ACCOMMODATION PROBLEMS OF GARMENT WORKERS IN DHAKA CITY
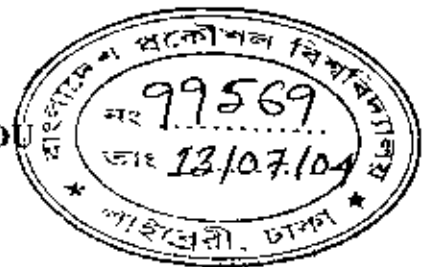
By

GOURANGO KUMAR KUNDU

THESIS
SUBMITTED TO THE DEPARTMENT OF URBAN AND REGIONAL PLANNING
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
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2004
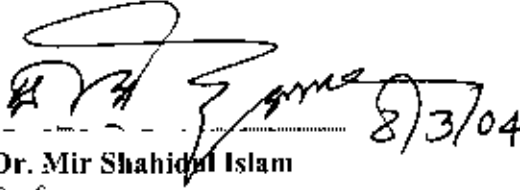
Thesis Acceptance Form

The thesis titled "**Accommodation Problems of Garment Workers in Dhaka City**" submitted by **Gourango Kumar Kundu**, Roll No. **100015029 F**, Session, **October-2000** has been accepted as satisfactory in partial fulfillment of the requirements for the degree of Master of Urban and Regional Planning (MURP) on 8th March, 2004.

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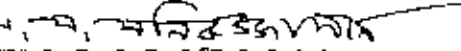2.

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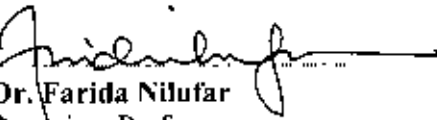3.

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Candidate's Declaration

It is hereby declared that this thesis or any part of it has not been submitted elsewhere for the award of any degree or diploma.

Gourango Kumar Kundu

Dedicated to

My

Beloved Maa

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Abbreviations and Acronyms

ADB	Asian Development Bank
BGMEA	Bangladesh Garment Manufacturers and Exporters Association
BBS	Bangladesh Bureau of Statistics
BIDS	Bangladesh Institute of Development Studies
BUET	Bangladesh University of Engineering and Technology
CUS	Centre for Urban Studies
DCC	Dhaka City Corporation
DESA	Dhaka Electricity Supply Authority
DPHE	Department of Public Health and Engineering
GOB	Government of Bangladesh
HSD	Housing and Settlement Directorate
HBFC	House Building Finance Corporation
HBRI	House Building Research Institute
LGED	Local Government Engineering Department
MURP	Master of Urban and Regional Planning
NGO	Non-Government Organization
RAJUK	Rajdhani Unnayan Katripakhay
RMG	Raising Manufacturing Garments
UDD	Urban Development Directorate
WASA	Water and Sewerage Authority
Km	Kilometer
M	Meter
Kg	Kilogram
Sq. ft	Square Foot
Sq.km	Square Kilometer
Tk.	Taka
HH	Household

Glossary of Terms

Kutcha   Earthen; temporary (house)

Kutcha Road   Unpaved road

Pucca   Permanent construction of brick and/or concrete

Pucca road   Paved road

Semi-pucca   Semi-permanent structure, a combination of Kutcha and pucca

                      materials, generally brick floor, brick wall and C.I. sheet roof.

Slum/Bastees   These are legal settlements of the low-income communities,

                      having high area density, room crowding and poor housing

                      condition.

Squatter   Unauthorized inhabitant of public or government land

Mastaan   Local muscleinen extracting surplus from slum dwellers and

.   squatters

Ward   Municipal or city administrative unit headed by the elected

                      Commissioner.

Household   Household is based on the arrangements made by persons,

                      individually or in groups, for providing themselves with food

                      other essentials for living.

FAR (Floor Area Ratio): It is a ratio of total floor area of a building to its site area.

                      The ratio was calculated by dividing total floor area of a

                      building to its site area.

Population Density: It is the average number of persons per unit of area.

Zilla   District

Bazar   Market

Acknowledgment

ABSTRACT

Garment sector is gaining importance in the development of the country. It also greatly contributes to poverty reduction through employment generation and women's economic empowerment, but accommodation for the workers is a serious problem in Dhaka City. This thesis attempts to present the housing condition of garment workers. Housing includes various community facilities and services such as water supply, sanitation, drainage, transportation etc. With the limited income garment workers have to live in the slum areas with high house rent. The average income of the garment workers is Tk.1573 per month. Average monthly house rent of the garment workers is Tk.540 per month in the study area. So the garment workers spend 34 percent house rent of their monthly income. Garment workers with their families live in the congestion without any ventilation in their houses. The average number of persons per room is 4.17. The average number of floor space of the houses is about 84.11sq feet. Per capita floor space in the housing units is 20.17sq feet. The existing services and facilities supplied to the workers are not satisfactory as found in this study. Dependency ratio of a latrine is 65 persons per latrine and dependency ratio of a tube well is 90 persons per tube well. The average distance of the work place of the respondents is 4.38 km from their residence. The average travel cost of garment workers is Tk.98.33 per month. Women workers become the victims of various harassments due to their insecured living arrangement. This study has attempted to identify the housing condition, existing utility service facilities and causes of housing problems of the garment workers. At the same time this study has also attempted to give some policy guidelines for promotion of better housing facilities for the garment workers.

TITLE: ACCOMMODATION PROBLEMS OF GARMENT WORKERS
                        IN DHAKA CITY
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Chapter One

Introduction
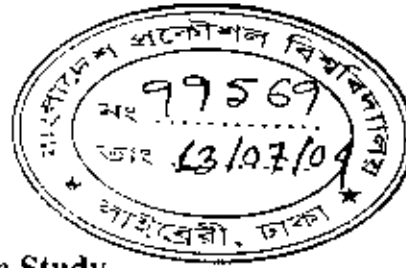
CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Housing is one of the basic requirements for a person to organize his thoughts, discipline his action, stabilize his mind, undertake plans and programs for doing some thing meaningful. As housing is a basic need of human life but the greater part of the population of Bangladesh is deprived. Housing plays a tremendous role in the economy of the country. Housing has highly significant social implications because it provides the shelter for our basic unit of the family. The workforce of our country is approximately 58 million (BGMEA report 2002). This segment of the population has always been contributing the hardest labour, yet they bear the burden of the negative effects of development.

Since women constitute the most vulnerable group of society, their plight arising out of housing problems is more serious than those of men. Many have taken shelter in shanty houses in slums where they are compelled to lead an inhuman life devoid of all civic amenities. Women workers in the cities live in the worst condition much due to the problems of poor housing. Housing is a basic need and a prerequisite to Socio-economic and cultural progress. It is influenced by many factors working simultaneously the land, people, climate, cultural traditions and the socio-economic conditions, all these determine the form and character of housing in a society.

Readymade garment sector has been playing a significant role in the socio-economic stability of the country by fetching about 73.23 percent of the total export earning and employing nearly 1.8 million people (Bangladesh Export Promotion Bureau, 2001) The sector has created a tremendous employment opportunity especially for the women in society. Apart from earning valuable foreign exchange for the country, it also greatly contributes to poverty alleviation through women's economic employment generation. 90 percent workers in the garment industry are female (BGMEA report 2002). The pull effect of export-oriented garment manufacturing

industry has brought a large number of young women out of their village homes and driven them in to Dhaka City to undertake wage employment in the export-oriented garment industry.

The BIDS 1990 survey showed that 83 percent of the male workers and 69 percent of the female workers originated from the rural areas (Zohir and Paul-Majumder, 1996). They come to the town and join in the labour market in the garment industry. But no housing arrangement was made for them. Moreover, the residential problem is acute in Dhaka City. About half of its population live in slums and squatter settlements (Hasan, 2002). Some initiatives have already been taken by NGOs, such as that by Nari Uddog Kendra (NUK) since 1993. There now exist four hostels accommodating about 600 female garment workers (NUK annual report, 2002).

The Bangladesh Garment Manufacturers and Exporters Association (BGMEA) have not provided any housing facility for its workers. But it is unquestionably true that these women workers contribute a lot to help the garment sector by working as a labour source. But the authorities pay no attention to their needs. As a result the migrant young women coming to Dhaka City in search of garment work have to take shelter either in the rented dilapidated slums and squatter settlement, mess, hostel, or in the relative's houses from a distant place to their industry where in general social insecurity is widespread. More over the workers live in the slums in inhuman condition. The workers living in slums and squatter settlements are always remained afraid of local terror. The travel system of the female garment workers is very insecure. No doubt, this long distance travel on foot is physically quite strenuous. Women face various mishaps while traveling on foot at night.

The present study is aimed to identify the housing problem of the garment workers and provide a policy guideline for solving the accommodation problem of the garment workers.

1.2 Objectives of the Study

The study has been conducted to achieve the following objectives:

   i) To identify the housing condition of the garment workers.
   ii) To investigate the causes of housing problems related to garment workers.
   iii) To identify the utility service facilities of the study area.
   iv) To provide policy guidelines for promotion of better housing facility of the garment workers.

1.3 Rationale of the Study

Housing is a basic human need and as such provision of adequate housing for all citizen by government as one of the fundamental responsibility. Yet housing remains a serious problem in most of the developing countries, and even in many developed countries. Making provision of housing for garment worker is a critical issue. In the case of developing countries particularly Bangladesh, the gap between the demand and supply of adequate housing is continually increasing. This gap has been of alarming proportion in our country. The reasons for such gaps are several, including the existing social structure, rapid population growth, persisting poverty, and recurring natural hazards, but also an unclear perception about the role of housing.

A large number of workers are working in the garment industry in Dhaka City, ninety percent of them are women facing serious housing problem and provides inhuman life. They face different victims by poor housing. A large portion of their income are spending for their housing purpose. Social status of the workers depends to a large extent on safe and secure housing. Generally one expects a secure shelter at the residence. But in Dhaka city the female workers face various harassment due to their insecure living arrangement (Paul-Majumder and Sen, 2001).

The pull effect of export-oriented garment manufacturing industry has brought large number of young women in Dhaka City and provides wage employment in the export-oriented garment industry. But garment authorities have not provided any housing facility for their workers. The present study with a view to identify the causes of housing problem to the garment workers and develop policy guideline for better housing facility of the garment workers. This research would help policy makers and developers to take any types of housing development project in Dhaka city.

1.4 Literature Review

Relevant literature like published and unpublished thesis, journals, various books. research reports, newspapers etc. were reviewed with a view to understand the housing problem of the garment workers in Dhaka City.

Haque studied the Residential Circumstances of Low Income Single Working Women in Dhaka City. The study reports the demographic and socio-economic characteristics of low-income working women, their housing pattern and process in acquiring accommodation and the private house owner's attitude toward them as tenants.

Paul-Majumder and Begum (1997) have argued that the lack of housing is a supply constraint for female garment workers, as 93 percent of them are rural migrants. The supply of women's labour depends to a great extent upon safe and secure housing. Safe and secure housing will facilitate their upward occupational mobility. If they are provided with safe and secure housing, they could continue their job and thereby could acquire work experience which makes them competent for promotion. Presently some entrepreneurs have become aware of this need and in order to retain their skilled worker they are providing housing facilities. About 9 percent of the workers were staying in mess during the BIDS survey in 1990. This is a new phenomenon which is likely to increase with the passage of time.

Tariq (2003) reported in his thesis of An evaluation of Resettlement of low-income People under Dhaka Urban Infrastructure Improvement Program that slums are usually run-down housing in established, legally built part of the city proper. generally located in the older parts of a city. The total number of slums and squatters settlements recorded by the UPRPCUS survey in 1996 was 3007 in the Dhaka Metropolitan Area (DMA). The slums and squatters are found allover the city, especially within the DCC areas. It should be mentioned here that 96% of all slums and squatters are located within the DCC boundary. These slums and squatters settlements occupy about 1038 acres (1.62 sq miles or 4.20 sq kilometers) of land

areas within Dhaka Metropolitan Area. The 1996 Survey identified 1358 new slums and squatters settlements. These 1358 settlements have appeared new after 1991 survey. The high growth of squatter clusters during the last five years may be explained in several ways. First: It is evident that there was an undercounting of slums in 1991 survey. Second: Many of the mini-slums or squatters (Household less than 10) in 1991 may have gained more households and were counted in 1996 as slums/squatters with 10+ households. Third: The slums and squatters are unstable phenomenon. It is not only people who move from one settlements to another but the squatter settlements have also high degree of mobility. Disappearance of slums and squatters and formation of new settlements is very common. Although slums and squatter settlements are found all over the city but the peripheral zone of the city has larger concentration of such settlements compared to inner zones. The western fringe of the city has the highest concentration of slums and squatter settlements, most likely due to land availability and proximity to working places.

National Housing Policy (1993) – Global Strategy for shelter by the year 2000 adopted by the United Nations in November, 1988, calls upon governments to take steps for formulating a National Housing Policy in the light of " the enabling approach" for achieving the goals of the strategy. The United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro in June, 1992, urged upon the governments to formulate national settlement strategies to implement the recommendation of the UNCED in the field of human settlements. In the light of the above, and in the context of the objectives of the fourth five year plan of Bangladesh, the government formulated the National Housing Policy 1993. The main objective of the policy is to make housing accessible to all strata of the society and to accelerate housing production in urban and rural areas, with major emphasis on the needs of the low and middle-income groups. The high priority target groups will be the disadvantaged, the destitute and the shelter less poor.

Five Year Plans and Programs- Housing policies are incorporated in all five year plans. However, in the first two five-year plan no specific plans and programs were aimed towards private development. The major thrust of third five-year plan were for

housing policy prescriptions to stimulate enhanced private sector participation. To stimulate private investment in district towns, the government adopted a strategy of seed fund to develop small sized serviced plots for the low- income group. In the fourth five-year plan (1991-1995), the main objective of the housing policy was to provide long term acceptable living environment for all groups of people. Separate policy guidelines are formulated for public and private sector. The private sector policy of Fourth Five -Year Plan are

- Government should develop necessary physical and financial facilities to promote private sector housing in both rural and urban areas.
- Semi-autonomous, autonomous and private corporate sectors would develop housing estates for their employees.
- Private developers would be allocated land at suitable locations for providing housing for the middle and upper income group.
- Fiscal incentives and confessional investment credit should be extended to develop building material industries at suitable locations of the country.

A major concern of the Fifth Five Year Plan (1997-2002) is to improve the physical facilities of living such as housing, water supply, sanitation and environment. The salient policies of housing sector related to low and middle income group and private sector of Fifth Five - Year Plan are –

- Tax exemption will be given to those, who build houses with their own resources
- Hire purchase system for house ownership in the private sector will be encouraged.
- Tenancy Act will be updated for rented houses in the urban areas, for mutual benefit of both owner and the tenants.
- Arrangements of soft loans for housing will be made available for the poor; thus end, a special fund will be created by the Government. So far, the Government of Bangladesh has prepared five-year plan, a two- year interim plan and a national housing policy. A number of housing strategies and prescriptions in these plans has been implemented. The emerging trend in the

housing policy of Bangladesh, is the gradual shift of housing responsibility from the Government to the Private developers and non-government organizations. Despite the modest success of these plans, the Government has failed to provide safe and sanitary housing for the great majority of people of the country. The reasons could be a limitation in government fund, huge housing shortage, and increasing population pressure of the country. Moreover, many of these housing programs were biased towards the high-income group, and housing standard was often kept exceedingly high. There are also instances of corruption and favoritism in plan implementation. In some cases, housing facilities for the low-income target group, were taken over by higher income people, mainly due to the lack of affordability of the former

Most of the information on the housing aspect of garment workers is not available from secondary sources because very little work has been conducted on the issue 'Housing Problem of the Garments Workers'. Therefore, preliminary household survey was conducted. Thus maximum data for this study are collected from primary field survey.

1.5 Methodology of the Study

General

A proper methodology is always necessary for the successful accomplishment of any research work. It helps to streamline and organize the experiences, observations, examinations, analysis of data and information and their logical interpretation through a systematic process to achieve the ultimate goal and objectives of the research. Methodology of a research work, determine to an appropriate extent, the nature, success and limitation of the thesis. The methodologies adopted for the current research work is presented in a sequential manner.

1.6 Stages of the Research

Following stages were followed during the research work:

Stage – I	:	Selection of the Study Area.
Stage - II	:	Reconnaissance survey.
Stage – III	:	Selection of Sample.
Stage – IV	:	Collection of Data.
Stage – V	:	Processing and Analysis of Data.
Stage – VI	:	Presentation of the report.

1.6.1. Stage – I: Selection of the Study Area

Maximum (80%) garment workers of Dhaka City live in different slum areas. According to BIDS study, the study area confined six slum areas (Bawniabad Tin Shed Colony, Rupnagar Tin Shed Colony, Pallabi Molla Bosti, Mohakhali Sattala Bosti, Karail Bosti and Manda Jamidar Bosti) of the Dhaka City where most of the tenants are garment workers (Zohir and Paul-Majumder 1996).

1.6.2. Stage – II: Reconnaissance Survey

A preliminary physical visit was conducted in the study areas, which is noted as the reconnaissance survey. Through this survey the existing overall situation was found out and that helps to design the survey procedure.

1.6.3. Stage – III: Selection of Sample

a) Determination of Sample Size and Sampling Technique

It is not possible to survey each individual of the population in the study area for various limitations. A Sample of 200 garment workers were surveyed. The Sampling method was adopted for this study in random sampling procedure assuming that all of the Garment worker's living standard, housing condition, income level etc were all most same in these areas.

1.6.4. Stage – IV: Collection of Data
1.6.4.1 Primary Data

a) Questionnaire Survey of Workers: A comprehensive questionnaire survey was carried out on two hundred garment workers to collect data on following aspects:

- Existing housing condition
- Existing utility services and facilities
- Social and community facilities
- Commuting system

b) Questionnaire Survey of Garment Owners: A detailed questionnaire survey was carried out on ten garment owners to collect data on following aspects:

- Type of facilities were provided for their workers such accommodation, transport, medical, festival bonus, any type incentive etc.

1.6.4.2 Secondary Data

Due to the nature of the topic the study is mainly of primary data based. To present the research work clearly, it is very much essential to receive a strong theoretical support of knowledge. This knowledge would be gathered by studying the published or unpublished reports, journals, theses, related books, daily news papers etc.

1.6.5 Stage – V: Data Processing and Analysis

To compile primary data, a compilation sheet was prepared by using computer Microsoft Excel software. The collected data was tabulated by another computer software SPSS. The collected information from primary and secondary sources was analyzed statistically and presented in text, tabular and graphical forms for the convenience of analysis. Thus by using different cross tables the data are analyzed until fulfillment of the objectives of the research. Tables, different types of graphs (bar chart, pie chart, etc) have presented the analyzed data.

1.6.6 Stage – VI: Presentation of the Report

The final report was submitted after editing. Following steps were associated with the presentation of the report.

 1) Presentation of assembled and analyzed data through tables and charts.

 2) Presentation of the draft report.

 3) Presentation of the final report.

Flow Diagram of the Study

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┌─────────────────────┐
│   Topic Selection   │
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│  Conceptualization  │
└─────────────────────┘
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┌─────────────────────┐
│ Study Area Selection│
└─────────────────────┘
          │
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┌─────────────────────┐
│ Reconnaissance Survey│
└─────────────────────┘
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┌─────────────────────┐
│Sample Size Determination│
└─────────────────────┘
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┌─────────────────────┐
│   Data Collection   │
└─────────────────────┘
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Primary Data Collection
- Questionnaire Preparation
- Survey Work

Secondary Data Collection
- Published Documents
- Unpublished Documents

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┌─────────────────────────────┐
│ Data Processing & Interpretation│
└─────────────────────────────┘
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│    Data Analysis    │
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│ Modifying Draft Report│
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│ Final Submission of Thesis│
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1.7 Scope and Limitation of the Study

Every research has some limitations and this study no exception. Attempts have been formed to accomplish the objectives set for the current study. But some constraints have limited the study in different stages in distinct ways. Due to time and resource constraints, a larger sample size could not be taken for the study and also the scope is limited to particular fields for questionnaire survey.

1.8 Organization of the Study

The subject matter of this report has been conveniently divided in to six chapters.

Chapter One presents background of the study, Objectives, Rational of the study, Literature review. The methodology and limitations of the study are also discussed in this chapter.

Chapter Two deals with an overview of housing situation in Dhaka City.

Chapter Three presents a profile of the study area.

Chapter Four discusses garment industry in Bangladesh.

Chapter Five deals with analysis of findings.

Chapter Six deals recommendations and conclusion.

Chapter Two

An Overview of Housing Situation in Dhaka City

CHAPTER TWO
AN OVERVIEW OF HOUSING SITUATION IN DHAKA CITY

2.1 Migration of Workers in Dhaka City

Migration is not a new phenomenon in Bangladesh. The process of rural to urban migration in Bangladesh started a long time ago. Spatial distribution of population through rural urban migration is considered an important aspect in the process of economic growth and development. Migration process is selective based on socio-demographic characteristics and other attributes of the migrants. Migration rate of the male is higher than the female as revealed from the male–female ratio of urban areas and due to the fact that men frequently move in search of work leaving their wives in the village (DMAIUDP, 1981). Male migrants are disproportionately single and they mostly originate from families having large family size (Chowdhury, 1980).

In Bangladesh, the sudden and rapid boom of the ready-made garment industry (RMG) in the 1980s generated considerable female employment in formal export-based manufacturing sector. It has important implications in term of women's mobility, adaptation in the labour market and urban society and their roles and status. Ever since the emergence of the RMG sector as the major employer of the female labour force in the urban areas, a good number of studies are conducted on this sector and the female labour. On background characteristics of female labour some these studies suggested that more than 90 percent of the garment factory workers are migrants from rural areas and the bulk of them (three quarters) migrated from landless families (Afsar, 2000).

Migrant workers migrate to urban areas for economic motives. Migrants are directly recruited by the employer's agents from their villages of origin to work in Dhaka. Although migration from employment related reasons has always been high among male migrants but it has increased significantly in last five years. All these trend to suggest that job opportunity for women migrants in RMG factory has increased faster in last five years than between 1981 and 1991 and also faster than their male counterparts. (BGMEA annual Report, 2002).

2.2 Urbanization, Trend and Growth of Dhaka

Urbanization is a socio-demographic, economic and physical phenomenon characterized by the concentration and convergence of a country's population in to its major cities and towns. The word urbanization has its root in Latin word 'Urbs' meaning urban which refer to a place where concentration of population takes place through shifting of residences from rural areas, change of occupation and economic activities from agriculture to non- agriculture, change in life style i.e. typical attitude, values and behavior alone with the presence of organization and institution. History of urban growth in Bangladesh has a rich heritage of planned cities (Hasan and Hayat, 1999).

The economic, social, environmental, occupational and cultural gap between urban and rural areas attract village people towards urban centers. The real purpose of rapid flow of the people towards urban areas can only be that people want to live with better facilities, comfort and ease. The victims of poverty, unemployment, natural hazards, river erosion etc., migrant from villages and small urban centers to the cities but the cities can not accommodate its existing people. So this extra flow of population from out side is a tremendous pressure for the city (Hasan, 2002).

However, Dhaka is the heart of the country and economically, socially, politically and cultural view, Dhaka is stronger and more develop than any other city in the country. Dhaka became an important town and a center of trade, commerce, handicrafts and important manufacturing goods during the Mughal period. The city grew around the old fort and became a glorious city (Huda and Kamal, 1998).

Table 2.1: Past, Present and Future Population of Dhaka city (1901 - 2021)

Year	Population	Growth rate in percentage
1901	128857	-
1911	153609	1.77
1921	168510	0.93
1931	196111	1.53
1941	295735	4.19
1951	335928	1.28
1961	556712	5.18
1974	1772438	9.32
1981	3440147	5.62
1991	5670575	4.90
2001	9912908	1.48
2011*	11481686	-
2021*	13298733	-

Source: BBS, 2001 and projected population
* Projected population based on the population and growth rate of 2001.

As such given the rapid population growth and many other constraints this has resulted in a huge backlog of housing. According to World Bank Report, in 1980 there were 1.9 million housing units for 11.8 million urban population (World Bank Report, 1981). By the turn of the century the total requirement of urban housing units is likely to be in the order of 7.1 million. The additional requirement has been estimated to be 5.287 million of which 1.176 million units have been estimated for Dhaka Metropolitan Area (UNCRD, 1980).

Urban population is increasing as such an alarming rate that the increase in the housing stock cannot keep pace with it. This results in acute shortage of accommodation, over crowding and growth of squatters and slums. Moreover, the land ownership pattern (specially residential land) is very skewed.

2.3 Housing Problems in Dhaka City

The urban areas of Bangladesh have serious housing problems stemming from shortage of houses and lack of services. Dhaka City, the capital of Bangladesh which has a present population of around 9 million, requires between 45,000 – 83,000

housing units each year, whereas all public and private effort together can only produce 25,000 housing units a year. (Hasan, 2002).

There is an acute shortage of adequate housing in the urban areas, particularly for the lower income group. This has resulted in homelessness and rampant growth of slum and squatter settlements especially in big cities and medium sized secondary towns. The housing shortage estimated in 1991 at 3.1 million units, composed of 2.15 million in rural areas and 0.95 million units in urban areas. The current housing stock is deteriorating fast due to aging, general neglect, poverty and civic apathy on the part of the dwellers and lack of enforcement of rules on the part of the authorities (GOB, 1993; 1998).

Housing backlog for metropolitan cities are even more pronounced. The over all urban residential density, occupancy ratio and the structural condition of houses have all assumed critical proportions. Residential densities have increased manifold even in upper income and middle- income areas by the process of densification. In urban low income areas such as slums and squatters settlements, the densities are extremely high, some times even more than 2000 persons per acre on a single story development. The ideal even by Third World standards would have been about 500 persons per acre. The occupancy rate or the average number of occupants per housing unit in urban areas increased from 5.84 in 1961 to 6.05 in 1974 to over 7.07 in 1981 (Shafi, 1998).

2.4 Housing Situation of Low Income People in Dhaka City

Rapid growth of the urban population and its concentration in a few cities and towns; but there has been no concomitant construction of affordable housing. Moreover, the continuous migration of rural poor to the urban area particularly in the Dhaka city. for job opportunities has given rise to slums and squatters settlements (GOB, 1998).

The uncontrolled growth of slums and squatters settlements, illegal encroachments on publicly owned land and other vacant lands are the direct out come of these

pressures. About one third of urban population of Bangladesh, now live in slums and squatters settlements. If appropriate measures are not taken, over 50 percent of urban population will be living in the slums and squatters settlements by year of 2010 (GOB, 1993).

By the term low-income we mean those people for whom it is difficult to afford permanent, safe, healthy and sanitary housing at places suitable for their jobs and economic activities. A greater part of the income of low- income people is spent for food and clothing and they set aside a small portion of their household income for shelter purpose (Paul-Majumder,1996).

The destitute condition of the poor migrants couple with the severe shortage in the supply of residential land and formal housing, has led to the mushroom growth of slums and squatters settlements in the city. At present, nearly one third of the city's population live in unauthorized or unregulated settlements and in future, unless some decisive measures are adopted, the disorderly growth of these settlements will overwhelm the city and caused immense environmental and social problems. According to CUS survey in 1988, the total population living in 1125 slums and squatters settlements of the city is around 878,000. About 80 percent of the residential land is occupied by the 30 percent of the population (specially upper and upper middle class) where as the poor (Garment workers, Rickshaw Puller, Day labour, Hawker etc.) are 70 percent have access to only 20 percent of land.(Islam, 1996).

2.4.1 Housing Sub- System of the Low Income People of Dhaka

The low -income people of Dhaka are spread in different areas of the city and they live in different types of housing systems in different land tenure pattern. The housing pattern of the low- income people of the city we can classify them into six major sub- systems, which are described below -

Squatters

These are unauthorized dwelling built by the low- income people in government land. Squatters include persons or families residing or squatting in terminals, pavements and public or semi- public office buildings. A large proportion of squatters settlements is tenant occupied while a fewer occupied by the builders themselves. The density of population of squatters settlements is extremely high, almost 1500 -2000 persons per acre. The approximate number of squatters population in Dhaka city is roughly around one lack. The population (about 25 percent of the total) covers less than 0.5 percentage of all residential land in the city (Hasan,2002).

Resettlement Camp

There are some resettlement camps in Dhaka where people reside in large groups occupying a single piece of land in crowded and congested condition. The first group of this colonies was develop immediately after partition of India in 1947, when large groups of refugee families from India started migrating to the then East Pakistan. Large-scale resettlement camps were organized by the government at Mohammadpur and Mirpur that provided land and core houses. These plots were given to the allotees on a long–term leasehold basic. Bashabo Wahab Colony is another resettlement camp for the low–income refugees. Some 565 families were given shelter in this resettlement colony between 1958 and 1960. Another type of resettlement camp was set up in 1971 for the Bihari's who wanted to repatriate to Pakistan after the independence of Bangladesh. Around 1,20,000 people live in this camps at Mirpur and Mohammadpur. Health, sanitation and dwelling condition are extremely poor in these camps. In 1975, the government of Bangladesh evicted inner city squatters settlements of Dhaka and a portion of them were sheltered in three camps out side of Dhaka city. These are the rehabilitation camps at Dattapara, Demra and Vasentek. These camps have gross densities up to 300 persons per acre and well-laid out roads and provision for community toilet and drinking water facilities. The resettlement colonies together with a few other government assisted rehabilitation camps accommodate and approximate population of some 2,50,000 people (about 6 percent

of the population of the city) while covering little more than two percent of the residential land of the metropolis (Hasan, 2002).

Bastees

These are authorized settlements of the low-income people having very high area density as well as high room crowding and poor housing condition. The largest group of people of Dhaka lives in innumerable bastees of the city. These bastees are characterized by temporary and semi-permanent structures of a single or double story. The rental housings are the most common and predominant and they accommodate nearly 35 percent of the total population of the city. The bastee settlements have a residential density of 1000-2500 persons per acre and the cover approximately around 11 percent of the city's residential land (Hasan, 2002).

Conventional Inner City Tenement Slums

Conventional inner city tenement slums are seen in the old part of Dhaka. These dwellings can be distinguished from the bastees mainly by the age and structural system. Many houses in the inner part of Dhaka are semi-permanent but there are also some permanent 2/4 storied buildings, which are very old and dilapidated. These slums have very high residential densities due to room crowding and vertical development. Utility services and other amenities are very poor. The conventional tenement slums of Dhaka accommodate approximately about 12% of the city's population covering less than 4 percent of the city's residential land (Hasan, 2002).

Employee's Housing

This system provides accommodation for about 9 percent of the total population. The government or formal sector industries and institutes are responsible for half and the middle class households provide accommodation for the other half. Industrial worker's housing is generally in the form of permanent or semi-permanent barracks with mess-type occupancy and very high room crowding (Hasan, 2002)

Other sub-systems

Many low-income people house themselves through free lodging in middle class families in shops, factories and in industrial buildings. Some other low-income families live on boats in rivers or waterfronts around Dhaka City. The working girls' in the garment factories of Dhaka usually arrange for their shelters in lower or lower middle income family housing. A single room is usually rented to a group of four to five girls. The other sub-system category provides accommodation for about 2.5 percent of the population of the city on less than one percent of the land (Hasan, 2002).

2.5 Housing Policies of Bangladesh

After the independence of Bangladesh in 1971, Bangladesh Government formulated five year plans for planned development of the country. Housing policies are incorporated in these five years plans. The first five-year plan is formulated for the period of 1973-78. After the first five-year plan, an interim two year plan was formulated for the period of 1978-1980. The second and third five-year plans were formulated for the period of 1980-1985 and 1986-1990 respectively. Bangladesh Government prepared a national housing policy in the year 1993. The fourth five-year plan of the country was formulated for the period of 1991-1995. The two years from June 1995 till June 1997 have been a sort of plan holiday for the country. During this period, annual development programs of the country were prepared and implemented outside the framework of any five year plan. The fifth five year plan is prepared for the period of 1997-2002.

A national Housing policy was approved by the Government in 1993 with the prime objective of ensure housing of all strata of the society, especially for low and middle income groups and the disadvantaged and the shelter-less poor. However, its follow up activities have been very limited. There has been virtually no Government program for improving the conditions of low income housing for working women of Dhaka city. The same has been the case with resettlement program for the slum dwellers. The construction of low-cost houses for the low and middle income group

has been limited. In Bangladesh, private sector participation in house construction, especially in the metropolitan cities, is encouraging. Residential quarters for government employees can only meet 10% of the requirement. (GOB,1998)

The Objectives of the Fifth-Five Year Plan are as below:-

- Development of low cost houses and multi-storied building for housing, and resettlement of slum-dwellers, the disadvantaged, the destitute and the shelter less people, and *situ* development of the slums and squatters settlements.
- Development of sites and services schemes for accommodation of low and middle-income groups of people.
- Developing condominiums for low and middle-income groups of people.
- Developing housing facilities for working women.
- Greater involvement of the private sector through necessary incentives in the housing sector.

The policies of the Fifth-Five Year plan are as below:-

- A national Housing authority will be set up in accordance with the National Housing Policy of 1993, to address the housing problem of low and middle income groups, the disadvantaged, the destitute and the shelter-less poor.
- Government Khas land will be used to its maximum extent, to resolve housing problem, especially for the poor household.
- Houses for working women will be developed by the relevant city, and town authorities.
- The Government will fund the local bodies to develop low cost houses for the low income groups.

Chapter Three

Profile of the Study Area

CHAPTER THREE
PROFILE OF THE STUDY AREA

3.1 Introduction

Dhaka Metropolitan area is located on the alluvial plain of the three major rivers the Ganges, the Brahmaputra, the Meghna and their tributaries. The area of the city is 260sq. km. Dhaka metropolitan area is surrounded by the three rivers, the Turag river in the west, the Buriganga River in the south, Balu River in the east. The geographical location of Dhaka with its network of inland waterways made it an important location both strategically and commercially. Dhaka, the capital city of Bangladesh, the rapid growth of Ready-made garments industry (RMG) have taken place in and out side of it Considerable female employment was created in the export-oriented garment industries. Garments industries are located in different places of Dhaka City. As the workers of the garment industries get low level of wage, so maximum workers of the garment industries rent houses in different slums of Dhaka City. As the garment workers are increasing their number day by day so, they need tremendous accommodation facilities which the city can not afford. As a result the garment workers tend to live in the slum as well as squatters with a lesser cost causing a serious damage of their physical, mental as well as have to face socio-economic problems.

3.2 Basis of Selecting Study Areas

Maximum garment industries are located in Mirpur, Mohakhali, Malibagh, Rampura areas. The garment workers get very low monthly payment. So the workers rent houses in slums which are within walking distance from their working places. In a factory more than four hundred workers work together. Maximum workers of the garment industry are unmarried and get very low amount of monthly payment. So three or four workers rent a room jointly Maximum garment workers want to live in

the same area for their travel together from house to factory. BIDS study on "Globalization. Gender and Poverty-a study of women garment workers in Dhaka City", was identified six biggest slum areas where the maximum garment workers are concentrated. So for this study, those six identified slums have been taken as study areas.

Table 3.1 Spatial Distribution of Study Areas

Ward no	Name of the Area	Main Location	No. of H/H	Garment workers (%) of total H/H	Popul ation
05	Bawniabad Tin Shed Colony	Mirpur (Section-11)	520	83	2912
06	Rupnagar Tin Shed Colony	Mirpur (Section-7)	665	76	3724
12	Pallabi Molla Bosti	Mirpur (Section-12)	645	87	3612
19	Mohakhali Sattala Bosti	Mohakhali	760	77	4256
19	Karail Bosti	Mohakhali Wireless gate	802	81	4491
09	Manda Jamidar Bosti	Manda	611	79	3421

Source: Field Survey, 2003

Map of Study Area

Study Location
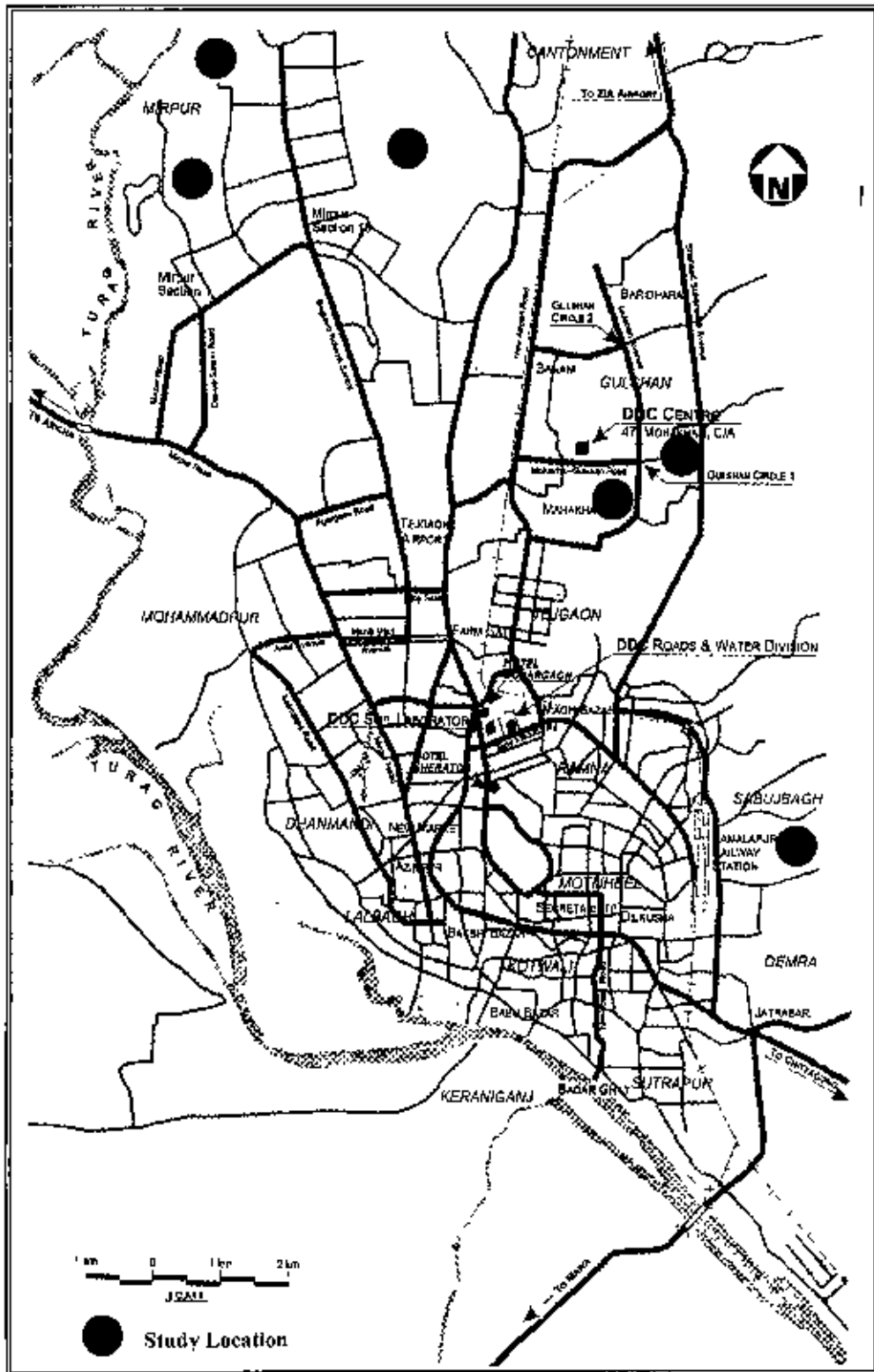
3.3 Spatial Distribution of Study Areas

Bawniabad Tin Shed Colony

Bawniabad tin Shed Colony is situated seven kilometers west side in Mirpur -11 at ward no-5. In the south side Palash Nagor, in the north side Manikdi, in the east side Dawanpara and in the west side Mirpur 11no bus stand is situated. People of different professions are living in the colony but maximum are garment workers. There are more than five hundred houses in the Bawniabad Tin Shed Colony whose maximum (83%) tenants are the garment workers. By field survey it is revealed that near about four lack twenty thousand people live per square mile. Most of the houses are of row housing type. Out of them Kutcha, Thatched and some are Tin shaded houses.

Rupnagar Tin Shed Colony

Rupnagar Tin Shed Colony is situated in Mirpur Section-7 at ward no-6. Eastern Housing is located to the north side of the Rupnagar Tin Shed Colony, in west side of Mirpur Zoo and Botanical Garden; in the east side. Milk Vita Industry is situated and in the south side Rupnagar Shialbari Rainkhola residential area. There are more than four hundred houses in the Rupnagar Tin Shed Colony where maximum tenants are the garment workers. By field survey it is revealed that maximum houses are Kutcha. Thatched and some are Tin shaded.

Pallabi Molla Bosti

Pallabi Molla Bosti is located in Mirpur section-12 at ward no-12.National defense college located to the north side of the Pallabi Molla Bosti. in west side Wapda colony, in the east side Mirpur ceramic industry is situated and in the south side Maximum garments industry are located. The owner of the Bosti is Sattar Molla. So this Bosti is named as Molla Bosti. There are more than five hundred houses in the Molla Bosti where maximum tenants are the garment workers. By field survey it is revealed that maximum houses are Kutcha. Thatched house and some are Tin shaded.

Mohakhali Sattala Bosti

Mohakhali Sattala Bosti is located two kilometers west side from Mohakhali bus stand. Cholera, T.B Hospital, Cancer hospital are one kilometer away form Mohakhali Sattala Bosti. Maximum houses are Kutcha and some are Tin shaded. People of different professions live in this slum but the maximum are garment workers. There are more than seven hundred houses in the Mohakhali Sattala Bosti where maximum tenants are the garment workers. By field survey, it is revealed that near about four lack people live per square mile.

Karail Bosti

Karail Bosti is situated in the four kilometer away from Mohakhali Bus stand. In the north and South side the T & T Staff quarter is situated and Mohakhali Wireless gate is situated in the north side of the Karail Bosti. T & T college is located at one kilometer away from the Karail Bosti. Karail Bosti is located beside the T & T lake. There are more than seven hundred houses are located in the Karail Bosti where maximum tenants are the garment workers. By field survey it is revealed that maximum houses are Kutcha, Thatched house and some are Tin shaded.

Manda Jamidar Bosti

Manda Jamidar Bosti is located in the three kilometer east side from kamlapur railway station. Haidar Ali School and College is situated in the west side of Manda Jamidar Bosti. In the north side Kadamtala and east Basabo, in the west side kamlapur railway station , in the south side Maniknagor and in the east side Demra area is situated. Manda Jamidar Bosti is one kilometer away from Atisdipankor road and Mukda Jatio Stadium. Green Model Town is in the east side from Manda Area. In the past time this place was Haidar Ali Jamidar Bari. There are more than five hundred houses in the Manda Jamidar Bosti whose maximum tenants are the garment workers. By field survey it is revealed that near maximum houses are Kutcha, Thatched and some are Tin shaded.

3.4 General Description of the Study Areas

The study areas are lacking basic facilities e.g. availability of shopping centers, kutcha bazar, grocery shops. As there is no such type of facilities, the inhabitants of study areas have to go a longer distance for buying their daily needed products. As there is no primary school in Rupnagar Tin Shed Colony, Karil Basti and Pallabi Mollah Bosti for the school going children; they have to go about 2-3 kilometers away for study purpose. Moreover there are no parks or play grounds for the children of the study areas. Only there is an open space, which is about ¼ km from the Mollah Basti. As a result most of the time children have to play on the street near by which is causing accidents. There is a kutcha bazar near Mohakhali Sattala Bosti and Manda Jamidar Bosti. So the inhabitants of these places can easily buy their commodities and do not have to depend on upon another market. Botanical Garden is located near Rupnagar Tin Shed Colony. Thus the inhabitants of this study area can easily visit this zoo. The people of study areas have the access to mosque; so they can easily say their prayers. Mohakhali Sattala Bosti, Bawniabad Tin Shed Colony, Manda Jamidar Bosti have primary school, which is provided by different NGOs. So children can easily complete primary level education.

Chapter Four

Garment Industry in Bangladesh

CHAPTER FOUR
GARMENT INDUSTRY IN BANGLADESH

4.1 Growth of the Readymade Garment Industry of Bangladesh

The Bangladesh Garment Manufacturers and Exporters Association (BGMEA) is the only recognized trade body that represents the export oriented garment manufacturers and exporters of the country. Starting in the late 70s as a negligible non-traditional sector with narrow export-base, the Readymade Garment (RMG), by the year 1983, emerged as promising export earning sector of the country. Since then this sector has been acclaimed as the thrust sector of our country. Bangladesh Garment Manufacturers and Exporters Association (BGMEA) is the apex trade body of over 3,625 apparel manufacturing companies of Bangladesh (BGMEA annual Report, 2002). Since its inception in 1977, the association has been working to promote and protect the greater interest of RMG sector of Bangladesh.

BGMEA is dedicated to establish and promote contacts with foreign buyers, business and trade associations, organizations and chambers, research organizations to develop the export base of apparels. BGMEA also acts as a pressure group to protect the higher interest of the sector and as a promoter of trade negotiation in international market, global trade bodies like WTO, concerned UN agencies like ILO, UNCTAD etc. BGMEA came into existence since 1977 with only 4 members. The present total membership of the association as of end of January 2002 is 3,625 Considering the importance of Chittagong, the biggest port city of the country, where most of the garment factories are located after Dhaka (BGMEA annual Report, 2002)

Table 4.1 : The growth of Garment Industry of Bangladesh.

Year	Number of BGMEA Members
1983-84	134
1986-87	629
1989-90	759
1992-93	1,537
1996-97	2,503
1999-2000	3,200
2000-2001	3,480
2001-2002	3,625

Source: (BGMEA annual Report, 2002)

Figure: The growth of Garment Industry of Bangladesh
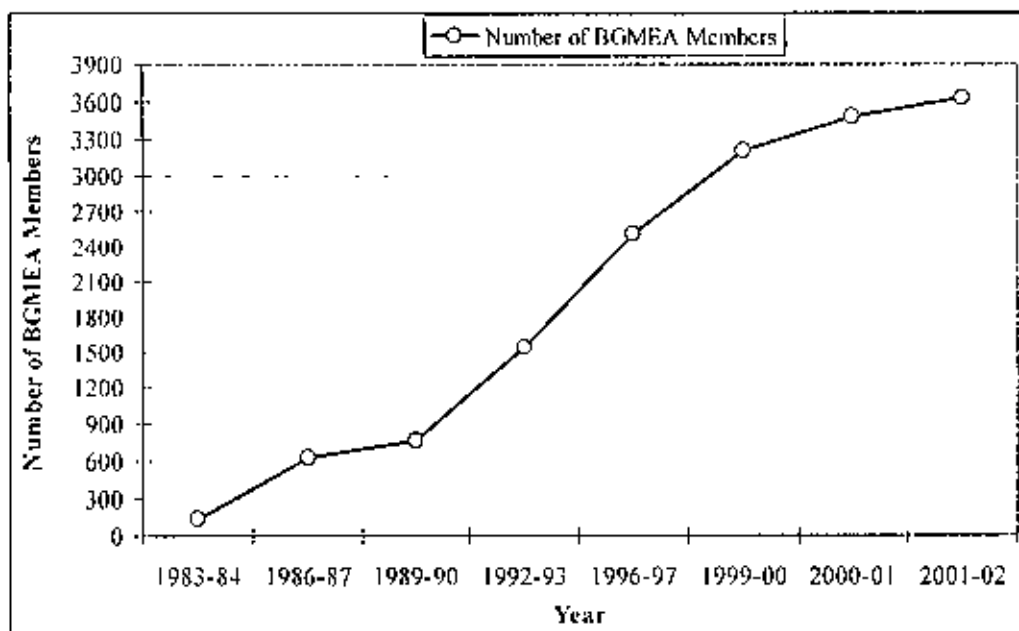
4.2 Rapid Growth of Garment Industry in Dhaka City

The Garments industry is mainly a Dhaka based industry with 70 percent of the total factories and the rest 30 percent are in Chittagong. The garment factories location in the two main cities of Dhaka and Chittagong affects the employment trend of women in the country. As garments requires little bit educated and trained pools of employees, more and more women form the middle class and lower middle class families are migrating due to economic pressure to get employment in these two

cities. Even the location of factories within Dhaka City has effect on employment of women. More women are employed in areas with larger units, cheaper building rents and good road network and communication facilities (BGMEA annual Report, 2002). As communication to the working place is an important pre-requisite walking distance from the working place. The main for the garment industries location in Dhaka are:

- o Easy accessibility of buyers, owners and workers to the working place.
- o Better communication facilities, getting trained pool of employees, easy accessibility of raw materials are possible in the city.

Reasons for Dhaka Location

Apart from Dhaka city being the central part of the country with all the better facilities available, there remain few important factors for location of garments industry in Dhaka .

Buyers Stay in Dhaka

The overseas buyers usually come and visit the firms in which their orders are set. They have to stay for few days, even weeks, thus the convenient movement of these buyers and ready communication with overseas firms is an essential requirement that favors the location of firms in Dshaka .

Accessibility of Workers

This point does not apply to the location of industries in other cities, as labour is readily available almost every where in Bangladesh. But for the proper training of garments workers, a sizeable pool of trained workers is needed, which is more possible in Dhaka than elsewhere. Due to its being a central place, the people from different remote villages come to Dhaka first, thus the availability of workers is more here than elsewhere.

Good Infrastructure: Power Supply and Communication Facilities

A continuous supply of electricity is one of the important prerequisite for the proper functioning of the garments factory as even half an hour stoppage of electricity may

cause huge loss to the factory at the eleventh hour of the work. Thus owners are more cautious about this factor. For the economy of time and cost, for the transportation of both raw materials and finished products, and also as the buyer does not want to travel to remote areas due to poor transportation and lack of air travel facilities, thus Dhaka are preferred to other parts of the country.

Availability of Space and Building

Usually there are more rich and wealth garment owners in Dhaka, who either for easy management and saving cost of production set up the factory in their own space or building available. Usually the garment factories are located in owners own building. Thus ownership influences the location of the factory.

Availability of Equipment

The required equipment for running a garments factory i.e. machineries, raw materials, repairing of these equipments are more easily available in Dhaka than else where in the country. Thus, location of most of the factories in Dhaka can be attributed to these important factories. Hence the garment industry which is export-oriented, is primarily a Dhaka and Chittagong phenomenon, and likely to remain so, until these facilities are fully available in other parts of the country.

4.3 Women Employment in the Garment Industry in Dhaka City

Unemployment and underemployment are considered as major problems in Bangladesh and other South Asian countries with high population density and low land-man ratio. The surplus labour is expected to be absorbed in the family farms in the rural areas and in other informal enterprises. Theories of development formulated (Lewis 1954) during the fifties and sixties articulated the process of industrialization based on the withdrawal of surplus labour from the informal sectors (Paul-Majumder 1996).

The rapid growth of Ready-made garment industry (RMG) in Bangladesh since the mid 1980 squatters has generated considerable female employment (90% female) in

the formal export-oriented manufacturing sector (BGMEA annual Report, 2002). This has made women visible in statistics and has brought a social change in Bangladesh. Employment improves women's economic status and mobility.

Occupational mobility is an important factor affecting labour-market efficiency Occupational mobility provides better job opportunities, strengthens bargaining power of the labour force and eliminates wage differentials in given job. It also affects labour productivity and terms and conditions of the employment. However, this important factor is almost absent among the female workers, particularly among the manufacturing female workers although one of the remarkable features of the recent industrialization in Bangladesh is the entry of women into the wage employment (Paul-Majumder 1996).

Labour Force Surveys (BBS, 1989, 1990-91) show that although male employment in the manufacturing sector is more or less stagnant, female, employment increased significantly. One of the most important reasons behind this dramatic increase in female employment is the expansion of the garment manufacturing industry. This industry alone provides more than 90 percent of the total female manufacturing employment in the county. In this industry not only is the size of female employment large, the ratio of female to male employment is indeed very high.
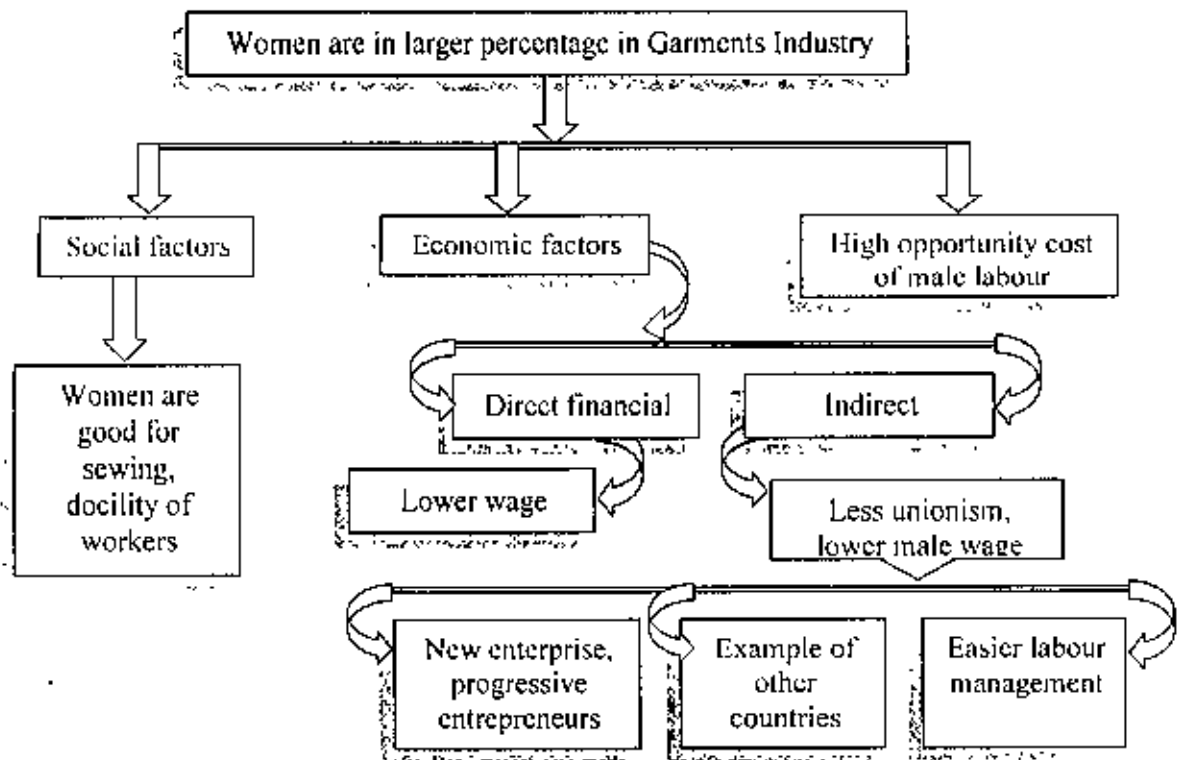
The participation of women in economic activities and their employment is new as garments industry reflects a change in the traditional status of the women and also indicates a change in their role of the family and in the society. It has direct impact on their social and economic status. In a country like Bangladesh where women constitute 49.06 percent of the total population (B.B.S. 2001), the rate of participation in income generating activities. The beginning of Garment Industry in Bangladesh in 1976 has created a change in the traditional role of women in the society. The location pattern of garment factories in Bangladesh and within Dhaka has direct effect on the size and trend of employment of women (Paul-Majumder 1996).

The beginning of garments industry in Bangladesh is a great development in the sphere of women employment and providing employment to almost 15 lack people till 2002, mostly working class and lower middle class women (BGMEA annual Report. 2002). Most of the women workers were unemployed before and the minority who worked before doing jobs like domestic servant, low paid factory and

clinical work. For the first time many women got the opportunity of wage employment and were working side by side with men.

Industrialization of the country has integrated women in the development process by providing employment opportunities to them. Employment in the industrial sector implies higher wage and earnings than that in the agriculture sector. But in case of the female employment in the industrial sector the same is not always true. It is mainly due to the fact that female employment in the industrial sector is found to be concentrated in a few industries only. There are wide variations in the female employment even in enterprises within the same industry (Rahman 1993). Besides, female employment is concentrated in a few low-paid jobs. Thus, both the horizontal and vertical mobility of the female manufacturing workers is limited.

Employment in garment industry has provided direct access to cash income for the first time to many women. Control over their earnings and a greater role in household decision making is important measures of economic empowerment of female workers. In Bangladesh, women's role in household decision making is usually much more limited than men's.

In recent years women's participation rate is increasing steadily due to economic pressure. Wage employment had pulled out a large number of women from their homes. Women's employment is crucial for the success of export industries like garments because 'timeliness' is very important in export production and this is ensured by the docility of women workers, their preparedness to comply with the requirements of the employers which in turn is due to their low bargaining power. More emphasis is given by Government and development agencies on reservation of jobs for women. More and more women are doing income-generating activities outside home, especially from the land less families.

Table 4.2: Number of Employment in Different Year in the Garment Industry
in Bangladesh.

Year	Employment (No. in Million)
1983-84	n.a
1984-85	n.a
1985-86	0.198
1986-87	0.283
1987-88	0.306
1988-89	0.317
1989-90	0.335
1990-91	0.402
1991-92	0.582
1992-93	0.804
1993-94	0.827
1994-95	1.20
1995-96	1.29
1996-97	1.30
1997-98	1.50
1998-99	1.60
1999-2000	1.65
2000-2001	1.70
2001-2002	1.80

Note: 'n.a' stands for not available

Source: (BGMEA annual report, 2002).

Figure: Number of employment in different year in the garment industry in
Bangladesh
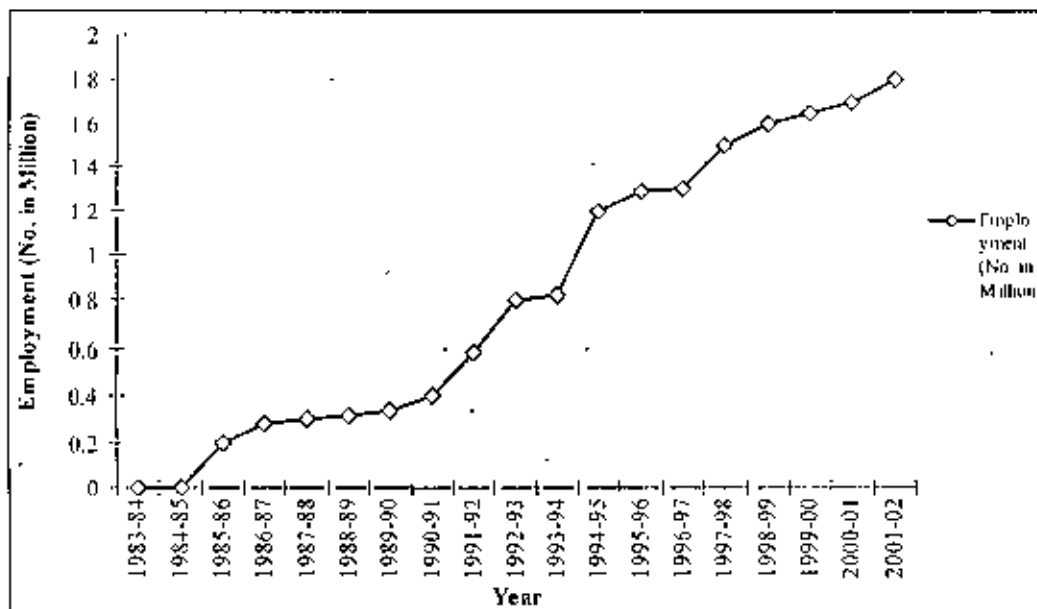
Chapter Five

Findings and Analysis

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CHAPTER FIVE
FINDINGS AND ANALYSIS

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5.1 General

For the rapid growth of readymade garment industries in Dhaka city, accommodation for the working community should be given due importance. This chapter is dealing with the identification and analysis of housing condition, causes of housing problems and present condition of utility services and facilities of the garment workers in the study areas.

5.2 Employment Status of the Garment Workers

A ready-made garment has become an overwhelmingly important sector for Bangladesh economy. Occupation is one of the indicators of social status of the people. There are three categories of workers: helper, operator, and iron man. Helpers are newly appointed garment worker. Usually, they are very weak hand. They help the operators. Operators sew cloth. Operators are well trained. Helpers get monthly salary taka 750-1500 (table 5.3), which is unrealistically low for a man to sustain in Dhaka City Garment workers have to work from 8a.m to 8 p.m or more. They are bound to work in late night also. In most of the cases, they are bound to work 12 to 15 hours in the factory for more production. These extra working hours actually deprive them from being engaged in other jobs. More over, they are bound to work 7 days a week As a result, they get very little time for their domestic works.

Fig 5.2: Employment category of the garment workers
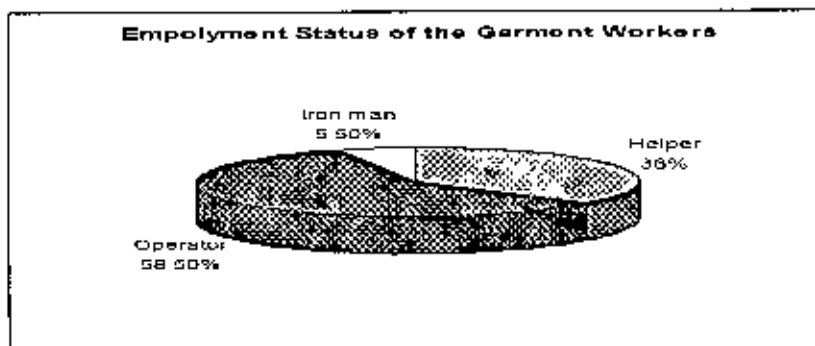
Source Table 5.3

In the study area, 36.00% are helpers who are new in the factory, 58.50% are operators who got promotion from helpers to operators. Operators get more salary than helpers. The rest 5.50% are iron men.. Most of the rural areas have not got the touch of modern industrialization. Therefore, it can be said that, in rural areas the scope of getting different types of jobs is limited. In order to survive. the people are migrating from rural areas to the Dhaka City for searching different kind of jobs. especially, in garments sector.

5.3 Income and Employment Category of the Workers

The level of income is the primary and one of the most important indicators of the true economic condition of any population. Information regarding the income of the people helps in determining their demand and affordability for receiving the services and facilities to be provided in the area. Employment in garment industry has provided direct access to cash income for the first time to many women. Both male and female workers contribute a substantial proportion of their earnings to their families. Income of the workers is the most indicator to assess their affordability of consuming housing facilities. Level of income of the workers also indicates the nature of savings, social status, quality of houses, expenditure pattern, and other socio-economic aspects.

Table 5.3: Distribution of Income According to Employment Categories

Monthly Income (In Tk.)	Employment category						Total	
	Helper		Operator		Iron man			
	No	%	No	%	No	%	No	%
Below 1000	31	43.05	-	-	6	54.55	37	18.50
1001 -1500	41	56.95	23	19.65	5	45.46	69	34.50
1501-2000	-	-	57	48.73	-	-	57	28.50
2001-2500	-	-	17	14.53	-	-	17	8.50
2501-3000	-	-	9	7.69	-	-	9	4.50
3001-3500	-	-	7	5.99	-	-	7	3.50
Above 3500	-	-	4	3.41	-	-	4	2.00
Total	72 (36.0)	100.00	117 (58.5)	100.00	11 (5.5)	100.00	200	100.00

Source: Field Survey, 2003

Table 5.3 reveals that maximum (34.50%) of the workers are in the income range from Tk. 1001- 1500 and this income range is highest in Rupnagar Tin Shed Colony (table 5.4), about 28.50% workers are in income range from Tk. 1501- 2000 and this range is highest in Bawniabad Tin Shed Colony (table 5.4), about 8.50% workers are in income range from Tk. 2001-2500 and this range is highest in Pallabi Molla Bosti and 18.50% workers are in lowest income of Tk. Below 1000 and this range is highest in Pallabi Molla Bosti and Karail Bosti Only 2.00 % households are in income above Tk.3500 and this range is highest in Pallabi Molla Bosti. From the sample survey, the operators are large (58.50%) from the total sample data and their monthly salary is more than Tk 1000 which is higher than the helper Iron man also gets similar salary to helper.

Fig 5.3 : Monthly income of the garment workers
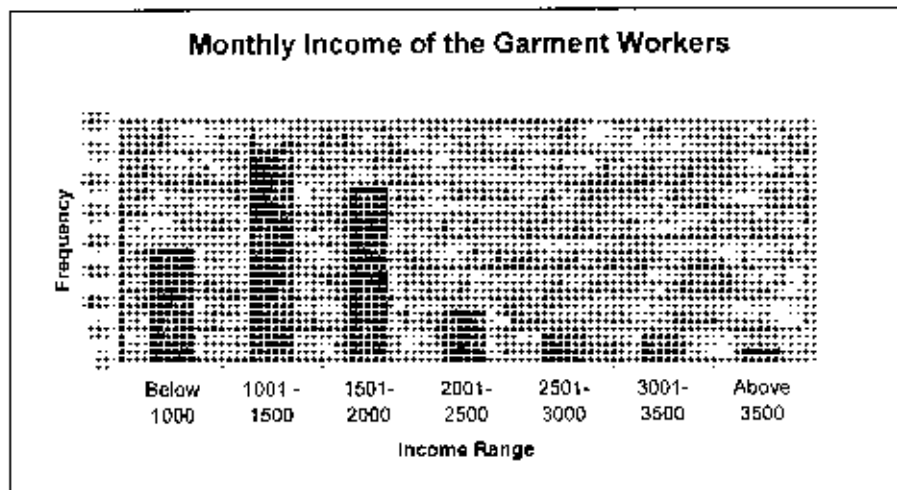
The previous information indicates that the maximum workers' income is in the range of Tk.1001- 1500. The average income of the garment workers is Tk. 1573 per month. It's really a poor figure of income by which a garment worker cannot afford a sound or healthy or hygienic accommodation for living in Dhaka City. As a result, the workers are bound in living in slums where they face different types of problems like poor housing, sanitation, drainage, drinking water, social security, etc. This type of accommodation is both physically and socially much harmful for living.

Table 5.4: Monthly Income Range of the Workers in the Study Areas

Study Area	Income Range													
	Below 1000		1001-1500		1501-2000		2001-2500		2501-3000		3001-3500		Above 3500	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Bawniabad Tin Shed Colony	4	10.8	11	15.9	14	24.5	3	17.6	1	11.1	2	28.5	-	-
Rupnagar Tin Shed Colony	3	8.10	16	23.1	8	14.0	2	11.7	2	22.2	1	14.2	1	25.0
Pallabi Molla Bosti	8	21.6	11	15.9	13	22.8	4	23.5	1	11.11	1	14.2	2	50.0
Mohakhali Sattala Bosti	7	18.9	11	15.9	5	8.78	3	17.6	2	22.2	2	28.5	-	
Karail Bosti	8	21.6	9	13.0	13	22.8	2	11.7	1	11.1	-	-	1	25.0
Manda Jamidar Bosti	7	18.9	11	15.94	4	7.01	3	17.6	2	22.2	1	14.28	-	
Total	37	100	69	100	57	100	17	100	9	100	7	100	4	100

Source: Field Survey, 2003

Average income range varies with different study areas. In Bawniabad Tin Shed Colony about 24.56 percent workers earned about Tk.1501-2000 per month. In Mohakhali Sattala Bosti about 17.65 percent workers income about Tk. 2001-2500per month and in Manda Jamidar Bosti about 14.28 percent workers income about Tk. 3001-3500 per month.

5.5 Educational Status

Educational status of the workers in the garment sector not at satisfactory level. In the study areas, among the garment workers 10.50 % are literate and other 89.50% are illiterate.

Table 5.5.1: Literacy in Respect of Sex

Educational	Sex				Total	
Status	Male		Female			
	No	%	No	%	No	%
Illiterate	2	10.00	19	10.55	21	10.50
Primary	11	55.00	113	62.78	124	62.00
Class VI-S.S.C	6	30.00	48	26.67	54	27.00
H.S.C	1	5.00	-	-	1	0.50
H.S.C +	-	-	-	-	-	-
Total	20	100.00	180	100.00	200	100.00

Source Field Survey, 2003

Table 5.5.1 revels that among the literate workers, about 62.00% have primary level and which is highest (18.55%) in Karail Bosti (table 5.5.2), 27.00% have secondary level and only 0.50% have higher secondary level of education that workers only found in Rupnagar Tin Shed Colony. From the illiterate workers, 42.85 percent are the highest in the Dawniabad Tin Shed Colony Here it is added that in the garment sector, 90% workers are female but no one of the female workers has higher secondary level of education. In the garment sector primary level of education is higher because, after completing primary school, they act as garment workers for their livelihood.

Chart 5.5.1: Educational Status of the Workers
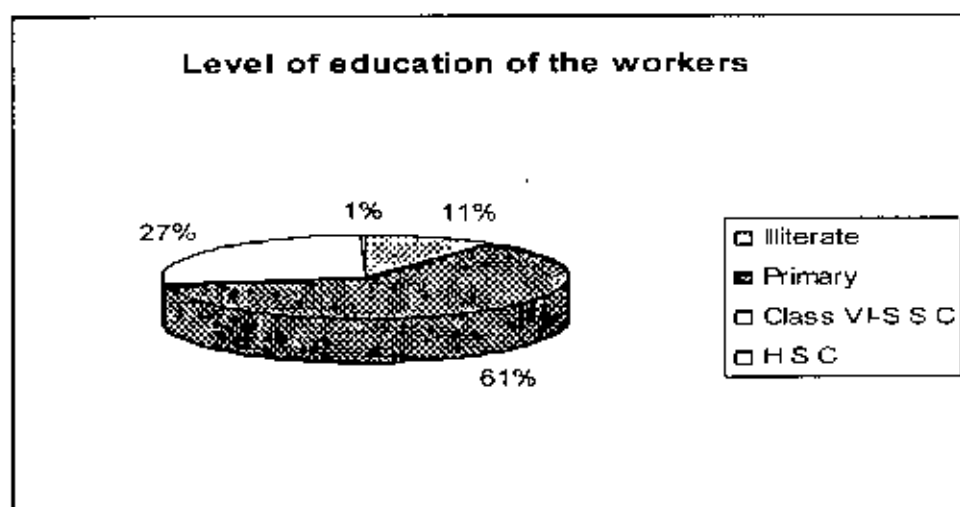
Table 5.5.2: Educational Status of the Workers in the Study Areas

Area	Educational Status									
	Illiterate		Primary		Class VI – S.S.C		H.S.C.		H.S. C+	
	F	%	F	%	F	%	F	%	F	%
Bawniabad Tin Shed Colony	9	42.85	15	12.09	11	20.37	-	-	-	-
Rupnagar Tin Shed Colony	3	14.28	20	16.12	9	16.67	1	100	-	-
Pallabi Molla Bosti	2	9.53	31	25.00	7	12.97	-	-	-	-
Mohakhali Sattala Bosti	3	14.28	19	15.33	8	14.81	-	-	-	-
Karail Bosti	2	9.53	23	18.55	9	16.66	-	-	-	-
Manda Jamidar Bosti	2	9.53	16	12.91	10	18.52	-	-	-	-
Total	**21**	**100.00**	**124**	**100.00**	**54**	**100.00**	**1**	**100**	**-**	**-**

Source: Field Survey, 2003

From field survey it is calculated that average 42.85 percent people were illiterate in Bawniabad Tin Shed Colony. In Pallabi Molla Bosti 25 percent workers had taken primary level education and in Karail Bosti about 18.52 workers had completed SSC level education. Only One worker had the HSC level education in Rupnagar Tin Shed Colony.

5.6 Age - Sex Structure

In the survey it was found that a number of young girls was working in the garment sector. Here it could be added that, a very small number of boys is working in the garment sector. There were about 40.00% of female are engaged in garment factories and their ages are in between 11 to 15. Maximum of the laborers who are girls come from the age group 16 to 20 and they are about 43.89%.

Table 5.6.1: Age–Sex Structure of Garment Workers

Age Group	Sex				Total	
	Male		Female			
	No	%	No	%	No	%
11-15	1	5.00	72	40.00	73	36.50
16-20	5	25.00	79	43.89	84	42.00
21-25	8	40.00	13	7.22	21	10.50
26-30	3	15.00	11	6.11	14	7.00
31-35	2	10.00	3	1.67	5	2.50
36-40	1	5.00	2	1.11	3	1.50
Total	20	100.00	180	100.00	200	100.00

Source: Field Survey, 2003

Another important thing is that 7.22% of female workers are engaged in garment factories who are 21 to 25 aged. In the case of male worker, the highest portion is 40.00% who are between the age group of 21 to 25. So in the garment factories young female workers are engaged more than male workers. Male workers engaged in the garment factors are above 20 years ages.

Chart 5.6.1: Age-Sex Structure

43
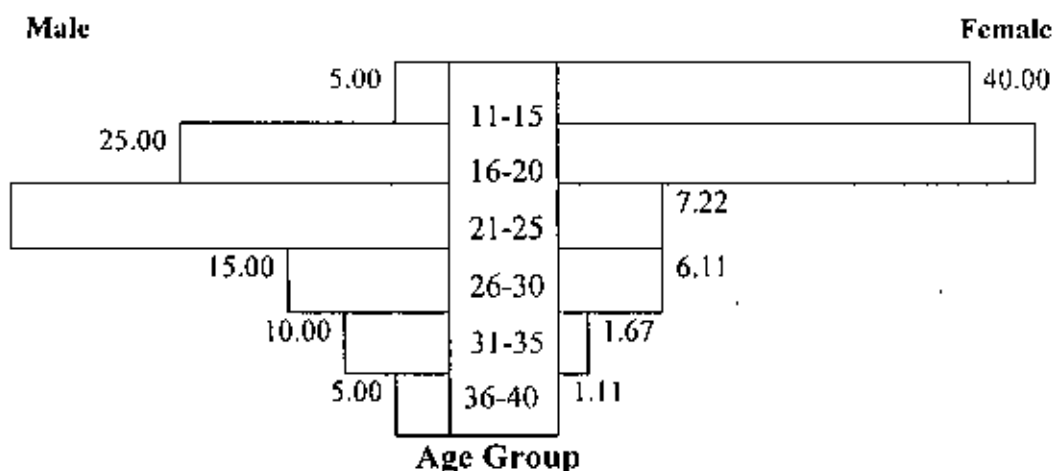
5.7 Marital Status

Marital status is one of the important phenomena of the socio-economic conditions.

Table 5.7: Marital Status of the Respondents

Marital Status	Sex				Total	
	Male		Female			
	No	%	No	%	No	%
Unmarried	11	55.00	111	61.67	122	61.00
Married	9	45.00	53	29.44	62	31.00
Widow	-	-	9	5.00	9	4.50
Divorced	-	-	7	3.89	7	3.50
Total	20	100.00	180	100.00	200	100.00

Source: Field Survey, 2003

From the sample survey (Table 5.7), among the workers of the garment factories in Dhaka City, it was found that 61.00% of the workers were unmarried, while 31.00% were married, 4.50% were widow and the rest were divorced.

5.8 Male- Female Ratio

Survey required for the following study, was conducted in home of the workers. As a whole 200 samples were surveyed. Out of them 10.00% workers are male. The percentage of female workers are 90.00%. The number of male and female worker are 20 and 180 respectively out of 200.

Table 5.8: Male-Female Ratio

Sex Status	Frequency	Percentage
Male	20	10.00
Female	190	90.00
Total	200	100.00

Source. Field Survey, 2003

One thing must be noted here that, female workers working in the factory are mostly unmarried girls and others are widows and divorced. On the other hand, male workers are the heads of the family. Here the ratio of male and female is important:

the important thing is that all of the competent female family members are working in the garment factory for sustaining their lives Female workers are working as helpers and operators in the garment factory.

Fig 5.8: Male – Female Ratio

Male-Female Ratio

**Male
10%**

**Female
90%**
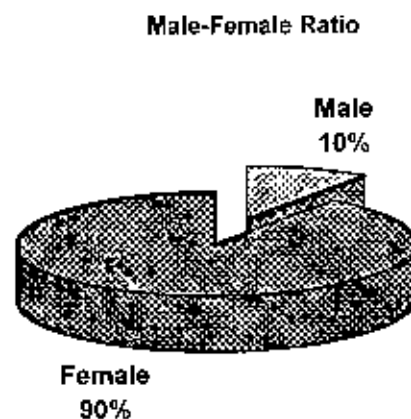
5.9   Monthly Income and Housing Expenditure

Man wants to live in a good quality of house with basic services and security according to his ability. Rent and housing situation of any area are very much interrelated with each other. Rent structure of houses of any place depends on various factors such as housing quality, level of services and facilities, environmental situation of the area, house type, housing delivery system etc. House rent is an economical and physical commodity, which include various utility facilities and services such as water supply, electricity, and sanitation access provision. As an element of urban growth and income distribution, desirable house rent fulfills a social need House rent levels are perceived to be one of the most important issues in urban development Migrant garment workers from rural areas are largely in the low-income group and they require rental housing relatively of low standard in different slums.

Table 5.9: Monthly Income and House Rent of Garment Workers

Income Range	Monthly House Rent								Total	
	201-400		401-600		601-800		801-1000			
	No	%	No	%	No	%	No	%	No	%
Below 1000	11	57.9	26	19.6	-	-	-	-	37	18.5
1001 -1500	8	42.1	61	46.2	-	-	-	-	69	34.5
1501-2000	-	-	43	32.5	14	35.0	-	-	57	28.5
2001-2500	-	-	2	-	15	37.5	-	-	17	8.5
2501-3000	-	-	-	-	7	17.5	2	22.2	9	4.5
3001-3500	-	-	-	-	4	10.0	3	33.3	7	3.5
Above 3500	-	-	-	-	-	-	4	44.4	4	2.0
Total	19 (8.5)	100	132 (66.0)	100	40 (20.0)	100	9 (4.5)	100	200	100

Source: Field Survey, 2003

The expenditure of the monthly house rent is parallel to their monthly income. Table 5.9 shows that the rate of housing expenditure increases according to the rate of their income except of few families. In the study area, 8.5% of the households provide Tk 201-400 as house rent and their income is bellow Tk.1500 per month. 66.0% of the households provide Tk.401-600 as monthly house rent and their income is bellow Tk.2500 per month. 20.0% of the households provide Tk.601-800 as monthly house rent per month and their income is bellow Tk.3500 per month. Only 2.0% of the workers have income above Tk.3500 per month and 44.4% of the workers provide Tk 801-1000 as monthly house rent. In Dhaka City, house rent is very high. Maximum workers spend major portion of their income for housing purpose. They don't have the ability to maintain the minimum standard of life after paying the house rent. So, low-income people as garment workers have to live an inhuman life in an unhygienic surrounding. They are always in the war against poverty.

Fig 5.9: Monthly House Rent of the Garment Workers
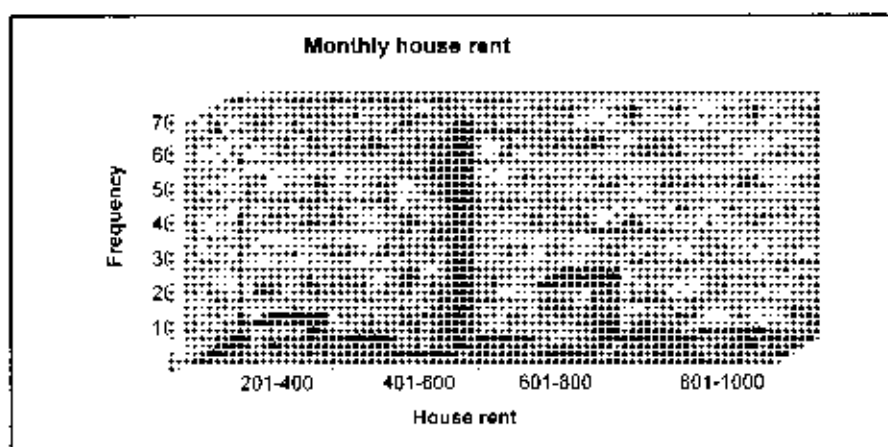
5.10 Physical Condition of the Houses

Housing development in the study areas has not been implemented systematically. For construction of houses different types of construction materials are used Materials also indicate the quality of the houses and the living standard of the household. Housing construction materials indicate the standard of living and also indicate the housing condition. Materials used for construction of houses of different types (Pucca, Semi-pucca, and Kutcha) in the study areas are shown according to floor, wall and roof.

Table 5.10.1: Physical Condition of the Houses

House Type	Frequency	Percentage
Kutcha	189	94.50
Semi- pucca	11	5.50
Pucca	-	-
Total	**200**	**100.00**

Source. Field Survey, 2003

Table 5.10 1 demonstrates that in the study areas, 94.50 % of the houses are Kutcha and the used construction materials are bamboo, golpata, and tin and this percentage is highest in Pallabi Molla Bosti and Karail Bosti (Table 5.10.2). 5.50% of the houses are Semi-pucca and construction materials are concrete for floor, brick for wall and

tin or golpata for roof and this percentage is highest in Bawniabad Tin Shed Colony and Rupnagar Tin Shed Colony (table 5.10 2) There is no pucca house in the study areas.

Chart 5.10.1 : Physical condition of the houses

About 9.09 percent workers had to stay in semi-pucca houses in Rupnagar Tin Shed Colony. In Pallabi Molla Bosti about 97.50 percent workers had to live in Kutcha houses and in Karail Bosti about 97.05 percent workers were in kutcha houses.
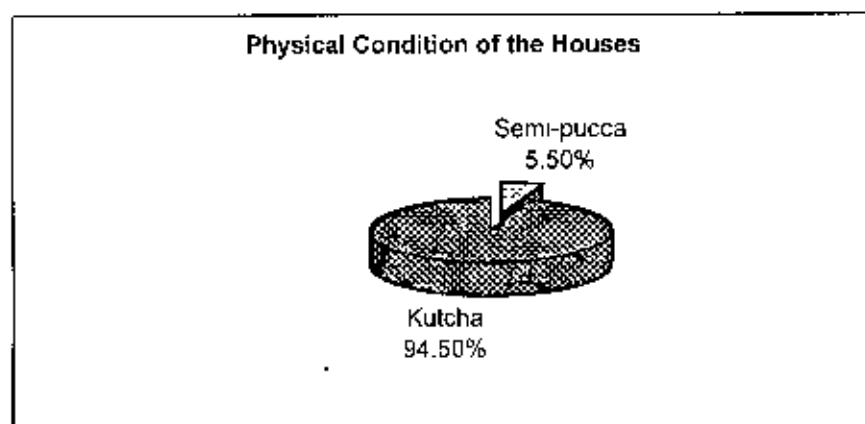
Table: 5.10.2 Condition of the Houses in the Study Area

Study Area	House Type					
	Kutcha		Semi-pucca		Pucca	
	F	%	F	%	F	%
Bawniabad Tin Shed Colony	32	91.42	3	8.57	-	-
Rupnagar Tin Shed Colony	30	90.90	3	9.09	-	-
Pallabi Molla Bosti	39	97.50	1	2.50	-	-
Mohakhali Sattala Bosti	28	.93.33	2	6.66	-	-
Karail Bosti	33	97.05	1	2.94	-	-
Manda Jamidar Bosti	27	96.42	1	3.57	-	-
Total	**189**	-	**11**	-	-	-

Source Field Survey, 2003

5.11 Type of Structures and Income Level

Almost all the structures (94.50%)of the study areas are Kutcha. These housing structures are influenced by the income level. Economic condition which is a determinant of housing condition. Moreover of the garment workers, regardless to their income level, rent houses in the slum areas of Kutcha and semi-pucca houses which is not suitable for living in an unhygienic environment.

Table 5.11: Types of Income and houses of the workers

Monthly Income Range (In Tk.)	Type of Structure						Total	
	Kutcha		Semi- pucca		Pucca			
	F	%	F	%	F	%	F	%
Below 1000	37	19.58	- -	-	-	-	37	18.50
1001 – 1500	69	36.51	-	-	-	-	69	34.50
1501-2000	57	30.15	-	-	-	-	57	28.50
2001-2500	17	8.99	-	-	-	-	17	8.50
2501-3000	9	4.77	-	-	-	-	9	4.50
3001-3500	-	-	7	63.64	-	-	7	3.50
Above 3500	-	-	4	36.36	-	-	4	2.00
Total	189	100.00	11	100.00	-	-	200	100.0

Source. Field Survey, 2003   *Note: 'F' denotes frequency*

Table 5.11 reveals that housing structures are influenced by the income level. From the table 5.10.1, it has been found that 94.50% houses are Kutcha but 18.50% of that are owned by the workers whose income range is below Tk.1000, 34.50% are owned by the workers whose income range is Tk.1001-1500, 28.50% are owned by the workers whose income range is Tk.1501-2000. So, economic condition is a determinant of housing condition.

5.50% houses are semi-pucca but of that 3.5% and 2.00% are owned by the worker whose income ranges are Tk.3001-3500 and Tk. Above 3500 respectively. So these data show that economic condition is a determinant of housing condition.

5.12 House Rent Paid by the Tenant

From table 5.12. it was found that 66.0% of the tenants pay house rent between Tk. 401 to Tk. 600 per month and which is highest in Pallabi Molla Bosti (table5.12.2), 20.0% of the tenants pay house rent between Tk. 601 to Tk. 800 and which is highest in Rupnagar Tin Shed Colony, 8.50% of the tenants pay house rent Tk. 201 to Tk.400. and which is highest in Bawniabad Tin Shed Colony. Only 4.50% of the tenants pay house rent 801 to Tk. 1000 per month.

Table 5.12.1: Amount of Rent Paid by Tenants for Houses

House Rent (Tk./Month)	Total	
	No	%
201-400	19	8.50
401-600	132	66.00
601-800	40	20.00
801-1000	9	4.50
Total	200	100.00

Source· Field Survey, 2003

It is also revealed from the study that the average house rent for a single room was about Tk. 540 per month. The maximum of the garment workers live in Kutcha structures.

Table: 5.12.2 Amount of Rent Paid by Tenants for Housing

Study Area	Monthly House Rent (In Tk)							
	201-400		401-600		601-800		801-1000	
	No.	%	No.	%	No.	%	No.	%
Bawniabad Tin Shed Colony	5	27.78	20	15.03	8	20.00	2	22.22
Rupnagar Tin Shed Colony	4	22.22	19	14.29	9	22.50	1	11.11
Pallabi Molla Bosti	3	16.67	30	22.56	5	12.50	2	22.22
Mohakhali Sattala Bosti	2	11.11	20	15.03	7	17.50	1	11.11
Karail Bosti	2	11.11	23	17.30	7	17.50	2	22.22
Manda Jamidar Bosti	2	11.11	21	15.79	4	10.00	1	11.11
Total	18	100.00	133	100.00	40	100.00	9	100.00

Source. Field Survey, 2003

In Bawniabad Tin Shed Colony workers pay Tk. 201-400 for house rent and the percent of such workers is about 27.78. In Mohakhali Sattala Bosti 15.03 percent workers have to pay Tk.401-600 per month. In Manda Jamidar Bosti about 10 percent workers have to pay Tk. 601-800 per month.

5.13 Building Material Used for Floor, Wall and Roof

Low-income people such as garment workers rent Kutcha houses which are available and less costly. Besides this, construction materials are also determined by the cost of materials, availability of materials and climate.

Table 5.13: Construction Materials in Different Parts of the Houses

Different Parts of the Houses	Construction Materials	Type of structures					
		Kutcha		Semi-pucca		Pucca	
		F	%	F	%	F	%
Floor	Mud	189	100.00	-	-	-	-
	Brick + Cement	-	-	11	100.00	-	-
	Total	**189**	**100.00**	**11**	**100.00**	-	-
Wall	Tin	23	12.17	-	-	-	-
	Bamboo	123	65.07	-	-	-	-
	Wood	43	22.76	-	-	-	-
	Brick +cement	-	-	11	100.00	-	-
	Total	**189**	**100.00**	**11**	**100.00**	-	-
Roof	Tin	171	90.47	11	100 00	-	-
	Polythene	18	9.53				
	Total	**189**	**100.00**	**11**	**100.00**	-	-

Note: 'F' denotes Frequency   *Source: Field Survey, 2003*

Floor Material: Mud as the floor construction material is used in maximum areas in Bangladesh. From this study, it has been found that, for cent percent Kutcha houses, mud is used as floor material. For Semi-pucca houses, brick and cement are used to construct floor.

Wall Material: In the study areas, for 94.50% Kutcha houses, different types of materials are used to construct the wall of the houses. Within 94.50% Kutcha houses, for 12.17% houses tin is used to construct wall of the houses, for 65.07% houses

bamboo is used, for 22.76% houses wood is used to construct their wall of the house. For Semi-pucca houses brick and cement are used to construct their wall of the house.

Roof Material: Tin is used for the construction of roof of Kutcha and semi-pucca houses in the study areas. Only 9.53% Kutcha houses used Polythene for roofing material. To increase the durability of the roof. tin is used for construction of roofing material which is now also cheap for its market value.

5.14 Possessions of Floor Spaces

Most of the sample houses rented by the garment workers are very small houses. The monthly salary of the garment workers are very low. As the house rent in Dhaka city is very high, the garment workers rent small Kutcha houses and live all family members or working collogues in a single room with contestation.

Table 5.14.1: Floor Space of the Houses

Floor Space of Room (Sq.ft)	Frequency	Percentage
<50	60	30.00
50-100	96	48.00
101-200	44	22.00
Total	200	100.00

Source: Field Survey, 2003

Table 5.14.1 shows that most of the houses of the workers are within 50 to 100sq.ft.. which is 48.00% of the total and which is highest in Karail Bosti (table 5.14.2). 30.00% families use less than 50 square feet of space as the floor areas of their house and which is highest in Pallabi Molla Bosti. Only 22.00% of the total households have 101-200 square feet floor areas and which is highest in Bawniabad Tin Shed Colony. The average floor space of the houses are about 84.11sq.ft. There exist a relation between the number of living rooms and amount of floor space.

Table: 5.14.2 Floor Space of the Houses in the Study Areas

Study Area	Floor Space of Room (Sq.ft)					
	<50		50-100		101-200	
	F	%	F	%	F	%
Bawniabad Tin Shed Colony	8	13.33	15	15.63	12	27.27
Rupnagar Tin Shed Colony	7	11.67	15	15.63	11	25.00
Pallabi Molla Bosti	17	28.33	14	14.58	9	20.45
Mohakhali Sattala Bosti	10	16.67	15	15.63	5	11.37
Karail Bosti	9	15.00	21	21.87	4	9.09
Manda Jamidar Bosti	9	15.00	16	16.66	3	6.82
Total	60	100.00	96	100.00	44	100.00

Source: Field Survey, 2003

As the people of the study area, they have to stay densely. In Bawniabad Tin Shed Colony 27.27 percent workers used floor space of 101-200 sq. ft. The workers of Pallabi Molla Bosti occupied 28.33 percent of less than 50 sq. ft and in Manda Jamidar Bosti about 16.66 percent workers shared 50-100 sq. ft floor space.

5.15 Density Per Room

From the field survey, it was found that the number of people living in one room varied form house to house. From the table 5.14.1, it was revealed that the average floor space of the housing units was 84.11sq.ft. So the sizes of the houses were very small. From the study it was found that 39.50% of housing units accommodated upto to 4 persons per room and which is highest in Pallabi Molla Bosti, 49.50% of housing units accommodated 5 to 6 persons per room which is highest in Karail Bosti and 12% housing

Table 5.15.1: Density Per Room in the House

Average Number of People/Room	Total Number of Houses	
	Number	%
0-4	79	39.50
5-6	99	49.50
6+	22	11.00
Total	200	100.00

Source: Field Survey, 2003

accommodated more than 6 persons per room, which is highest in Pallabi Molla Bosti. From the table 5.14.1 it was revealed that average room size is 84.11sq.ft. The average number of people per room is 4.17. So the per capita floor space in the housing unit is 20.17sq.ft. These figures shows living environment within those housing units. When the room densities are very high in the housing units, the living condition is considered as an unhygienic one. They live in extremely congested condition in a room. It indicates the severity of the accommodation problems of the garment workers. The garment owner never provides accommodation facilities for their factory workers.

Table: 5.15.2 Density Per Room of the Houses in the Study Areas

Study Area	Average Number of People/Room					
	0-4		5-6		6+	
	F	%	F	%	F	%
Bawniabad Tin Shed Colony	13	16.45	17	17.17	5	22.73
Rupnagar Tin Shed Colony	14	17.73	15	15.15	4	18.18
Pallabi Molla Bosti	19	24.05	15	15.15	6	27.27
Mohakhali Sattala Bosti	12	15.18	16	16.16	2	9.09
Karail Bosti	11	13.93	21	21.22	2	9.09
Manda Jamidar Bosti	10	12.66	15	15.15	3	13.64
Total	79	100.00	99	100.00	22	100.00

Source: Field Survey, 2003

From the field survey, it was found that the number of people living in one room wide-ranging from house to house. In Bawniabad Tin Shed Colony 22.73 percent workers provided their opinions more than 6 six persons per room. In Pallabi Molla Bosti 24.05 percent workers provided their opinions upto 4 person per room. In Mohakhali Sattala Bosti and Karail Bosti workers said that average 6 persons had to stay per room.

Table: 5.15.3 Average House Rent per sq. ft in the Study Areas

Sl. No	Name of the Study Area	Per Sq.ft Rent in Tk
1	Bawniabad Tin Shed Colony	26.71
2	Rupnagar Tin Shed Colony	26.45
3	Pallabi Molla Bosti	26.58
4	Mohakhali Sattala Bosti	25.68
5	Karail Bosti	27.04
6	Manda Jamidar Bosti	26.90

Source: Field Survey, 2003

In the study area on an average 26.71 taka is paid by the workers for per sq. ft in Bawniabad Tin Shed Colony, 25.68 taka in Mohakhali Sattala Bosti and 26.90 taka per sq. ft in Manda Jamidar Bosti. So per sq. ft house rent is highest in Karail Bosti among the study areas.

5.16 Condition of Air Circulation

The condition of air circulation is related to the amount of space of a house, its height, ventilation, and positions of houses around it. Where there is more space more height and window facilities, there is more air circulation. The slums of the study areas are totally deprived air circulation. Most of the houses are small shanties in congested cluster forms. There are no setbacks between houses. Most of the houses have just an entry, through which only little kids can enter properly. In maximum cases, there are no windows and ventilators. As a result, the air becomes very sultry and damp.

Table 5.16: Height of the Houses in the Study Areas

Height of the Houses (in feet)	Frequency	Percentage
<6	81	40.50
6 – <8	63	31.50
8- <10	56	28.00
10	17	8.50
Total	200	100.00

Source: Field Survey, 2003

Adequate height is not available in most of the houses. It is an important issue for proper air circulation in the houses and also for the comfort of the households. The maximum (60%) garment workers live in huts with no scope of movement in or out of their houses. Table 5.16 reveals that about 91.50% of the houses have less than 10ft height. Among them about 72.00% have less than 8feet height where as 40.50% have less than 6feet height. Moderate heights have been found at 19.50% of the houses with 8 to 10 feet height and only 8.50% have adequate height. The average height of the houses was 6.41sq.ft. The standard height of houses is about 10 ft approximately. Therefore, it can be said that in the study areas, houses are not well ventilated and they are not fit for living and sound health.

Chart: Table 5.16: Height of the Houses in the Study Areas
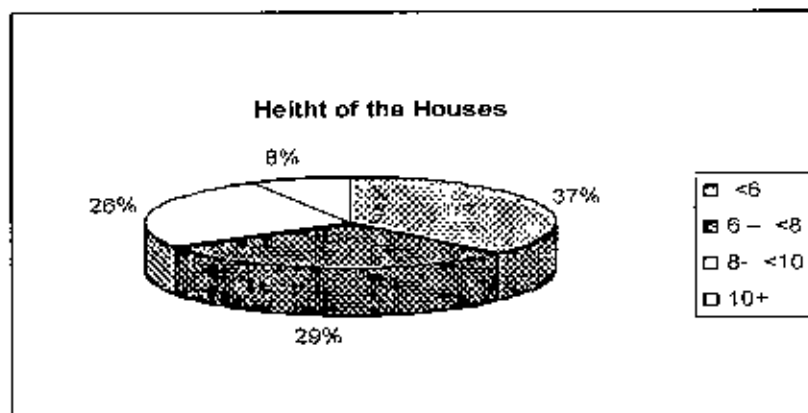
5.17 Duration of Living in the Same House

There is a strong positive relationship between duration of living in the same slum and duration of their work in the same factory. It means that if they are bound to change their work places then they have to change their living places also. It is a sort of inter slum migration.

Table 5.17: Duration of Living in the Same House

Duration of Living (Years)	Frequency	Percentage
< 1	75	37.50
1-2	95	47.50
2-4	15	7.50
4-6	10	5.00
6-8	5	2.50
Total	200	100.00

Source: Field Survey, 2003

In the recent field study, it is revealed that maximum number of people usually stay about 1 to 2 years in a particular slum. On an average the garment workers duration of living in the same house is 1 5 year.

5.18 Mode of Transport

The workers usually use multi modal transports. It depends on the distance between work places and living places, availability of convenient modes, terms, and condition of works, mode fare their tendency of selecting convenient modes etc. The nature of commuting is also exhaustive for the workers.

Table 5.18.1: Mode of Transportation to Workplace

Commuting Mode	Frequency	Percentage
On foot	119	59.50
Rickshaw	5	2.50
Public bus	48	24.00
On foot & public bus	28	14.00
Total	200	100.00

Source: Field Survey, 2003

The travel system of the workers is very insecure. From the table, 59.50% worker travel on foot, which is highest in Pallabi Molla Bosti, 24% worker travel by public bus which is highest in Bawniabad Tin Shed Colony and 14% worker travel on foot and public bus which is highest in Bawniabad Tin Shed Colony. It has been found that most of the workers travel from their house to their work place on foot. Most of the workers walk in groups. On an average a garment worker has to travel 4.38 k.m. everyday on foot, spending about 45-60 minutes. No doubt, this long distance travel on foot is physically quite strenuous. However, this long travel on foot makes them unsecured, especially at night. Often, the women workers face various mishaps like physical and sexual harassment while traveling on foot at night. The workers who travel on foot have reported many incidents like attack by mastans (local touts), harassment by policemen, harassment by boys in the street etc. The young female garment workers were often bothered by the boys' suggestive comments or language, demeaning remarks, unwelcome touching, etc, while traveling on foot. For this reason the young garment workers were always found traveling in groups. Travel by rickshaw, bus, tampoo is also not free from these incidents. Bus conductors and drivers behave badly with the female commuters. Commuting by public bus and rickshaw is also very accident prone. From all these facts, it is understandable

insecure commuting is one of the main causes of violence against female garment workers.

Traditionally, women were confined to the precinct of the household and their presence in the street were very rare. Hence, wage work at the garment industry have increased the mobility of women but neither the employers nor the government have provided transport for them. Only in the EPZ, workers commute by factory bus.

Chart 5 .18.1: Mode of transportation to work place
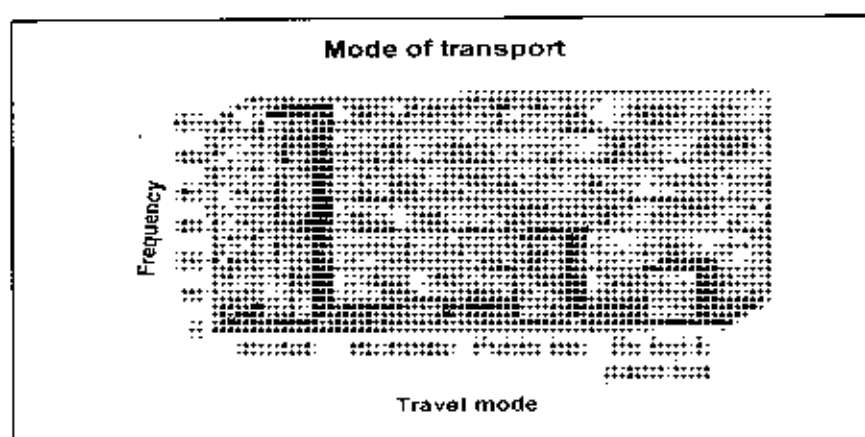
Table: 5.18.2 Mode of Trip to Work Place

Study Area	Mode of Transport							
	On foot		Rickshaw		Public Bus		On foot and Public bus	
	F	%	F	%	F	%	F	%
Bawniabad Tin Shed Colony	1	.85	-	-	26	54.16	8	28.58
Rupnagar Tin Shed Colony	23	19.32	2	40.00	3	6.25	5	17.86
Pallabi Molla Bosti	32	26.90	1	20.00	4	8.33	3	10.71
Mohakhali Sattala Bosti	17	14.28	2	40 00	4	8.33	7	25 00
Karail Bosti	25	21.00	-	-	5	10.42	4	14 28
Manda Jamidar Bosti	21	17.65	-	-	6	12.50	1	3.57
Total	119	100.00	5	100.00	48	100.00	28	100.00

Source: Field Survey, 2003

From survey it is estimated that workers of the Bawniabad Tin Shed Colony have to go a long distance. So, maximum people use public bus. About 54.16 percent of Bawniabad Tin Shed Colony uses public bus for trip to their working place. On an average 40 percent workers of Mohakhali Sattala Bosti uses rickshaw and 17.65 percent workers of Manda Jamidar Bosti have to go to their working place on foot.

5.19 Travel Cost to the Working Place

The garment workers don't get any travel allowance from their factory. They have to spend a portion of their monthly salary in the cases when the workers don't have any other choice but to use modes of their own foot.

Table 5.19: Monthly Travel Cost of the Garment Workers

Monthly Travel Cost (Tk)	Frequency	Percentage
No Cost	119	59.50
1 to 50	12	6.00
51 to 100	41	20.50
101 to 150	13	6.50
151 to 200	9	4.50
201 and above	6	3.00
Total	**200**	**100.00**

Source Field Survey, 2003

According to table 5.19, about 59.50% of the households do not have any travel cost to go to their work place. The statistics shows that most of the households do not expend any money to reach to the working place. The highest monthly travel cost of a household is more than Tk.200

Chart 5.19: Monthly transportation cost of garment workers
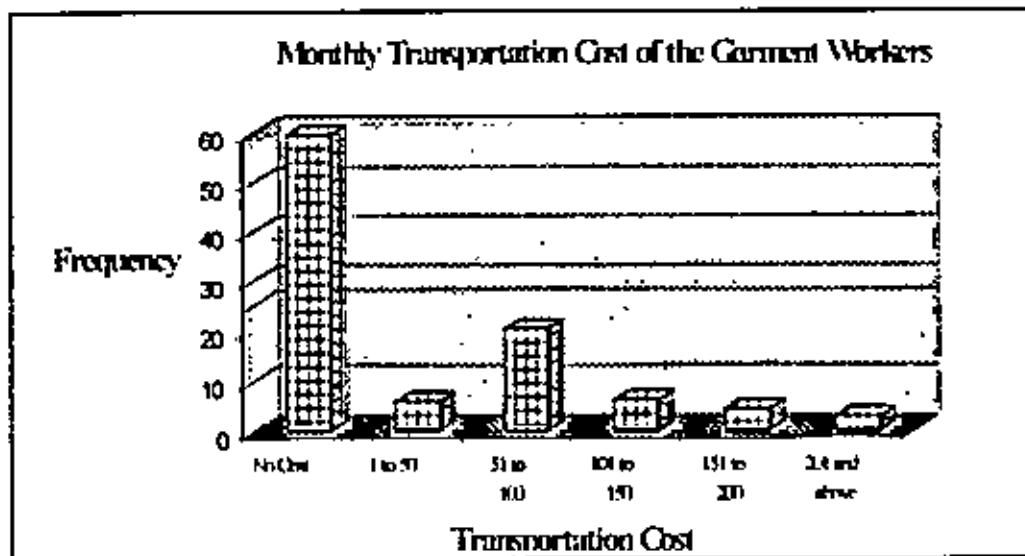
5.20 Distance of Work Place

Distance between workplace and their residences plays significant role in their quality of living. The equation could be simplified as more the distance they face the more travel cost, time cost and physical labour they have to incur.

Table 5.20.1: Distance of Work Place of the Workers

Distance of Working Place (Km)	Frequency	Percentage
Less than 1	38	19.00
2 – 5	104	52.00
6 – 10	52	26.00
11 – 15	6	3.00
Total	200	100.00

Source: Field Survey, 2003

Table 5.20.1 reveals that the maximum distance of the work place of the respondents is 11-15 k.m and which is highest in Bawniabad Tin Shed Colony because this area is near the fringe area of Dhaka city. The average distance of the work place of the respondents were 4.38 km. This represents that they want to work not far from their living place and the work place must be accessible on foot.

Chart 5. 20.1: Distance of Work Place of Garments Workers
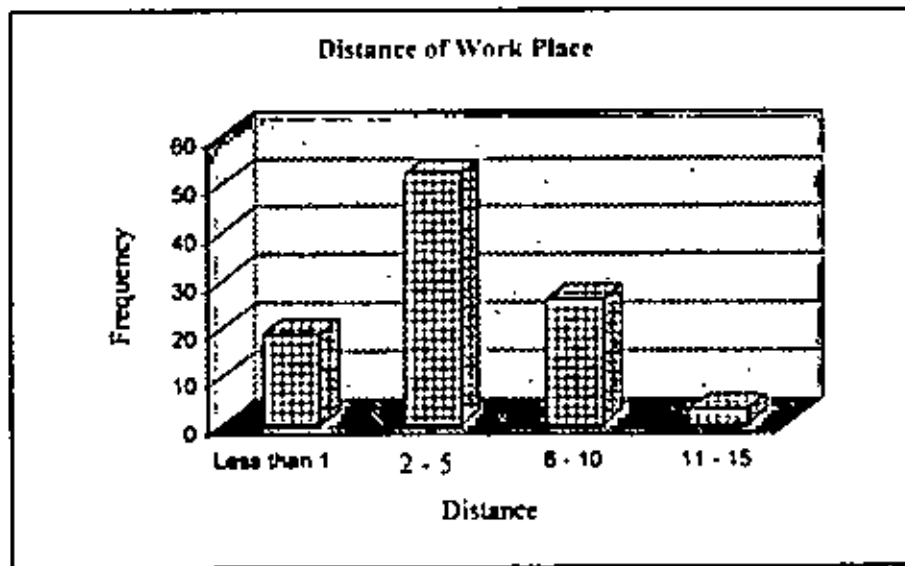
Table: 5.20.2 Distance between Work Place and Residence of the workers in the Study Area

Study Area	Distance of Working Place (Km)							
	Less than 1		2 – 5		6 - 10		11 - 15	
	F	%	F	%	F	%	F	%
Bawniabad Tin Shed Colony	7	18.42	10	9.62	15	28.85	3	50.00
Rupnagar Tin Shed Colony	11	28.95	17	16.35	4	7.69	1	16.67
Pallabi Molla Bosti	2	5.26	24	23.07	14	26.93	-	-
Mohakhali Sattala Bosti	2	5.26	21	20.19	6	11.53	1	16.67
Karail Bosti	7	18.42	19	18.27	8	15.38	-	-
Manda Jamidar Bosti	9	23.69	13	12.50	5	9.62	1	16.67
Total	38	100.00	104	100.00	52	100.00	6	100.00

Source: Field Survey, 2003

Average 28.85 percent workers had to cover a distance of 6-10 km. to reach the work place in Bawniabad Tin Shed Colony. In Pallabi Molla Bosti average 23.07 percent workers had to travel 2-5 km. and in Manda Jamidar Bosti about 23.69 percent workers had to travel less than 1 km.

BASIC UTILITY SERVICES

The term services refers to different types of civic services or utility services that is very much important for urban housing development such as water supply, road network, electricity, drainage system, solid waste disposal etc.

5.21 Water Supply

Water supply is also an important aspect of environmental condition. The main source of the water supply of the households are 1) Hand tube-well in their houses, 2) Tap water installed in their houses 3) Tap water collected from near by streets, 4) Well dug in the houses for collection of water.

Table 5.21: Source of Water of the Households

Source of Water Supply	Frequency	Percentage
Hand tube-well	109	54.50
Supply water	32	16.00
Pond	--	-
Well	55	27.50
Road side stand pipe	4	2.00
Total	200	100.00

Source: Field Survey, 2003

Table 5.21 reveals that in the study areas most of the respondent (54.50%) responds their opinion to use hand tube-well for drinking and other purposes. Most of the garment workers remain busy for their professional task at 8 am and back at 8 pm. So all times they face crowd to their respective tube-well and create hazardness. So all persons cannot collect water for their daily purpose and they go to work place without bath. Only 16.00% of the households have access to the supply water by WASA connection. It indicates most of the families are not bear to pay water supply line. So majority of the respondents collect their water. supply from well. For drinking, washing and bathing purpose majority of the people use hand tube well and well water. Roadside standpipes are always ill maintained.

5.22 Dependency on a Tube-Well and their Effects

From the questionnaire survey one of the crucial findings was sharing tube-wells as majority of the garment workers have to rely on using tube-wells on higher ration. About 80 to 100 people have to share one tube-well in a particular time, especially, taking morning bathe and latrine use. There is also other type of tube-well water use like washing clothes, culinary use and urinals, latrine water. In most likely cases the workers have to go to their working place without taking bathe in the morning. As a result, the workers, especially the women workers suffer from infectious diseases. In some cases these diseases become chronic and beyond diagnose. This picture shows that the workers not only face high density in a living house but also in other basic housing needs of water supply (Appendix-B).

5.23 Sanitation Condition

Sanitation at present day is considered one of the important parameters of environmental condition; it bears high importance in the slum areas.

5.23.1 Toilet Facilities at Home

Latrine is one of the important factors for well dwelling. The sanitation condition is very dreadful, especially in terms of types of toilet found in the study areas. Only the number of the sanitary latrines does not refer well sanitation.

Table 5.23.1 Distribution of the Structure of the Latrine

Type of Latrine	Frequency	Percentage
Kutcha	55	27.50
Semi-pucca	142	71.00
Pucca	3	1.50
Total	200	100.00

Source. Field Survey, 2003

In the study area 27.5 percent household has Kutcha latrine and 72.5 percent household has Semi-pucca latrine but its condition is not very good. It makes the water dirty and pollutes environment. Nevertheless, no household has pucca latrine. Effective management and cleanliness are the important thing for consideration.

5.23.2 Dependency on a Latrine

From the study, it is found that the sanitation condition of the garment workers is worse. About 60 to 70 persons depend on a latrine. Usually, people tend to use the latrine in a particular time like in the morning. The workers are queued in front of the latrine. Often they have to rely on factory latrine and practice of evacuating in other times of days. Even though they have to face bitter experience while evacuation because of poor maintenance and cleaning of those latrines. The latrines are full of dirt and filth. This situation is very harmful for human health. These latrines are breeding place of infectious diseases. The garment workers are facing these problems not for a single days but days after days, months after months. If they try to improve these conditions, they have to pay extra amount of rent (Appendix-C).

5.24 Waste Disposal Pattern

Hazardous waste is often injurious to human health and cause death of human and animal lives. Solid wastes are often called the third pollutant after air and water. It is mostly generated in the thickly populated core area. Due to lack of proper knowledge in the female garment workers and no provision for garbage disposal in the study areas, they dispose their domestic waste near the house or in an open space near the dwellings or heap on road side or municipal drain or water body (Appendix-D).

Table 5.24.1: Disposal Pattern of Solid Waste of the Households.

Place of Garbage Disposal	Frequency	Percentage
Open space	49	24.50
Near the house	107	53.50
Heap on road side	13	6.50
Dustbin	11	5.50
Water body	6	3.00
Municipal drain	14	7.00
Total	200	100.00

Source: Field Survey, 2003

Table 5.24.1 indicates that in the study areas 53.50% households dispose their domestic waste near the house, 24.50% households dispose their domestic waste in the open space, 6.50% households dispose their domestic waste in the heap on road side and others dispose their domestic waste in the municipal drain or water body. Only 5.50% households dispose their domestic waste in the dustbin. For disposing domestic waste near the house creates bad odor and pollutes the environment which creates different diseases. The existing system garbage disposal pollutes the environment and encourages mosquitoes. The smelly areas are intolerable to both the residents of the areas and the people who visit the area. For this reason they faced serious health problem. Proper solid waste management with regular collection and controlling the disposal system improve the living environment in the study areas. It is essential to install dustbins in these areas. The Dhaka Municipal Corporation may arrange to carry them to the dumping ground. Irregular collection of wastage creates worse conditions. On the other hand waste collection during rush hour and such interrupting the traffic flow is quite troublesome for the people

Chart 5.24.1: Disposal Pattern of Solid Waste of the households
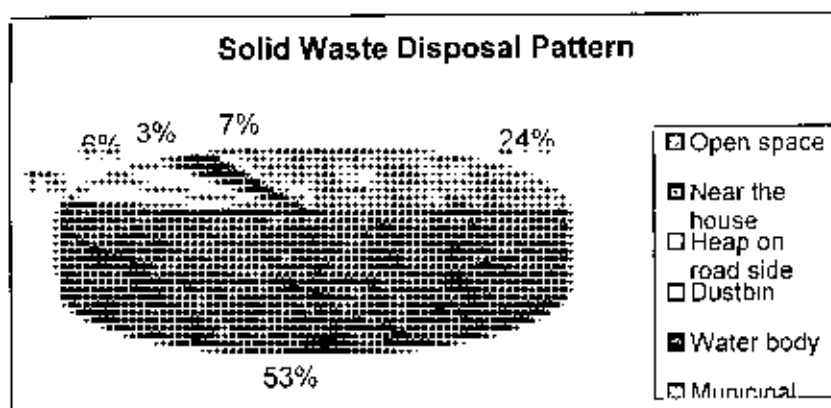
5.25 Condition of Drainage Facilities

An effective and efficient drainage system is very important for any urban area to discharge its runoff and waste water for a better and healthy environment. Without an effective and proper drainage system an area faces water logging problem. Worse drainage is one of the reasons of polluted environment. Drainage is one of the dominant problems in the study areas. Unplanned and haphazard housing development creates drainage problem for water discharging (Appendix-E).

Table 5.25.1: Drainage Facilities in the Study Areas and Causes of Drainage Problems

Drainage Facilities Nearer the House		Total	Causes of Drainage Problem				Total
Yes	No		Heavy Rain	Drain Block	Repairing Constrain	Others	
141 (70.50)	59 (29.50)	200	17 (8.50)	133 (66.50)	21 (10.50)	29 (14.50)	200

Source: Field Survey, 2003

From the table 5.25.1, we see that 29.50% of the respondents do not have proper drainage facilities. 66.50% face drainage problem caused by heavy rainfall. 10.50% households face the drainage problem due to lack of repairing the drain and the rest 14.50% households face other problems. Existing drains are usually unclean and children, even some of the aged people use drains as latrines. Consequently, water logging takes place frequently. Several other problems such as unhygienic environment as it overflows the garbage and make a favorable environment for the growth of mosquito, which is a common problem in the study areas. For this reason a grossly unhealthy environment prevails during water logging.

5.26. Electricity Facilities

Electricity and gas are the most important utility service and facilities for rapid growth and development of an area and also for increasing the productivity in all aspects. Electricity is the acquit of civilization or civic people to make moderate their daily life as well as to make the city developed and well facilitated of modern day utilities.

Table 5.26: Availability of Electricity Facility

Electricity	Frequency	Percentage
Available	151	75.50
Not Available	49	24.50
Total	200	100.00

Source: Field Survey, 2003

The survey results indicate that the study area is covered by power supply network of the Dhaka Electricity Supply Authority (DESA). About 75.50% of the households have access to the electricity facilities. The rest of the households use kerosene for lighting purpose.

5.27 Cooking Fuel and Kitchen Condition

Table 5.27 reveals that one third of the families use gas as fuel of their cooking. Two thirds of the households use woods, papers, kerosene etc. for their cooking. Firewood and Gas are predominant cooking fuel materials, which is a clear indication of their low level of affordability.

Table 5.27: Cooking Places and Cooking Used of the Households

Fuel Types	In Side Living Room		Yards		Road Side		Separate Shared Kitchen		Total	
	F	%	F	%	F	%	F	%	F	%
Wood	43	52.43	23	82.14	9	56.25	6	8.10	81	40.50
Gas	-	-	-	-	-	-	68	91.90	68	34.00
Papers	4	4.88	5	17.86	7	43.75	-	-	16	8.00
Kerosene	35	42.69	-	-	-	-	-	-	35	17.50
Total	82(41.0)	100	28(14.0)	100	16(8.0)	100	74(37.0)	100	200	100.00

Source. Field Survey, 2003

41.00% families cook inside their living room because every respondent of these study has only one room. They also cook in the yards or road sides when the weather permits. 37.00% of the households cooking place in Kutcha shared kitchen using cooking gas. Usually sharing the kitchens of the houses with 6 or 7 families. 8% of the families use cooking papers as fuel. Only 17.50% families use kerosene and they cook inside their living room. The living place and cooking place are common in most cases. So they face unhygienic condition.

5.28 Market Facilities

Market serve the social needs. Nevertheless for garment worker market facility is very important for their daily needs. Shopping facilities of the residents in the study areas are not well developed. No municipal market or any other developed shopping center exists in close proximity to the study areas. Scattered Kutcha Bazars and stationary shops serve the immediate need of the workers. For higher quality goods the workers have to go for shopping to the city center areas.

5.29 Health Facilities

From the basic needs, health is an important facility for human both urban and rural areas. The health situation of the garment workers is extremely poor. This is mainly due to the unhealthy and unsanitary environment of living in the slums. They are not aware of the modern health facilities for the lack of education and other information. Moreover their economic condition does not support them to take the modern expensive medical treatment. As a result, they suffer in several diseases all through the year. The health situation of the urban poor is worse than that generally prevailing condition in the country. About 30-40 (UNICEF, 1993) percent of the urban poor population is ill at any given time. Their knowledge is limited about health and hygiene.

5.29.1 Types of Diseases

The garment workers as slum dwellers are the most least aware group of the urban people about health. They don't maintain the general cleanliness for healthy life. In the study areas, sanitation and drainage condition are very poor. As a result, common infectious diseases can flourish here easily. Some common diseases in the area are cold, diarrhoea, scabies, seasonal fever etc. These diseases mostly affect children and old people. The unhygienic residential environment of the slums is the main cause for their diseases.

5.30 Road Accessibility

Most of the households in the slum areas are deprived of direct access to the residence. Most of the access roads are in very poor conditions. There are some narrow arterial roads which provide accessibility in the study areas. It was found that width of the most access arterial roads of the study areas are 5ft. or less which is obviously insufficient for vehicle movement.

5.31 Nature and Extent of Violence Against Female Garment Workers

Wage employment had pulled out a large number of women from their home. But a safe and secure work environment outside the home boundary of women was not created simultaneously. Due to the absence of safe and secured working environment, women in the garment industry face various types harassment. Violence against women resulting from women's wage employment can be attributed largely to the absence of support services facilitating women's work. The government, employers and the society are unaware about the need of women as workers. The young garment workers became victims of violence mainly due to the absence of safe and secured transport and housing facilities.

5.31.1 Violence Against Garment Workers at the Residence

Generally one expects a secured shelter at the residence. But for the female workers even the residence is not a secured place. The workers living in slums always remain afraid of local touts. The local touts come to them regularly to collect chanda (subscription). The garment workers are threatened by the local touts in several ways if they refuse to give subscription. For the female garment workers the possibility of being raped by the local touts is also very high since there is no law imposing authority in slums. So findings of the study shows that in many cases female garment workers become the victims of various harassment due to their insecured living arrangement. Hence, attempt should be taken to provide secured housing facilities to the garment workers.

5.31.2 Lack Safe and Secure Travel System

It has been found that most of the female workers (59.50%) travel from their houses to their work place on foot (table 5.20.1). On average they travels more than 4.38 km a day on foot. Women faced various mishaps while traveling on foot at night lack of safety and secured travel system. From all these facts, it is understandable that in secured commuting is one of the main causes of violence against female garment workers.

5.32 Facilities by Proprietors of the Garment Sectors

For the study purpose ten owners of the garment sector have been interviewed randomly in Dhaka city in order to understand the types of facilities they offer for the garment sector workers. The purpose of this interview was also to know if they offer any incentives or allowances for garment workers. From this survey it was also identified that some garment workers have offered light refreshment at the leisure time by the owners. If workers have to face accidents during their working period, the owners make arrangements for better treatment facilities. Nari Uddak Kendra - A national NGO has arranged programs by medical team after every 15 days to measure the condition of garment workers. There is no accommodation facilities provided by the garment owners. Moreover, they do not allow any transport facilities and festival bonus. Only the permanent staffs have some facilities like festival bonus, incentives but that is of lower in number.

Chapter Six

Recommendations and Conclusion

CHAPTER SIX
RECOMMENDATIONS AND CONCLUSION

6.1 Recommendations

The following proposals targeted garment workers. The housing needs of the workers with their facilities may be met by any general housing schemes and efficient housing suited to their independent life style. The mess system and hostel system are two existing housing types which are well suited to the need for the garment workers. Government, NGOs and Garments owner should provide adequate housing and transport facility to their workers.

6.1.1 Housing Facilities

Findings of the study shows that garment workers have serious accommodation problems due to poor housing condition and insecured living arrangement. Hence, attempt should be taken to provide better housing facilities to the garment workers. But not a single surveyed employer has agreed to provide housing facilities. However they showed favorable attitude towards NGO's intervention in area. Only the NGO's initiative is not adequate to replicate this system. In fact, it should be a joint venture of the government, NGOs and employers Government should allocate land for constructing low cost housing and the employers and the NGOs should arrange fund for construction. Management of housing should lie with the NGOs.

For the designing pattern of the housing modern planning techniques should be applied; so that maximum output can be gained by investing minimum input. As for example; Row Housing Technique can be applied to solve housing problem for maximum number of households by spending minimum land and cost.

Another approach can be applied known as hostel type, which includes more than 5-6 members in a room by a minimum charge of about Tk.400-500 per month. This

will increase the quality of living environment than the slum area of same cost. If GO's, NGO's, Garments owner, BGMEA or other private authority take initiatives to make such residential facilities for the garments workers in the fringe area of Dhaka city where land cost is cheaper. There can be an approach of offering transportation facilities by the respected authority. By this system in a 12x16 Sq.ft room, 6 workers can accommodate them. But if the double-bed system is used here, 12 workers can accommodate themselves in the same room with minimum cost.

From the field survey it is found that about 66% garment workers expend about Tk.400-600 per month. 20% garment workers have to expend about Tk.600-800 per month. The amount is paid for the slum area where they are living at this moment. If hostel type housing is offered, they will get better facilities than slum area.

The study shows that the workers should get adequate facilities such as electricity, water supply, sanitation, sewage and gas along with other amenities. The workers live in the slum areas which are not hygienic. The young garment workers do not get proper place in the slum areas to lead a normal life which culminates into different social pathos. Hostel type housing can be provided for unmarried female workers or for those who wants to live in single. The female workers living with their families can share row housing which may be developed by Government and non-Government organizations in the fringe areas. These housing must be connected by well transportation system.

To reduce the pressure of accommodation problem, double storied-bed system can be introduced for the garment workers which ensure double people of the same area with minimum cost. This can also be used in the hostel type housing In order to accommodate more garment workers, 6 storied buildings can be constructed as hostel type housing.

6.1.2 Transport Facilities

Violence arising from insecure commuting can be eliminated to a large extent if the female garment workers are provided with transport facilities. Provision of factory bus can solve the problem of violence against garment workers. If garment owners provide transport facility to their workers, the time of traveling will be reduced. Therefore, findings of the survey reveal that all sample-surveyed workers demanded separate bus service for them. Due to positive attitude of the employers, it will not be very difficult to provide transport facilities to the workers. Moreover, from the findings of the above-mentioned survey it was found that for safe and secure transport, the female garment workers were ready to pay more than what they are currently spending on transport.

The garment employers in the Dhaka Export Processing Zone charged Tk.100 per worker per month as transport cost. Similar approach can be replicated in all garment factories. The employers can easily provide transport facilities without incurring much cost. Most of the cost can be recovered from the workers. The garment employers alone may not be able to provide the transport facilities to the workers since it need large-scale organizational efforts. The private transport organization or the NGOs can help the garment employers to provide this service. The NGOs can tap into different resources to invest on garment workers' transport, organizing entrepreneurial women into groups so that they can enter into the transport business.

6.1.3 Law for Controlling the Establishment of More Garment Factories in Dhaka City

Government should take proper initiatives to stop more Garment Factories in Dhaka City. If a garment factory is established in the city, it generates about 700-900 more workers. This creates problems in accommodation as well as in sanitation, sewage, water supply and other facilities. Due to continuous increase of population in Dhaka city, additional people in the garment sector will decrease the quality of living environment. Garment workers intend to pay less money for their accommodation which creates slum area nearby the garments. In order to prevent new garment factory, the legal authority should take necessary steps for restricting the garment factories in Dhaka City. So Garment's Palli can be established out side from Dhaka City or fringe areas of Dhaka City where all the facilities will be given to serve the owners of garment factories as well as garment workers. Example of such area is Savar, Gazipur, Dhamrai and Zingira etc.

6.2 Conclusion

This study was intended to analyze the housing condition of the workers engaged in garment factories in Dhaka City. The analysis results that, the housing condition of the workers is not well enough. Problems of living conditions affect workers every day. The area which they used for living is too small for them, moreover the environment is hasty and nasty. They face accommodation problem on a daily basis. Their major demands circle around housing, transportation, sanitation, sewage, water supply, security and wages. Depending on the analysis, however, a set of recommendations has been formulated for improvement of the housing conditions of the workers. If proper policies and guidelines with its implementation of the housing for the garments workers are taken as initiatives to reduce the accommodation problem, better production with maximum profit can be assured by the garment workers. For actual development of the housing condition of the workers engaged in the garment factories, it requires further extensive survey and analysis. If GO's, Garment owners, BGMEA as well as other NGO's take initiatives to resolve the accommodation problem of garment workers, it will help the best to reduce the accommodation problem. Moreover govt. rules with guidelines should be approached for the garment workers in order to prevail a sustainable accommodation of garment workers by offering them housing areas like row housing, hostel type housing, double storied bed approach among the garment workers.

Appendices

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Appendix-A

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF URBAN AND REGIONAL PLANNING
Research Title: Accommodation Problems of Garment Workers in Dhaka City
(Questionnaire for Garment Workers)
(Only for research purpose)

Sample no-------------------   Date------------------------

Name of the respondent: ---

1) Locality: --- Ward No: ---------------------

2) Demographic Information about the worker and contributing members of the family:

Sl. No.	Age	Sex	Marital Status	Education	Occupation	Income/month
	1	2	3	4	5	6
1						
2						
3						
4						
5						
6						

Code: 1   **Code: 2**   **Code: 3**   **Code: 4**

Code: 1	Code: 2	Code: 3	Code: 4
1. Below 5 years	1=Male	1=Unmarried	1=Illiterate
2. 6 Years - Upto 10 Years	2=Female	2=Married	2=Up to Class V
3. 11 Years - Upto 20Years		3=Widow	3=Class VI to S.S.C
4. 21 Years - Upto 30Years		4=Divorced	4=H.S.C
5. 31 Years - Upto 40 Years		5=Abandoned	5= Graduate
6. 41 Years - Upto 50 Years			
7. Above 50 Years			

Code: 5   **Code: 6**

Code: 5	Code: 6
1. Day laborer	1= Below 1000
2. Service	2= 1001-1500
3. Business	3= 1501-2000
4. House Wife	4= 2001-2500
5. Unemployed	5= 2501-3000
6. Student	6= 3001-3500
7. Others	7= Above 3500

3). Information about the house

Physical Condition of the House	Total floor area occupied (sq ft)	Building Material			Height of the house (ft)	Monthly house rent (Tk)	Duration of living in the house (Year)
		Floor	Wall	Roof			
1	2	3			4	5	6

Code 1	Code 2	Code 3	Code 4	Code 5	Code 6
1. Katcha	1. < 50	1. Brick	1. 4-6	1.	1. <1
2. Semi-pucca	2. 50-100	2. Concrete	2. 6-8	2. 201- 400	2. 1-2
3. Pucca	3. 101- 200	3. Mud	3. 8-10	3. 401- 600	3 3-4
	4. 151-200	4. Bamboo	4. 10+	5. 601- 800	4 >4
		5. Tin		6. 801- 1000	
		6. Golpata			
		7. Polythene			
		8. Others			

4) Have any separate kitchen facilities of this house?
1.Yes ....2. No............

5) If yes, present condition of the kitchen?
1. Kutcha
2. Pucca
3. Semi-pucca

6) If no, where food is cooked?
1. Food is cooed inside the living room
2. Food is cooked in the Yard
3. Food is cooked in the roadside.

7) What type of fuel used for cooking?
1. Wood
2. Gas
3. Electricity
4. Kerosene
5. Paper
6. Others (specify)..... ....

.8) Are you living here without your family?
1. Yes ....2. No..................

If yes, how many members are living with you in a room?
1. One
2. Two

3. Three
4. Four
5. Five
6. Six
7. Seven

If no, No. of family members are living with you?

1. 1
2. 2
3. 3
4. 4
5. 5+

WATER SUPPLY

9) What is the location of water supply?
1. Within the house
2. Within the Neighbourhood
3. Out side the Neighbourhood

10) What is the source of water supply in your house?
1. Hand tube well
2. WASA connection
3. Pond
4. Well
5. Road side stand pipe
6. Others (Specify)---

11) What is the distance of sources of water from your residence (Km)
1. Within 1
2. 1-2
3. 2-3
4. 3+

12) Do you get sufficient supply of water regularly?
1. Yes   2. No

If no, what is the nature of irregularity?
1. Daily
2. Weekly
3. Seasonal

DRAINAGE FACILITY

13) Whether any drain available near your house?
1. Yes   2. No

14) Physical condition of the drain
1. Pucca
2. Kutcha

15) Do you face drainage problem?
1. Yes   2. No

If yes, What are the major causes of this problem?
1. Heavy rainfall
2. Drain block
3. Repairing constraints
4. Others--

16) Do you face water logging?
1. Yes   2.No

17) Which organization is responsible for repairing the drainage system?
1. Privately
2. WASA
3. City Corporation
4. LGED
5. Others--

SANITATION FACILITY

18) Structure of the latrine
1) Pucca
2) Kutcha
3) Semi-pucca
4) Others (Specify)----------------------------------

19) How many people use a latrine?
1. 1-5
2. 6-10
3. 11-15
4. 16-20
5. 21-25
6. 25+

20) Who is responsible to repair the latrine?
1. Privately
2. City corporation
3. LGED
4. NGOs
5. Shared with others family
6. Others (Specify)---

WASTE DISPOSAL FACILITY

21) Where do you dispose of the waste material?
1. Dispose through municipal drain
2. Dispose to the open space
3 Dispose near the house
4. Heap on road side
5. Dispose to the city corporation dump
6. Pond
7. Others (specify)-----------------------------------

ELECTRICITY FACILITY

22). Is there any electricity facility in your house?
1. Yes   2. No

If no, is the electricity available on the roadside to your house?
1. Yes   2. No

If yes, why did not you take this facility?
1. No ability to pay electricity bill
2. Kerosene is cheaper than electricity
3. No need
4. Others (Specify)----------------------------

ROAD

23) Physical condition of the access road
1. Pucca
2. Kutcha
3. Brick soling

24) Mode of transport from house to working place
1. On foot
2. Rickshaw
3. Public bus
4. Public bus and on foot
5. Others

25) Distance from the house to work place (km).
1. <1
2. 2-5
3. 6-10
4. 11-15
5. 16-20

26) Cost of transportation from living place to working place (Tk)
1. 1-5
2. 6-10
3. 11-15
4. 16-20

27) Travel time from living place to working place (Minute)
1   30-45
2   46-60
3   61-75
4   76-90
5   90+

28) Facilities of the Area

Facility	Distance of the nearest facility	Quality of Service
Hospital / Clinic		
Community Center		
Shopping Center		
Park / Play Ground		
Primary School		
Katcha Bazar		
Grocery Shop		
Place of Prayer		

Code

Distance of the Nearest Facility	Quality of Service
1. Within the neighborhood	1. Very good
2. <1 km	2. Good
3. 1-2 km	3. Moderate
4. 3-4 km	4. Bad
5. 4 -5 km	5. Very bad
6. More than 5km	

29) Violence against workers at the residence--

30) What kinds of Violences do you face in traveling time? ---------------------------------

31) Do you face any social problem in your locality?--

Comment (if any)--

Signature of the Surveyor

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF URBAN AND REGIONAL PLANNING

Research Title: Accommodation Problems of Garment Workers in Dhaka City

(Questionnaire for the proprietors of the garment)

(Only for research purpose)

Sample no-------------------   Date----------------

Name of the respondent: ---

Designation of the respondent:---

1) Location of the Garment: --

2) Whether any initiative for accommodation facilities of this garment's workers?

1. Yes

2. No

3. If yes, What kind of accommodation facilities provided?

.

4. If no, Why haven't undertaken this type of facilities?

5. Whether any allowance given for accommodation to the workers?

1. Yes

2. No.

6. If yes, Amount of the allowance: Tk................./Month

7. What type of accommodation facilities may be provided for the workers?

Your Comments:

Signature of the surveyor

Appendix - B

Comparison of Water Supply Conditions Among the Study Area

Sl No	Area	Water Supply
1	Bawniabad Tin Shed Colony	Most of the people of this study area are mainly dependent on tube well. The supply line is absent here. People use tube well for regular use. Dependency per tube well is about 76.
2	Rupnagar Tin Shed Colony	Mainly people are dependent upon Tube well. The number of water supply is also low here. Most of the people use tube well for bathing, washing cloths and other regular purpose. Dependency per tube well is about 86.
3	Pallabi Molla Bosti	There are some tanks for daily use of the people but most of the people have to rely upon tube well. Besides there is little provision of water supply offered by WASA. The Average dependency per tube well is about 88.
4	Mohakhali Sattala Bosti	People of this area have to dependent upon wells and tube well parallely. Besides there is also water supply for limited users. Water supply dependency per tube well is about 70. Most of the time they have to rely upon well for washing cloths, bath, drinking with all other types of regular use of water.
5	Karail Bosti	People of this area mainly dependent on well. Moreover there is a lake over this area. So most of the people use lake for bath, culinary use. Average dependency per tube well is about 70. Wells that are open all the time; causing skin disease, diarrheal and other infected diseases.
6	Manda Jamidar Bosti	Most of the people of this area dependent on tube well Besides there are roads side stand pipes but most of the time it is ill maintained. Average tube well dependency is about 75. If tube well is damaged, the owners do not take care of that, so people have to face problems like they need to buy water from long distance or have to drink dirty water.

Appendix - C

Comparison of Sanitation Conditions Among the Study Area

Sl No	Area	Sanitation
1	Bawniabad Tin Shed Colony	Maximum latrines of this study area are semi pucca. Average 60 people rely on a same latrine. The condition of latrines is very bad and most of latrines are open. Thus diseases spread from latrines.
2	Rupnagar Tin Shed Colony	Most of the latrines are semipucca. The average number of kutcha latrines is higher than semi pucca latrines. On average 70 people have to rely on same latrines.
3	Pallabi Molla Bosti	Most of the latrines are semi pucca. In an average 55 people have to use same latrines. Moreover there is no separate arrangement for the female.
4	Mohakhali Sattala Bosti	Most of the latrines are Semi-pucca and kutcha. As kutcha latrines are here, in most cases the out let is mixed with drains, polluting the environment. In an average 60 people have to use same latrine per day.
5	Karail Bosti	Most of the latrines are kutcha and semi-pucca. As there are semi pucca latrines, out let is mixed with nearby lake causing water pollution with chronic diseases to resident people In an average 70 people have to dependent on same latrine.
6	Manda Jamidar Bosti	Most of the latrines are semi pucca and kutcha. Latrines are full of dirt and filth. People do not wash the latrines though it is full of stool. Thus germs of different diseases spread out in the water and people have to face various diseases. Average 60 people uses the same latrine here

Appendix - D

Comparison of Waste Disposal Conditions Among the Study Area

Sl No	Area	Waste Disposal
1	Bawniabad Tin Shed Colony	Most of the resident do not have adequate facilities for garbage disposal. Wastes are mainly disposed near the houses, sometimes on roadside. Few people dispose waste nearby municipal drains which block drains in the rainy season.
2	Rupnagar Tin Shed Colony	Most of the people dispose wastes near their houses. Sometimes wastes are disposed in nearby drains, which blocks drains and some residences throw raw solid wastes in nearby dustbins and low lands.
3	Pallabi Molla Bosti	Most of the people of this area throw solid wastes in nearby ditch. This creates bad odor, which pollutes the surrounding environment. Thus the people of this area live very unhealthy condition and sometimes it creates numerous diseases.
4	Mohakhali Sattala Bosti	Most of the people of this area throws solid waste near their house, open space and low lands surrounded their living place. This hampers their lives; crates bad odor and sometimes severe diseases are frequently found among the residences of this slum area.
5	Karail Bosti	Most of the time people of this area throw solid waste in nearby lake, which pollutes the water quality of this lake. There is no dustbin available for the residents. People always throw solid wastes near their houses.
6	Manda Jamidar Bosti	As people of the area staying with bamboo shaded and the ground area is surrounded by water, people throw solid waste in the water and sometime they also use municipal drains. Thus it pollutes water and people are affected by water born diseases frequently.

Appendix – E

Comparison of Drainage Facility Among the Study Area

Sl No	Area	Drainage Facility
1	Bawniabad Tin Shed Colony	There are drains here but due to lack of clearing, drains remain blocked most of the months and in rainy season, vast amount of waterlogging causes overflow of the nearby area.
2	Rupnagar Tin Shed Colony	There are no pucca drains in this area. Only the kutcha or natural drains discharge the waste or rainy water. When heavy rainfall causes, this drains cannot discharge the stormy water. As a result overflow of water run over these area. Unplanned or densely houses create problems to flow out the rainy water.
3	Pallabi Molla Bosti	There pucca drains are present in this area. The storm or rainy water discharged in the low laying areas. But in the rainy season the rainy water can not be discharged frequently for block the kutcha drains. The overflow and water logging in this area creates problems moving the residents of this area.
4	Mohakhali Sattala Bosti	The kutcha drains are full of garbage. In the rainy season water is logged and the nearby area is flooded and entire in their house nearby. Thus they face diseases like diarrhea or skin diseases. Moreover the open latrines are flooded and the germs are spreaded nearby areas also causing diseases.
5	Karail Bosti	Most of the drains are kutcha but there is no overflow of the drains because the people take care of these drainages. There is a better channel with nearby lakes. Thus in the rainy season the area is not flooded due to proper channelisation with water bodies.
6	Manda Jamidar Bosti	Most of the drains are pucca but due to proper maintenance and repairing constraints, drains are flooded during the rainy season. More over the width of the drains are also narrow which does not carry more water in the rainy season. Thus overflowed nearby areas.