

Exploring the Housing Affordability of Readymade Garments Industry workers in Dhaka city: a case study of Mirpur Area

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Abstract: Ready Made Garment (RMG) industry is the leading earning sector of Bangladesh, a South Asian country. It adds billions of dollars to the GDP of this country each year recruiting about 2.4 million garments workers in this sector. Majority of the garments factories are clustered in the capital city of Bangladesh named Dhaka. Nevertheless, having a huge contribution of RMG sector in the economic growth, the living condition of the garments workers are below the minimum level of standard. In this context, the purpose of the research is to explore the present housing affordability of the RMG workers, who are residing and working in Dhaka city taking a case study of Mirpur area. For this study, data were collected on numerous factors regarding basic information, socio-economic and housing condition, utility and community facilities along with the status of privacy, comfort, safety and security of the RMG workers. Housing affordability has been measured by the ratio of monthly expenditure on house rent and transportation to total monthly income. By analyzing the collected data it has been found that almost 69% of them live below the affordable limit (field survey, 2015), although there is variation among different income groups and household types. Finally, some recommendations have been given to solve the housing affordability problem and improve the living condition of the workers through policy interventions and proper housing guidelines by the government, provision of housing loan to the workers, regulations for the factory owner, introduction of worker's savings account and provident fund.

Index Terms: Affordable Housing, Housing Affordability Index, Median Income, Garments Workers.

1 INTRODUCTION

The RMG industry is the only multi-billion dollar manufacturing and export industry in Bangladesh. It earned 24491.88 million dollar in the year of 2013-14 [1]. A total of 2.4 million workers are involved with this industry, where about 85% of these workers are women [1]. The garments industries in Bangladesh generate 80% of the country's total export revenue and 10% of the total GDP [2]. According to the Bangladesh Bank, the amount of current GDP of Bangladesh is around 129.86 billion dollar and the growth rate of GDP is 6.01%. There are about 4825 garments industries in Bangladesh, among there about 2000 factories (41.5 %) are clustered in and around Dhaka [3]. The garment industries play a significant role in terms of export earnings, employment generation, reducing poverty and empowering of women [2]. In spite of all these positive hallmarks of this sector, the housing in which the workers use to live is below standard and deplorable condition. Though the RMG workers earn millions of dollars for the state, the state does not provide any benefit.

The garments workers, whose contribution to the economy is highly laudable, how do the state addresses housing needs the housing condition of RMG workers remains unaddressed rather pitifully ignored. Almost half of the city's garments working population lives in slums in inhuman condition with deteriorating urban environment, characterized by crime and violence, overcrowding and significantly lower access to housing and services [4]. Whereas, according to the ILO Workers' Housing Recommendation 115, standards of housing for the workers should include minimum space allocated per person or per family, supply of safe water, adequate sewage and garbage disposal systems, appropriate protection against heat, cold, damp, noise, fire, adequate sanitary and washing facilities, ventilation, cooking and storage facilities and natural and artificial lighting, a minimum degree of privacy etc. [5]. But the housing situation and living condition of the garments factory workers in Dhaka city are far below these standards. As a result these workers face various risks in the life starting from inadequate housing to life threatening situations.

No initiative has been taken to measure their accessibility to proper standard of housing within their affordability. They cannot afford even a minimum standard of living or any quality of life. This research thus intends to investigate the present housing affordability situation of the garments

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Country	Housing Affordability Initiatives	Date	Definition of Affordability
United States	National Affordable Housing Act	1990	Less than 30% of gross income; costs include rent and utilities
United Kingdom	Green Paper Circular 6/98: Planning and Affordable Housing Planning Policy Guidance Note 3: Housing	2000 1998 1992	Locally determined Measures
Canada	Affordable Housing Framework	2001	Less than 30% of 13 gross income; costs based on norm rent income
New Zealand	Building the Future: Towards a New Zealand Housing Strategy	2004	Recognition of housing and non-housing costs
Sydney	National Housing Strategy	1991/ 1992	"30% - 40% rule"- income based ratio
Shanghai	The 1991 Housing Reform Programme. National Comfortable Housing Project	1991 1993/ 1998	Less than 50% of gross income
Malaysia	The New Economic Policy National Development Plan Vision DevelopmentPlan	1971 1991 2000 2001 2020 2010	Less than 30% of gross income

workers along with the policy recommendation to address the significant issue of housing affordability problem of them.

2 LITERATURE REVIEW

2.1 Housing Affordability Index

The affordability are usually relates to the ratio of housing costs to income or household financial costs associated with housing [6]. The index of affordability varies for each country all over the world. The share of income spent on housing or rental expenditure-to-income ratio is widely used, with 25 to 30 per cent of income representing the upper limit of affordability [7]. In general, the affordability benchmark of 25 per cent is based on the cost of housing that equal to a quarter of a household's income. Affordability considers not just housing but it is extended to the quality of house and the household's affordability for the remaining necessities of life. Table 1 shows the housing affordability index in selective countries.

TABLE1

HOUSING AFFORDABILITY INDEX IN SELECTIVE COUNTRIES.

Source: [8]

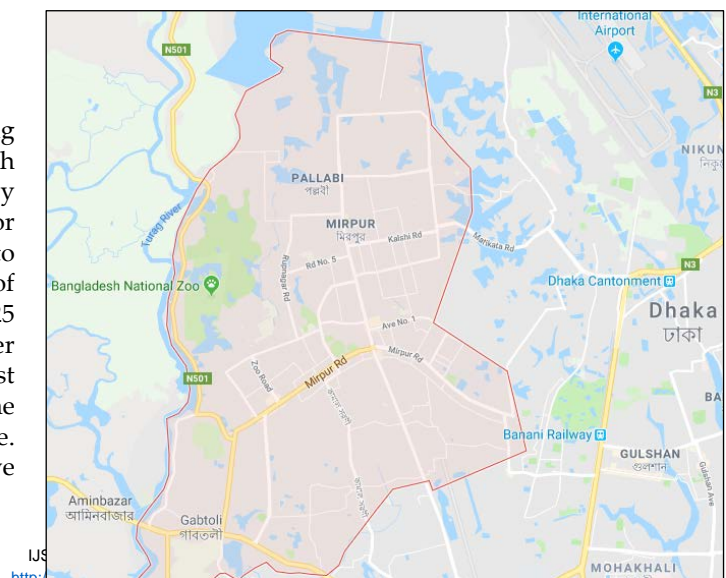
The affordability index of Bangladesh is around 50 percent [8]. As a result, People of Dhaka spent more than half of his household income for housing.

2.2 Measuring Housing Affordability of the RMG workers

For Bangladesh, a study was conducted to calculate the median income in 2005. The median household income of Bangladesh urban area was defined as 720 dollar (TK.36000) per year [9]. Assuming the inflation of Bangladesh (around 6 percent), the current median income of Bangladesh urban area may be 61000 Tk for 2015. The per capita income of Bangladesh is around 90,000 Tk. A World Bank report shows that the GINI coefficient of Bangladesh is 32.1% which represent income disparity among the household income [10]. As, there is no specific study or method for measuring housing affordability, a combination of affordability standard and threshold of median household income have been used in this study for the RMG workers. Affordability index for housing has been calculated by taking 30% of the household income on housing cost for all income groups and median income of the workers has been used to determined specific distinctions and variations among the different income groups of the RMG workers.

3 DATA AND METHODS

For data collection and survey, selection of study area is essential. As, the number of garment industries is highest in the Mirpur area, the location of the workers' housing is also nearby. Moreover, Mirpur area is reasonable place of living for lower income people like garment workers. Mirpur 1, Mirpur 10, Pallabi and Rupnagar Tin Shade area have been selected to conduct the survey (see fig1).



The primary data were collected to analyze the existing situation of housing of the garments workers along with housing affordability.

A precise questionnaire was prepared for the survey of the study group at their residence. Information on several demographic, socio-economic factors, financial status, physical condition of housing, information on cooking, bathing, utility and recreational facilities etc. were collected through the thorough interviewing of the respondents. On the basis of the answer of the respondents, final data sheet was prepared. The collected primary data was compiled in SPSS software and the statistical analysis of the data was conducted by using SPSS and Microsoft Excel tools.

In affordability analysis, existing housing affordability was calculated using the following equation of "affordability index". Location Map of the Study Areas

$$\frac{\text{Expense on House Rent per month per HH} + \text{Expense on Transportation per month per HH}}{\text{HH income per month}}$$

$$\text{Affordability Index (AI)} = \frac{\text{Expense on House Rent per month per HH} + \text{Expense on Transportation per month per HH}}{\text{HH income per month}} \quad (1)$$

The existing affordability index was used for finding out the respondents who lived within their affordability. The affordability standard was fixed as-

$$\text{Cost of Housing} = 30\% \text{ of the total Household (HH) income [8].}$$

If the existing affordability index for each respondent \leq affordability standard, the respondent is considered to live within affordable limit. Otherwise, it is considered as unaffordable. The last step is to find out the gap between present affordability and standard affordability in terms of space and cost. In this method the percentage total population of the study group who lived beyond their housing affordability was measured. This percentage or total amount of population is required for the further analysis for affordable housing provision.

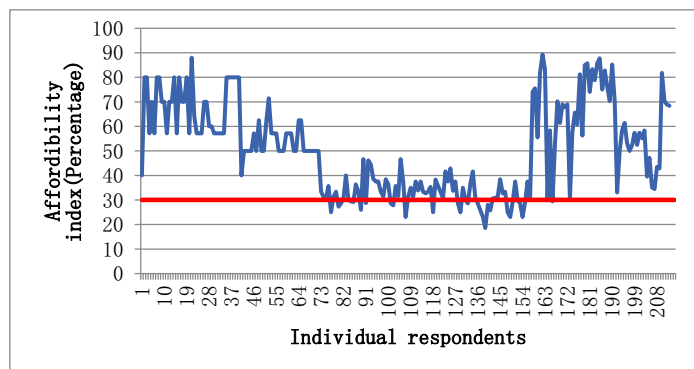
4 RESULTS AND DISCUSSION

As mentioned earlier, housing affordability can be measured through the ratio of expense on housing and total income. From the field survey, the study found that, the gross household median income of respondents is 8,650 Tk per month (Field survey, 2015).

Existing affordability index is determined to assess ability of payment for housing against the income. For the study, only three factors: expense on house rent per household per month; expense on transportation per month; household income per month, were used for determining the existing affordability of the each household. Based on previous

researches, standard affordable limit is fixed as housing expense is 30% of the total income is used to establish the household affordability or un-affordability. From the study, it is revealed that more than 69% respondents live below the affordable limit. Here, the affordability of the respondents is determined based on the household's total income and household structure (family or single household).

The study discovers that, for the single household, around 85% of workers live below the affordable limit. Figure 2 shows single household respondent's present affordability index-



From the above figure, it can be seen that the single workers expense more on housing and there are only one earning person in a single household. The workers from the single household can save little amount for the future rather than family respondents.

For family household, around 49% live below the affordable limit. Most of the cases, there are more than one earning person in the family household. Both husband and wife work for increasing the family income. Both of them support the family expenditure. The elder children also support the family income by conducting informal jobs.

The following figure 3 shows family household respondent's present affordability index. The family household can save more than the single household. The pressure of monthly expense is distributed among the mature individuals of a family.

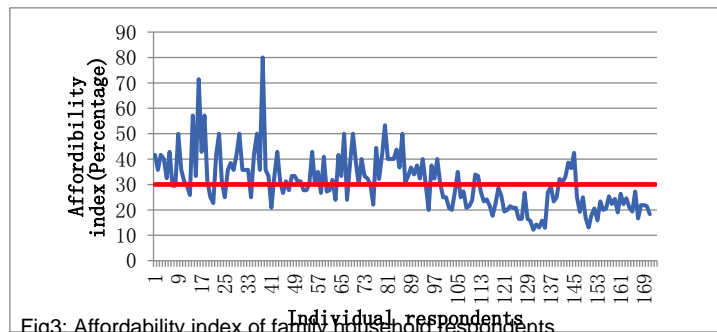


Fig3: Affordability index of family household respondents

Determination of existing maximum affordable cost for maintain housing

In this study, the affordability standard is determined as 30% of the total household income. Affordability standard is used to determine respondent-wise maximum cost for housing. Respondent-wise maximum affordable cost for maintain housing is determined by the relationship- "*Affordability standard* Monthly income of household of the workers*".

Here, the overall maximum affordable cost for maintain housing for each household is equal to 3450Tk per month on average. So using the equation, the average cost for housing are determined according to the income group and household structure.

The single household can afford 2646 Tk per month as the rent of housing on average. The family household can afford maximum 3578Tk on average per month as the rent of housing. The maximum cost for maintaining housing differs among the income groups and single workers and workers with family. The family household has more capacity to pay more for the housing as they earn more. This calculated amount is used to continue the further research on affordable housing solution investigation, discussed in the following section.

5 POLICY INTERVENTIONS BY GOVERNMENT

For the purpose of housing provision with affordable cost to the RMG workers, there should be strict policy regarding workers housing provision in both of the National Housing Policy and National Labor Law. The 'Law of Malaysia' or 'Singapore National Environment Agency Code of Practice on Environmental Health, 2005' can be taken as the standard for introducing a well-defined law for labor housing. Apart from the explicit policies there should be modification or upgradation of some other policies like

- Land Policies: In which land price should be kept under control and be affordable for lower and middle income group, who acts as a private owner of the worker's housing at present.
- Rent Control Act and Tenure Security: The rent control act is almost inactive in Bangladesh. As a result, the house rent flies from the grip of the workers. They need to pay higher rent for a lower quality of housing. Among them, the tenure security is quite absent. There should be a regulation for tenure security and rent control so that, the workers can keep their housing rent in their affordability.
- Restrictions on evictions: Though the eviction of the workers is rare, the strict restriction on eviction can give them better security of life and tenure security.

Provision of Housing Loan

Housing loan should be provided in lowest interest to the workers, who have been working for years long and trying to get housing ownership by various housing finance and credit

institutions. The traditional housing finance corporations will not be effective for them as they will not be willing to provide loan on minimal interest. Different NGO's and labor co-operatives can seek for funding from the donor agencies and introduce micro-financing. They can provide construction materials in lower cost and give instructions for low cost housing construction along with lower mortgage finance.

Regulations for the factory owner

This should be a joint intervention of both Govt. and BGMEA to create pressure on the factory owners to provide accommodation and transportation to the respective workers, especially to the female workers. If they provide single worker dormitories inside the premises of factories, it would be much easier for the workers to live and work with comfort. The owner would get a particular amount of loan for that construction of housing if they fail to provide them with their own accord. There should be also strict regulation of punishment and withdrawal of registration and membership of BGMEA if they violate the regulation.

Introduction of worker's savings account and provident fund

There is no provision of formal savings account of the workers and their provident fund. These should be introduced by the organizations of worker's welfare in association with the factory owners. This saving account will deposit a fixed amount of money per month having a particular rate of interest. Like government employee, the workers can enjoy the cumulative amount of fund after a certain period of their job and also take loan from it. This will help to build a sense of saving and enhance the security net for them.

6 CONCLUSION

The Ready Made Garment sector is very sensitive sector for the economy of Bangladesh. The contribution of this sector is huge. But the garment workers, who are the root contributors of the massive progress of economy, are being kept under great ignorance. They are not treated as importantly as they should be treated. As a result, the drivers of the growth of this country have to lead a measurable life with unending economic hardship. So, it is a dire need at present to think for them, work for them and build a livable environment for them. As, they live beyond their affordability either their minimum wage should be increased or they should be provided with better housing facilities by the authority. Increasing minimum wage is an uncertain vague issue with much debate and complexities. It doesn't ensure the improvement of life style of the workers. Rather, this should be subsidized by improving housing quality of the workers. This will need a cordial effort and some series of policy making by the Government, who should contribute with

major interventions. Apart from this, there is a basic responsibility of the garment authorities and owner agencies to raise fund for their workers from the donor agencies and domestic funds. It is not a risky task to invest for the garment workers, as they return several times higher than they are given to this country. Finally, this research on finding out an affordable housing solution can be used for further studies for the implementation of and types of housing development or redevelopment scheme for the garment workers of Bangladesh.

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