, M. A. and Islam, M. S. (2009). Assessing the livelihood of slum dwellers in Dhaka city. Journal of the Bangladesh Agricultural University, 7 (2):373-380.
[8]. Ali, M. J., Saha, A., Rouf, M. A. and Hossain, M. A. (2016). Social Structure and Practices of Slum in North Bengal-Bangladesh: A Case Study on Rangpur Zone. International Journal of Economics & Management Sciences, 5 (5):1-6.
[9]. Babatunde, R. O., Omotesho, O. A. and Sholotan, O. S. (2007). Factors influencing food security status of rural farming households in North Central Nigeria. Agricultural Journal, 2 (3): 351-357.
[10]. Banerjee, A. (2016). Migration in Slums of Kolkata: Examining Migrant's Labor Market Outcomes. Working paper. National Institute of Urban Affairs under SHRAMIC (Strengthen and Harmonize Research and Action on Migration in Indian Context) Portal.
[11]. Bangladesh Bureau of Statistics. (2014). Statistical Yearbook of Bangladesh. Ministry of Planning, Government of the People's Republic of Bangladesh, Dhaka.
[12]. Biplob, P., Sarker, D. C. and Sarker, R. C. (2011). Assessment of Water Supply and Sanitation Facilities for Korail Slum in Dhaka City. International Journal of Civil and Environmental Engineering, 11 (5):100-106.
[13]. Cameron, S. (2010). Access to and exclusion from primary education in slums of Dhaka, Bangladesh. Create Pathways to Access. Research Monograph No. 45
[14]. Diallo, A. and Toah, A. M. (2019). Determinants of food insecurity among maize farming households in the southern region of Mali. Journal of Food Security, 7(5):151-158.
[15]. Gruebner, O., Khan, M. M. H., Lautenbach, S., Müller, D., Kramer, A., Lakes, T. and Hostert, P. (2012). Mental health in the slums of Dhaka-a geoepidemiological study. BMC Public Health, 12 (177):1-14.

[16]. Gunawardhana, N. L. and Ginigaddara, GAS. (2021). Household Food Security of Urban Slum Dwellers: A Case Study in Colombo Municipality, Sri Lanka. Journal of Food Chemistry and Nanotechnology, 7(2):34-40.
[17]. Hossain, B. (2014). Do the slum dwellers enjoy the basic constitutional and economic rights as a citizen in Bangladesh? Global disclosure of economics and business, 3(3):27-37.
[18]. Hossain, M. A., Moniruzzaman, M. and Islam, M. A. (2010). Urban Environmental Health in Bangladesh Slum: A Comparative Study of Two Metropolitan Cities. Journal of Science Foundation, 8 (1&2):67-76.
[19]. Hossain, S. (2008). Rapid urban growth and poverty in Dhaka city. Bangladesh e-journal of sociology, 5 (1):1-24.
[20]. Islam, M. R., Farukuzzaman, M. and Islam, M. A. (2014). Situation of Slum's Children in Dhaka City, Bangladesh: A Sample Survey. Journal of Economics and Sustainable Development, 5 (18):27-33.
[21]. Islam, S., Papia, M. J. and Yesmin, S. (2022). The Rural-Urban Migration and its Socio-economic Consequences: A Study on the Rayerbazar Area of Dhaka City. International Journal of Publication and Social Studies, 7 (1):12-18.
[22]. Jahan, S. and Urba, T. R. (2015). Assessment of children health condition of urban slum area: a case study on Khulna municipality, Bangladesh. Journal of Molecular Studies and Medicine Research, 1 (1):41-47.
[23]. Jakaria, M., Hossain, M. E. and Noman, ANK. (2015). Socio-economic Features and Food Security Status of the Urban Slum Dwellers in Rajshahi City Corporation. Rabindra Journal, 32 (1):157-166.
[24]. Kamruzzaman, M. and Hakim, M. A. (2016). Socio-economic Status of Slum Dwellers: An Empirical Study on the Capital City of Bangladesh. American Journal of Business and Society, 1 (2):13-18.
[25]. Kamruzzaman, M. and Hakim, M. A. (2015). Socio-economic Status of Child Beggars in Dhaka City. Journal of Social Sciences and Humanities, 1(5): 516-520.
[26]. Kashem, M. A. and Faroque, M. A. A. (2011). A Country Scenarios of Food Security and Governance in Bangladesh. Journal of Science Foundation, 9 (1&2): 41-50.
[27]. Khan, M. A. U., Hossen, M. A., Sharmin, Z. and Kubra, T. J. (2015). Displacement and Deplorable Living Conditions of Slum Dwellers: With Special Reference to Sylhet City. International Letters of Social and Humanistic Sciences, 46:51-64.
[28]. Khan, M. I. (2013). Social Changes in contemporary Bangladesh. Journal of Asiatic Society of Bangladesh, 58 (2):263-276.
[29]. Khan, Z. S., Kundu, N. and Yeasmin, N. K. (2021). Sustainable Quality of Life of Urban Slum Dwellers in Bangladesh: Evidence from Dhaka City. Chiang Mai University Journal of Economics, 25 (1):62-76.
[30]. Latif, M. B., Irin, A. and Ferdaus, J. (2016). Socio-economic and health status of slum dwellers of the Kalyanpur slum in Dhaka city. The Bangladesh journal of scientific research, 29 (1):73-83.
[31]. Mannaf, M., Uddin, M. T. (2012). Socio-economic factors influencing food security status of maize growing households in selected areas of Bogra district. The Bangladesh journal of agricultural economics, 35 (1&2):177-187.
[32]. McNamara, K. E., Olson, L. L. and Rahman, M. A. (2016). Insecure hope: the challenges faced by urban slum dwellers in Bhola Slum, Bangladesh. Migration and Development, 5 (1): 1-15.
[33]. Muniruzzaman, ANM. (2013). Food Security in Bangladesh: A Comprehensive Analysis. Peace and Security Review, 5 (10):46-73.
[34]. Oluyole, K. A., Oni, O. A., Omonona, B. T. and Adenegan, K. O. (2009). Food Security Among Cocoa Farming Households of Ondo State, Nigeria. ARPN Journal of Agricultural and Biological Science, 4 (5):7-13.
[35]. Rahman, M. K., Muhibbullah, M. and Islam, M. S. (2015). Socio-economic Status of Slum Dwellers: A Case Study of Uttara Periphery, Dhaka. Asian Review, 4 (1):14-27.
[36]. Rahman, M. M. and Khan, S. I. (2005). Food Security in Bangladesh: Food Availability. Paper Presented in the National Workshop, 19-20 October 2005, IDB Bhaban, Agargaon, Dhaka, Bangladesh.
[37]. Rahman, R. I., Begum, A. and Bhuyan, H. R. (2012). Household Food Insecurity in Bangladesh: Concepts, Estimates and determinants. Research Monograph No. 22. Bangladesh Institute of Development Studies: Dhaka.
[38]. Ravallion, M., Chen, S. and Sangraula, P. (2007). New evidence on the urbanization of global poverty. World Bank Policy Research Working Paper No. 4199.
[39]. Rokanuzzaman, M., Ali, M. A., Hossain, M. N. and Miah, M. A. (2013). Study on Livelihood Status of Slum Dwellers in the North Dhaka City Corporation. Journal of Environmental Science and Natural Resources, 6 (2):89-95.
[40]. Seid, F. F. (2007). Food Insecurity and Its Determinants in Amhara Region. MS Thesis. Submitted to the Department of Economics, School of Graduate Studies, Addis Ababa University, Ethiopia.

[41]. Sharmin, S. and Luna, F. (2015). The Socio-Economic Condition of Female Slum Dwellers: a study on Slums in Dhaka. Journal of Humanities and Social Science, 20 (3):26-32.
[42]. Shirin, S. (2012). Feminist Movement and Women Empowerment: Bangladesh Perspective. The Journal of Social Development, 24 (1):183-312.
[43]. Suha, S. M. and Haque, M. R. (2013). Adolescent girls in urban slum: environmental health perspective. The international journal of social sciences, 9 (1):91-103.
[44]. Sundari, S. (2003). Quality of life of migrant households in urban slums. Proceeding of Third International Conference on Environment and Health, 15-17 December**,** Chennai, India. Department of Geography, University of Madras and Faculty of Environmental Studies, New York University. pp. 537-552.
[45]. Uddin, N. (2018). Assessing urban sustainability of slum settlements in Bangladesh: Evidence from Chittagong city. Journal of Urban Management, 7 (1):32-42.
[46]. Uddin, N. (2016). Paradox of conceptualizations, measurements and causes of urban poverty: context evidence from Bangladesh. International Journal of Social and Economic Research, 7(2):54-73.
[47]. Yasmin, S. (2016). Impact of Climate Change on Urban Slum Dwellers in Bangladesh: A Case Study of Four Selected Slums in Dhaka City. Archives of Current Research International, 4 (3):1-15.

ACRONYMS, ABBREVIATIONS

BBS: Bangladesh Bureau of Statistics
et al.: Et alia (L.) and others
Etc. : Etcetera
i.e. : That is
Tk. : Taka (Bangladeshi Currency)
%: Percentage
BDT: Bangladeshi Currency in Taka

Md. Sherf-Ul-Alam. "A Socio-economic Study on Slum Areas of Sylhet City Corporation: Food Security and Migration Perspective." *IOSR Journal of Humanities and Social Science (IOSR-JHSS),* 27(10), 2022, pp. 43-53.