



STUDY ON THE FACTORS INFLUENCING RESIDENTIAL LOCATION CHOICE OF THE GARMENTS WORKERS OF MIRPUR, DHAKA CITY

Shammi Shawal^{1†} --- Jannatul Ferdous²

^{1,2} Department of Urban and Regional Planning, Bangladesh University of Engineering and Technology, Bangladesh

ABSTRACT

Bangladesh is a developing country with huge population and huge scarcity of resources. Its economy is largely dependent on ready-made-garment industry. So garments industries as well as garments workers are very much important for our economy. Dhaka being the capital city, a large number of garment factories is situated here. But the majority of garment workers earn less than the living wage, which is the minimum requirement to provide a family with food, shelter and education. They can hardly find a suitable residence for them and are compelled to live in congested, unhygienic and sub-human condition. The development of a country is not possible by only developing the middle and upper class people depriving the lower class who occupy a major part of the economy. So, it's the need of the day to solve the problems of the housing condition of the garments workers. Therefore, this study emphasizes on the factors influencing residential location choice of the garment workers of Dhaka city. The target group is the residents of Mirpur 1. House rent, availability of utility facilities, monthly household income, distance from workplace, social security, dependence on family decision, size of dwelling unit, communal living, availability of community facilities – these have been pointed out as important factors in residential location choice of the garment workers by questionnaire survey. The study also investigated the priority among the pointed factors so that it could help the policy makers and developers to take any types of housing development project for the workers. If we can ensure a better residence and better facilities for them, their potentiality will increase and in the long run we can reap greater benefit from them.

Keywords: Garments worker, Residential location, Housing, Mirpur, Dhaka, Bangladesh.

Contribution/ Originality

The paper contributes the first logical analysis of the factors influencing the residential location choice of garment workers of Dhaka City and the relative priority of those factors. The paper's primary contribution is finding that the workers cannot afford standard housing on their own with their minimum wage.

1. INTRODUCTION

The Ready Made Garment (RMG) industry has played a pioneering role in the development of industrial sector of Bangladesh. It has become the country's dominant industry employing around 3.5 million workers in 4825 garment factories. The RMG industry is the only multi-billion-dollar manufacturing and export industry in Bangladesh. Bangladeshi garment industries generate 80% of the country's total export revenue and 10% of the GDP. It plays a significant role in terms of export earnings, employment generation, reducing poverty and empowering of women. Bangladesh presently exports ready-made garments to about 30 countries around the world [1]. The garment workers of Bangladesh are among the hardest working women and men in the world, but also the most exploited, earning the lowest minimum wage. Dhaka being the capital city, a large number of garments factories is situated here. But the majority of garment workers earn less than the living wage, which is the minimum requirement to provide a family with food, shelter and education. Shelter is a basic need for every human being, and this study is conducted to find the factors that influence the residential location choice of the garment workers of Dhaka city.

The Bangladesh Institute of Development Studies (BIDS) 1990 survey showed that 83% of the male workers and 69% of the female workers origins from the rural areas [2]. They come to the urban area to join in the garment industries and faces acute residential problem as the Bangladesh Garments Manufacturing and Exporters Association (BGMEA) have not provided any housing facilities for its workers.

Kundu [3] identifies that a huge number of garment workers of Dhaka are migrants and it becomes very difficult for them to find a suitable living place [3]. Wiest, et al. [4] mentioned that more than 60% of garment workers live alone and so the opportunity to find a suitable house for them is very difficult [5]. Ahmed, et al. [5] found that with the limited income many garment workers have to live in the slum areas with high house rent [5].

Although this sector is so important for our economy, little is known about the housing locations and conditions of garment workers. Under what circumstances they choose their residential location is mostly a notional issue which needs empirical vouching. It is important to understand the factors in order to ensure better residential facilities for them. Keeping this research question in mind this study focuses on the factors that influence garment workers while choosing their residential location, and examines their comparative priority. For this study,

primary data has been collected through field survey. Dhaka City Corporation (DCC), books, research works, information from internet etc. also have been used for this purpose.

2. STUDY AREA PROFILE

Mirpur 1 has been selected as the study area. Dhaka is the capital city of Bangladesh and Mirpur is one of the major portions of Dhaka city. The northern expansion of urbanization of Dhaka is affecting the socio-economic characteristics of Mirpur. A large number of garment factories of Dhaka city are placed at Mirpur. The survey was conducted in a specific part of Mirpur named Golartek, which is in 09 no ward of Dhaka north city Corporation. It is a congested area. Most of the people living here are garment workers.

2.1. Land Use, Settlement Pattern and Transportation Facilities

There are many commercial and industrial settlements along with the residential buildings. Maximum houses are semi-pucca. The average size of household is 8"/10" and the house rent is around 2000 to 3000 Tk. There is no individual kitchen for every family. The owners of these houses also live within the study area. They live in multi-storied buildings. The area is accessed by almost all types of motorized and non-motorized vehicles. All the roads are pucca. But the roads are narrow and some of them are broken in some places. So people have to face problems in rainy season.

2.2. Community and Utility Facilities

There is a primary school and a Madrasha within the study area, and some other primary schools within 200 meters of the study area. There is a secondary school about 115 meters away from the study area. Within 200 meters radius there are four mosques, a playground and a community center. There is a police station in Golartek and so the social security is satisfactory here. There is also a bazaar where all the necessary daily commodities can be found. The only one nearby urban health center is about 230 meters away from the study area. There are about four garments within the area.

The utility facilities of this area are quite satisfactory. All the houses have electric, gas and water supply. The source of water supply is Water Supply & Sewerage Authority (WASA). There is no individual toilet for every family. They use common semi-pucca latrines. Load-shedding is a common affair here. Sometimes they have to face drainage problem and drain block. Heavy rainfall makes this problem acute.

3. DATA ANALYSIS

Data was collected through questionnaire based sample survey on thirty workers of Mirpur-1 area who were randomly selected. The collected information are analyzed statistically and then presented in text, tabular and graphical forms for the convenience of understanding the situation.

3.1. Socio-Economic Profile

Of the sample population taken, 46.67% of the garment workers are male and the rest 53.33% are female. There are people of different ages, though people aging from 18 to 25 years are largest in number (56.67%). Maximum workers (56.67%) workers are married and other 43.33% of the workers are unmarried. Maximum garment workers of the study area have primary education (63.33%). The educational qualification of the garment workers is illustrated in figure 3.

Maximum garment workers (56.67%) earn 3001-5000 Tk. per month. The monthly income of the workers is shown in figure 4. Bangladesh Wage Board recommended that the wage of a garments worker should be at least 3000 Tk. monthly to the garment workers [6]. And most of the workers of the study area are not deprived of that. The monthly household income of the garment workers is illustrated in figure 5. From the figure, it can be seen that 43.33% of the workers have a family of 10001-15000 Tk. monthly household income and the average monthly household income is 12033 Tk. 50% of the workers have gross monthly household savings ranging from 500 to 5000 Tk. and the average savings is 2400 Tk. The other 50% of the workers have to spend all of their household income and have no monthly savings.

3.2. Household and Housing Related Information

The household size and number of earning members in the families of garment workers are shown in table 1. From the table, it can be seen that maximum workers (56.67%) have a family consisting of 3-4 members and among them 58.82% of the families have two earning members. 30% of the workers have 5 or more family members and 13.33% of the workers have 1-2 family members. And among them also, maximum families have two earning members.

The average size of dwelling unit of garment workers is 107.2 sq ft and the average monthly house rent is 2105 Tk. Only one of the workers goes to his workplace by bus and it costs him 20 Tk. daily (from residence to workplace). The other twenty-nine workers go to their workplace by walking.

23.33% (seven workers) of the sample population of garment workers has changed their residential location and other 76.67% of the workers are living in the same location from the beginning. Among them, four workers chose their previous housing location because it was near to their workplace. Two of them chose the previous house for the low house rent and another one lived there as it was his own house and he migrated later.

3.3. Information Related with Residential Location Choice

In the survey, the workers were asked which factors influence them in choosing their residential location choice. Nine factors were considered, which are:

- | | |
|--------------------------------|--|
| i. Monthly income of household | vi. Social security |
| ii. Distance from workplace | vii. Communal living |
| iii. House rent | viii. Availability of community facilities |

- iv. Availability of utility facilities
- v. Size of dwelling unit
- ix. Dependence on family decision

The workers then chose the factors and their choices are illustrated in figure 6. From the chart, it can be seen that “house rent” is considered as a factor by maximum number of workers (93.33%). “Social security” and “availability of utility facilities” are the next two factors chosen by maximum number of workers (83.33% and 80% of workers respectively). “Distance from workplace” is the next factor chosen by 76.67% of the workers.

Again, monthly income wise factor preference also studied and shown in table 2. The maximum people (56.67%) have monthly income from 3001-5000 Tk. and among them; most of the people (88.94%) have chosen “house rent” as an influential factor of their choosing housing location. It can be also seen that among all the factors, “availability of community facilities” has the least preference to all the income groups.

The change in workplace and residential location is shown by figure 7. From the figure, it can be seen that 53.33% of the workers have the same working place and residence. 23.33% of the workers have not changed their residence even after changing their working place. 10% of the workers changed their residential location though their workplace was not changed. And only 13.33% of the workers have changed their residential location with the change of their working place.

The priority ranking among the factors was made by the garment workers. Here 1 means the highest and 9 means the lowest priority. Weighted average ranking method is used to show the relative priority among the factors. It is illustrated in figure 8. In priority ranking, the lowest value indicates the highest priority. So from the figure, it can be seen that the most important five factors chosen by the garment workers are:

1. House rent
2. Availability of utility facilities
3. Monthly income of the household
4. Distance from workplace
5. Social security

3.4. Justification of the Factors

House rent: During the survey, it has been observed that the study area Golartek is far from the main road and it is a low lying land, so the house rent is comparatively less. And there is no individual kitchen or latrine provided for each house, the garment workers have to share kitchen and latrine. So the house rent is low. The garment workers choose this area for this factor.

The relationship between the house rent and the monthly household income of the workers is showed in table 3. The table shows that the monthly household income of maximum workers are from 10,001 to 15,000 taka and maximum workers live in a house or room, the rent of which is

between 1501 to 2000 taka. As their household income increases, the workers tend to spend more for their house rent.

Availability of utility facilities: There are four garment factories in the study area – Golartek. The area is industrialized and so the utility facilities are good enough in this area. So, the garment workers have chosen this area to live.

Monthly income of the household: From the questionnaire, it can be seen that 50% of the workers have to spend all of their household income. So it is a prime concern for them while choosing their residential location. And there are four garment factories in the study area – Golartek. So there are adequate job opportunities here for other members of their family.

Distance from workplace: Though “distance from workplace” has been chosen as the fourth most important factor, 50% of the workers live in an area which is 1.51 to 2 km distant from their workplace. It is shown in figure 9. The average travel distance of the garment workers is 1.314 km and average travel time is 0.58 hour. 96.67% of the workers go to their workplace from their house by walking and only 3.33% of the workers go to workplace by vehicle.

Social security: There is a police station in Golartek area, so the area is well secured and the workers feel safe to live here.

4. RECOMMENDATION AND CONCLUSION

4.1. Recommendation

The following recommendations are given for the betterment of the residences of garment workers:

- i. Influential factors in residential location choice should be brought into consideration if the future relocation of garment workers is required in a specific location.
- ii. As the income of garment workers is poor and they cannot afford better residence, government as well as factory owners should allocate built up houses among them and if these are adjacent to garments that would be a preferable one.
- iii. Many single women work in garment factories and they require to be provided with better residential security.
- iv. Influential factors got from the study in residential location choice of the garment workers should be given priority to do the betterment of their residential poor condition.

4.2. Conclusion

Garment industries of Bangladesh have created a breakthrough regarding earning foreign exchange in recent years. Hard labor and perseverance of the millions of garment workers have contributed in making the garments as the highest export earner of the country. Unless they are not provided with healthy and supportive environment in their residence, it will be difficult for them to make the expected contribution. That is why influential factors in choosing residences of garment workers is yet to receive due attention. Their view and their choice about their

residences have to be given priority and they have to be facilitated with adequate requirements they need as well if it is desired to reap out benefit from them through earning foreign exchange.

5. ACKNOWLEDGEMENTS

Authors would like to express their gratitude to the residents of Golartek, Mirpur 1 of Dhaka, Bangladesh for their cooperation and support to provide necessary data and information to carry out the study successfully. The departmental library of Bangladesh University of Engineering and Technology has also been a great help in this research.

REFERENCES

- [1] S. S. Absar, *Conditions, concerns and needs of garment workers in Bangladesh*. Australia: The Australian National University, 2002.
- [2] P. P. Majunder and A. Begum, "The gender imbalances in the export oriented garment industry in Bangladesh. Working Paper Series No. 12, The World Bank Development Research Group/Poverty Reduction and Economic Management Network," 2000.
- [3] G. K. Kundu, *Accommodation problems of garment workers in Dhaka city*. Dhaka: Bangladesh University of Engineering and Technology, 2004.
- [4] R. Wiest, A. Khatun, and H. Mohiuddin, *Workplace, residence and relationship of garment workers in Bangladesh in globalizing export economy*. In M. Rahman and H. Mohiuddin (Ed.), *Globalization, environmental crisis and social change in Bangladesh*. Canada: The University Press Ltd. ISBN: 9840516655, 2003.
- [5] B. Ahmed, R. Hasan, and K. Pervez, *Improving the living conditions of the garment workers: Participatory planning based approach, A case study of: Pallabi Molla Bosti*. Mirpur, Dhaka, Bangladesh: Lap Lambert Academic Publishing, 2010.
- [6] Economic Adviser's Wing, "Bangladesh economic review 2011, Finance Division, Ministry of Finance, Government of the People's Republic of Bangladesh," 2012.

Illustrations

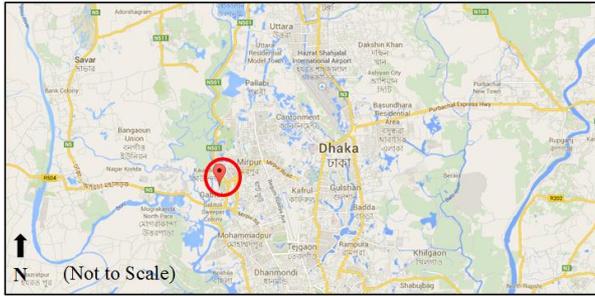


Fig-1. Map of the study area (Source: Google map)

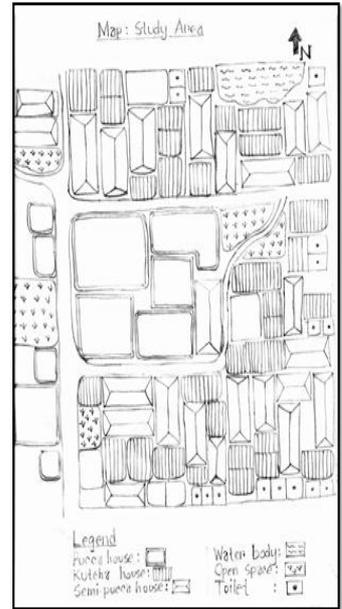


Fig-2. Plan of the study area (Source: Field survey, 2012)

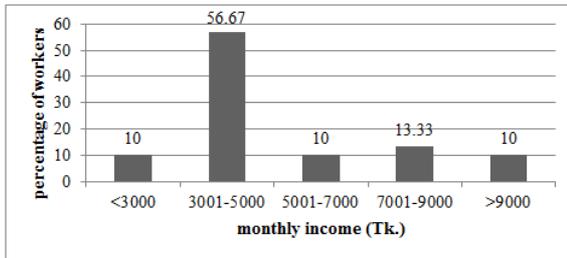


Fig-3. Educational qualification of garment workers (Source: Field survey, 2012)

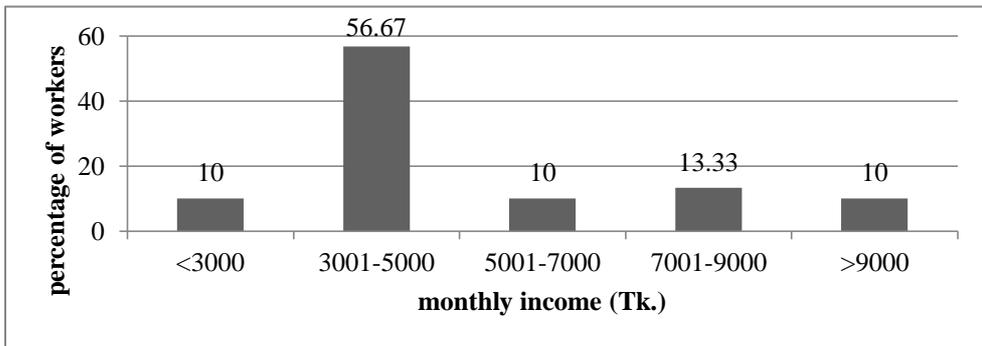


Fig-4. Monthly income of the garment workers

(Source: Field survey, 2012)

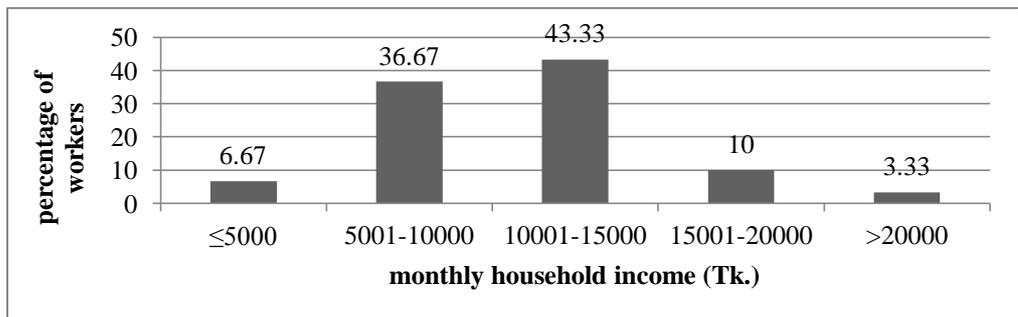


Fig-5. Gross monthly household income of the garment workers

(Source: Field survey, 2012)

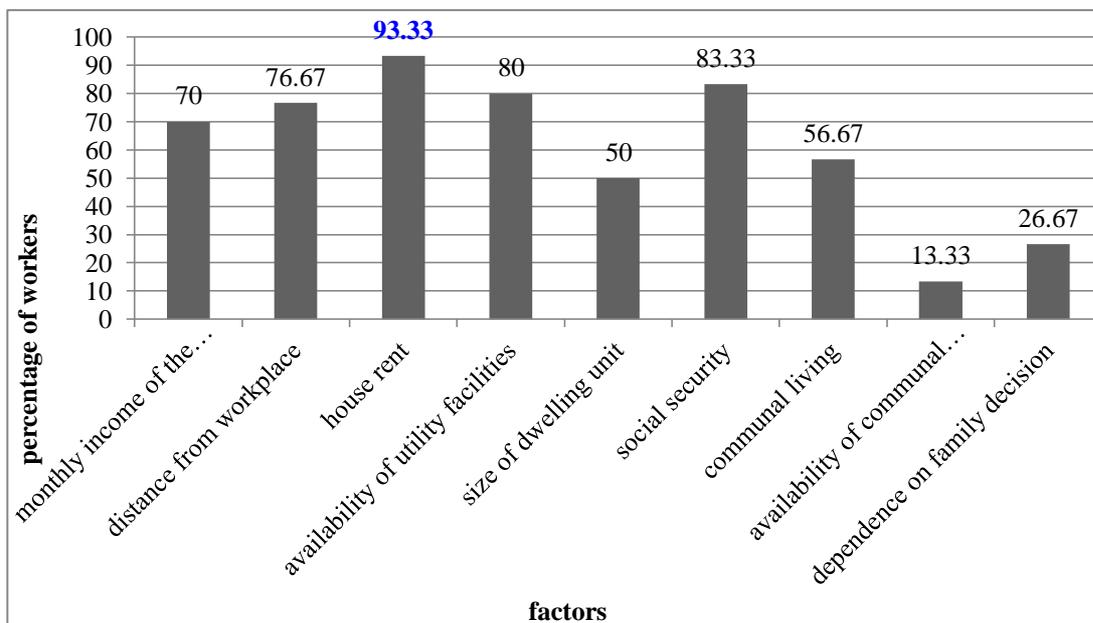


Fig-6. Factor preference of garment workers

(Source: Field survey, 2012)

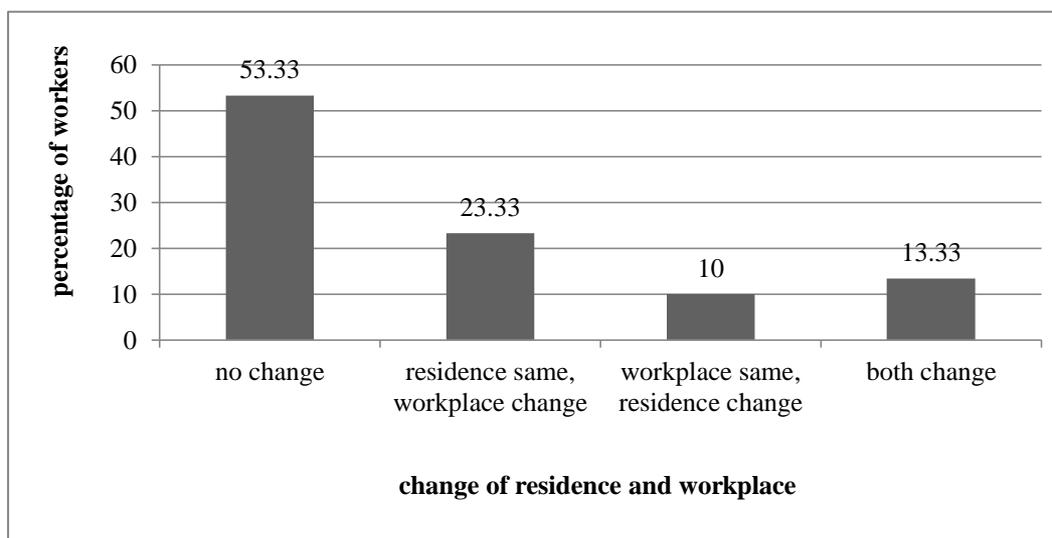


Fig-7. Change in workplace and residential location of the garment workers

(Source: Field survey, 2012)

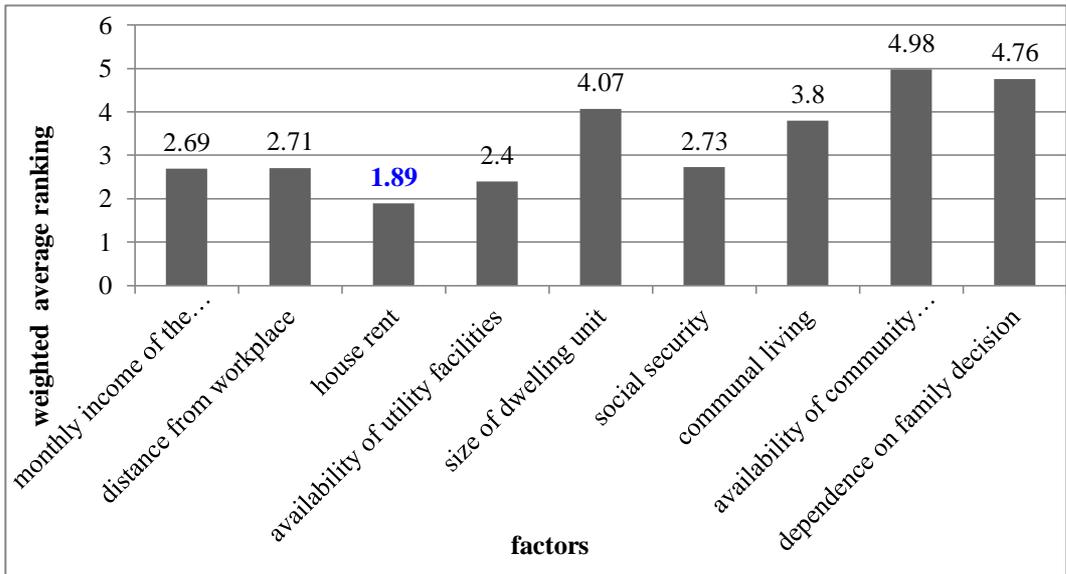
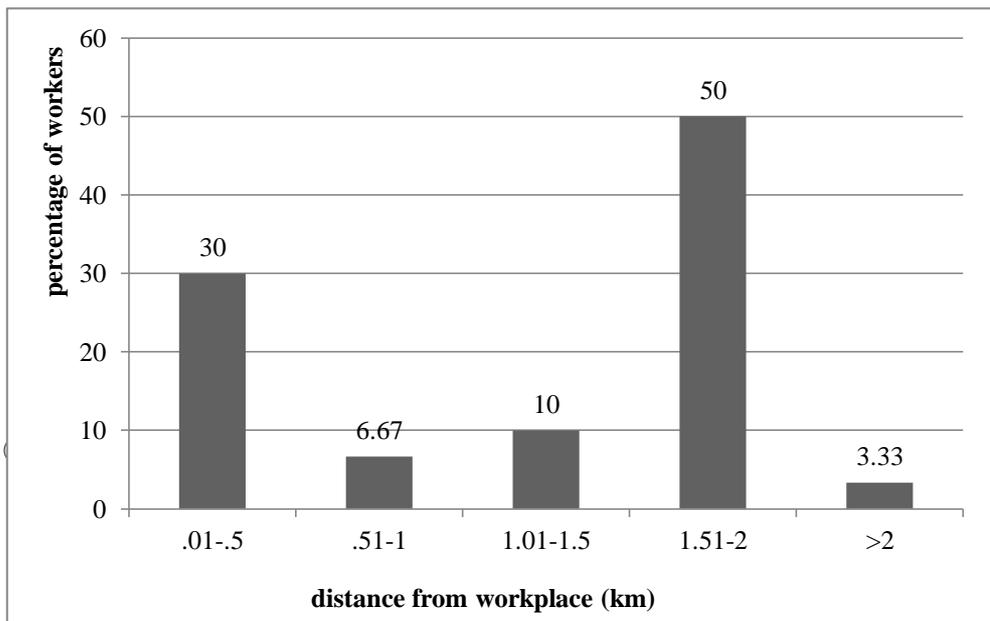


Fig-8. Weighted average ranking of the factors

(Source: Field survey, 2012)



Tables

Table-1. Household size and number of earning members

Family size	Number of earning member						
		1	2	3	4	5	
1 - 2	%within family size	25%	75%	0%	0%	0%	13.33%
	%within no of earning member	20%	17.65%	0%	0%	0%	
3 - 4	%within family size	23.53%	58.82%	17.65%	0%	0%	56.67%
	%within no of earning member	80%	58.82%	50%	0%	0%	
≥5	%within family size	0%	44.44%	33.33%	11.11%	11.11%	30%
	%within no of earning member	0%	23.53%	50%	100%	100%	
		16.67%	56.67%	20%	3.33%	3.33%	

(Source: Field survey, 2012)

Table-2. Monthly income wise factor preference

Factors	Monthly income (Tk.)				
	<3000	3001 - 5000	5001 - 7000	7001 - 9000	>9000
Monthly income of the household	66.67%	66.47%	66.67%	75%	33.33%
Distance from workplace	100%	70.59%	100%	50%	66.67%
House rent	100%	88.94%	100%	100%	100%
Availability of utility facilities	66.67%	70.59%	66.67%	100%	66.67%
Size of dwelling unit	0%	58.82%	0%	50%	66.67%
Social security	100%	64.7%	100%	100%	100%
Communal living	100%	47.60%	66.67%	50%	66.67%
Availability of community facilities	0%	5.88%	0%	25%	33.33%
Dependence on family decision	33.33%	29.41%	0%	0%	33.3%
Total	10%	56.67%	10%	13.33%	10%

(Source: Field survey, 2012)

Table-3. Relation between monthly household income and monthly house rent

Monthly household income (Tk.)		Monthly house rent (Tk.)				
		1500 and below	1501-2000	2001-2500	2501-3000	
5000 and below	%within house rent	5%	50%			6.67%
	%within household income	25%	7.14%			
5001-10000	%within house rent	27.27%	63.64%	9.1%		36.67%

	%within household income	75%	50%	14.29%		
10001-15000	%within house rent		38.46%	30.77%	30.77%	43.33%
	%within household income		35.71%	57.14%	80%	
15001-20000	%within house rent		33.33%	33.33%	33.33%	10%
	%within household income		7.14%	14.29%	20%	
>20000	%within house rent			100%		3.33%
	%within household income			14.29%		
		13.33%	46.67%	23.33%	16.67%	

(Source: Field survey, 2012)

Appendices

Appendix-A.

Bangladesh University of University of Engineering and Technology

Department of Urban and Regional Planning

Questionnaire for the

Study on the Factors Influencing Residential Location Choice of the Garment Workers of Dhaka City

[All the information collected will be kept confidential and used for academic purpose only]

Questionnaire No.: _____

1.Name of the respondent: _____

2.Address: _____

3. Location of workplace : _____

4. Designation at workplace : _____

5. General Information of the Respondent

Gender	Age (yrs.)	Educational Qualification	Religion	Marital Status	Monthly Income (Tk.)
<input type="checkbox"/> Male	<input type="checkbox"/> 18-25	<input type="checkbox"/> Illiterate	<input type="checkbox"/> Muslim	<input type="checkbox"/> Single	<input type="checkbox"/> Below 3000
<input type="checkbox"/> Female	<input type="checkbox"/> 26-32	<input type="checkbox"/> Primary	<input type="checkbox"/> Hindu	<input type="checkbox"/> Married	<input type="checkbox"/> 3001-5000
	<input type="checkbox"/> 33-39	<input type="checkbox"/> Secondary	<input type="checkbox"/> Buddhist		<input type="checkbox"/> 5001-7000
	<input type="checkbox"/> 40 and above	<input type="checkbox"/> S.S.C	<input type="checkbox"/> Christian		<input type="checkbox"/> 7001-9000
		<input type="checkbox"/> H.S.C	<input type="checkbox"/> Others		<input type="checkbox"/> Above 9000
		<input type="checkbox"/> Others			

6. Household Information

(a) Household Size/family size : _____

(b) No. of earning members : _____

(c) Gross monthly household income (Tk.) : _____

(d) Gross monthly household expenditure (Tk.): : _____

7. How long have you been working as garment worker?

_____ years.

8. Did you work in any other garment factory previously?

Yes

No

If 'yes' then go to question no. **9 and continue**, otherwise continue responding from question no.

10

9. Information regarding previous workplace and housing

Previous location of workplace	Location of housing	Reason of choosing housing location

10. Have you been living in this place so long as you been working as garment worker?

Yes

No

If 'No' then go to question no. **11 and continue**, otherwise continue responding from question no. **12**

11. Information regarding previous housing location

Previous housing location	Reason of choosing housing location

12. Housing related information at current location

(a) Size of dwelling unit (sft) : _____

(b) Monthly house rent (Tk.) : _____

13. Travel (from residence to workplace) related information for housing location

(a) Travel distance (km) : _____

(b) Daily travel time (Hour) : _____

(c) Mode of transport : _____

(d) Daily travel cost (Tk.) : _____

14. Which of the following factor/factors influence you on choosing your residential location?

Factors	
i. Monthly Income of the household	viii. Availability of community facilities
ii. Distance from work place	ix. Dependence on family decision
iii. House rent	
iv. Availability of utility facilities	

v. Size of dwelling unit	
vi. Social security	
vii. Communal living	

15. Rank the following factors in order of your preference that influence your residential location choice

***(Rank the factors from 1-9 where rank 1 means the most influential factor and rank 9 means the least influential factor)

Factors	
i. Monthly Income of the household	vi. Social security
ii. Distance from work place	vii. Communal living
iii. House rent	viii. Availability of community facilities
iv. Availability of utility facilities	ix. Dependence on family decision
v. Size of dwelling unit	

Appendix-B.

Calculation of weighted average ranking

The priority ranking among the factors is made by the garment workers. Then weighted average ranking of the factors is used to identify the relative importance among the factors. Here 1 means the highest and 9 means the lowest priority. So the factor that has the lowest weighted average ranking is the most important factor to the garment workers.

Factors	Priority ranking									Average ranking
	1	2	3	4	5	6	7	8	9	
Monthly income of the household	4	9	2	1	3	4	4	2	0	2.69
Distance from workplace	5	3	5	4	4	1	1	1	1	2.71
House rent	6	9	8	1	4	1	1	0	0	1.89
Availability of utility facilities	8	5	5	2	2	4	1	1	2	2.4
Size of dwelling unit	0	0	3	6	4	1	7	6	3	4.07
Social security	3	2	6	7	6	4	0	2	0	2.73
Communal living	0	2	1	7	6	2	5	4	3	3.8
Availability of utility facilities	1	0	0	2	1	2	4	10	10	4.98
Dependence on family decision	3	0	0	0	0	5	6	5	11	4.76

Source: field survey, 2012

Views and opinions expressed in this article are the views and opinions of the author(s), International Journal of Chemical and Process Engineering Research shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.