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**INFORMAL FINANCIAL MARKET AND THE HANDLOOM  
AND SMALL SCALE COTTON TEXTILE SECTOR  
IN BANGLADESH**

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## PREFACE

As in many developing countries, the informal financial markets in Bangladesh are alleged to provide the bulk of the credit needs of the economy, particularly to the small scale sector which has little access to the formal (institutional) sources of credit. Despite various attempts to control and regulate informal financial transactions, their scale and pervasiveness of operations have expanded unabated. In the long debate on the usefulness and the performance of the informal financial market operations, and associated issues like the determinants of interest rates, inter-linkages among transactions, etc., some have labelled the markets as usurious, as 'fettters on growth' while others have considered them as desirable adjuncts to the process of brisk growth in trade and commercial operations. Corresponding to these two views, two diametrically opposite policy frameworks are envisaged; the first aims at controlling and ultimately eliminating informal financial transactions while the second aims at expanding the fund flows and increasing the competetiveness in the informal sector. Both lines of arguments however agree that there are imperfections in informal financial markets and that the interest rates usually obtaining in these markets are on the higher side.

Despite the considerable operational significance of the issues involved, and the implications these have for developing an optimal policy environment, information on these markets in Bangladesh remain highly inadequate. The study on the informal financial markets in Bangladesh, conducted by the Bangladesh Institute of Development Studies (BIDS) and sponsored by the Asian Development Bank and the US-Agency for International Development (US-AID), attempts to fill-up this gap in information and analyse some select issues such as the growth and the structure of the markets, formation of interest rates, mobilisation and use-efficincy of resources. A series of case

studies have been conducted under the project; all of them are now being reproduced as working papers. A survey to collect some primary level information on the markets and the characteristics of lenders and to know more about the organizational aspects of informal finance gathering and distribution has also been conducted. The survey findings along with those of the case studies are being used to prepare an overview paper on the informal financial markets in Bangladesh.

This particular study by Dr Reazul Islam examines the role of informal financial transactions in hand- and powerloom sector of Bangladesh. The author has surveyed 15 pitlooms, 28 semi-automatic looms and 6 powerloom units from the demand side and 14 traders, 4 banks, 4 handloom associations and one NGO from the supply side of the informal financial transactions. The study shows that trade credit, which flows down from the wholesalers in Norsingdi and Narayanganj to yarn traders and then to the manufacturers (weavers), is the predominant form of credit in this sector. Slightly less than a half of yarn stock is procured on credit, for which interest rates varying from 11 to 21 per cent are paid. There are other instances of trade credit, in dyeing for example.

The findings of the study however can have general validity only to the extent the sample chosen is representative of the sector in general. Given the small sample size, there can of course be some doubts about the representativeness of the sample. Nevertheless, the study has come up with some interesting findings which are useful in understanding the informal transactions as far as the textile weaving sector in Bangladesh is concerned. The TORs of the study is presented in Annex A.

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## INTRODUCTION

This study has been undertaken as part of the Urban Informal Financial Market (UIFM) studies conducted by the Bangladesh Institute of Development Studies. The objective of this study is to investigate the role played by the Informal Financial Market (IFM) in providing financial support to Handloom and Small Scale Cotton Textile Sector (Powerloom) in Bangladesh, and to evaluate whether it is desirable to develop Urban IFM Sector for promoting efficiency of Hand and Power looms.

The Handloom and Small Scale Cotton Textile Sector is probably the largest non-farm production activity in Bangladesh. The handloom capacity of Bangladesh as found in Handloom Census - 1978 is 437.01 thousand, of which 259.92 thousand looms (or 59.5%) are operational while 177.09 thousand are idle. On the other hand, there are about 10.76 thousand different types of powerloom operating in the country, of which about 8.76 thousand is of ordinary type. The handloom contributes about 60 per cent of Gross Domestic product (GDP) of the Small and Cottage Industry Sector, which in turn contributes about 45 per cent of the industrial GDP. Handloom mainly produces cotton cloth and in 1984-85 it produced about 713 million yds, which was 84 per cent of the total supply of cotton cloth in the country and 91 per cent of the domestic cloth production. Ordinary Powerloom Sector, on the other hand, experienced a tremendous growth in recent years. From a number of 277 looms in 1978 (Handloom Census -1978), its registered number as mentioned rose to about 8.76 thousand, giving an annual production of 47 million yards of cotton and 172 million yards of synthetic grey fabrics (1986). It has been alleged that the number of unregistered ordinary powerlooms (Hattersely type) could reach double the registered number of looms in Dhaka Division alone.

It is a well known fact that, in the handloom and powerloom sector, handloom always suffers from working capital problems. According to the Handloom Census - 1978, about 81 per cent of the non-operational handlooms are non-operational due to dearth of working capital. It has been revealed in a BIDS study that weavers with 1-2 and 3-5 looms can meet 38.5 and 43.6 per cent of their working capital requirements respectively, while weavers with 11-25 looms can meet 73 per cent of their working capital requirement which indicates that contribution to working capital from own sources of funds increases with the size of the unit. The component of working capital which is not met from own sources is usually mobilized from non-institutional sources. The Task Force for the Handloom - 1982 revealed in its report that weavers with upto 3 looms depend for more than 90 per cent of their working capital need on non-institutional sources. The rate of interest paid for non-institutional loans varied between 150 and 200 per cent.

In the absence of institutional credit, the informal sector has been the main source of finance to enable production in the handloom and cotton textile sector to continue, by adapting to the credit needs in various ways: by extending both kind and cash loans, by linking credit to trading activities and providing much needed working capital to weavers, etc. The IFM, on the other hand, is alleged to have secured its own short-run interest of maximizing financial returns through exploitative credit relations, by channelling producers' surplus to traders, etc. Against this, the formal handloom credit - 1983 had been extended to counteract the influence of the informal credit sources and thereby reduce exploitation of the weavers. Although the handloom credit is intended to give almost a cent per cent credit coverage to handloom weavers, it has been found from this study that in Norsingdhi area only 20 and 57 per cent of the pit and semi-auto loom weavers respectively have benefited from such credit. Positive impact of such credit

is quite clear for the semi-auto loom units, where credit purchase has fallen by 32 per cent for weavers who obtained handloom loans. However, for the pitloom weavers, it is seen that credit purchases made by weavers who obtained formal loans is 10 per cent higher than that made by weavers who did not obtain formal credit. This is because utilization of the loan is utilised to purchase machinery and equipment and for consumption needs, rather than for working capital.

The study has been conducted in Norsingdhi area, because it is one of the important handloom and powerloom centres in Bangladesh. It is also known for its famous trading centre - Baburhat, where handloom and powerloom traders from all over the country come for business trading. According to the Handloom Census - 1978, Norsingdhi has 56.42 thousand handlooms, of which 79.40 per cent are operational and the remaining 20.60 per cent are idle. Norsingdhi has the highest percentage of operational looms in the country. On the other hand, there has been an unprecedented growth of powerlooms in the Norsingdhi area. It has been estimated that there may be about 5.0 thousand registered powerlooms operating in the Norsingdhi area (old). It would be useful to mention here that this comprises about 47 per cent of the total number of registered powerlooms in the country (198586). The number of unregistered powerlooms may be more than double the number of registered looms. This survey for this study has included 15 pitloom, 28 semi-auto loom and 6 powerloom units on the demand side, and 14 yarn traders, 4 banks, 4 handloom associations and 1 Non-Government Organization known, as Bangladesh Rural Advancement Committee (BRAC).

The findings of the study show that main type of credit involved in hand and power looms sector is trading credit, which is important both for the manufacturers (hand and powerloom units) and the suppliers (yarn traders). The yarn traders get their credit from the wholesalers in Norsingdhi and Narayanganj and they in turn sell

their stocks on credit (partly) to manufacturers. It has been found that about 46 per cent of the yarn stock is bought on credit from the wholesalers, for which yarn traders pay rates of interest varying between 11 and 21 per cent. On the other hand, pit, semi-auto and power loom units buy 49, 51 and 36 per cent of their raw material requirements respectively on credit and pay annual rates of interest varying between 44 and 90 per cent for their credit purchase to retailers and wholesalers. It appears, therefore, that rates of interest charged by the yarn wholesalers are competitive to the interest rates by the institutional sources.

Besides credit sales of yarn, there are some informal credit transactions involved in yarn dyeing, but its importance in terms of volume of credit is insignificant. Informal credit finance in investment and expansion is also found to be less significant. Institutional loans for setting up or expansion of handloom and powerloom units are completely absent, but a few yarn traders in Hasnabad (25%) and Madhabdi (20%) have used formal loans for working capital. Traders in Narsingdhi, however, did not use any formal loans. Among the manufacturers the institutional loan used by pit and semi-auto loom units are from the Handloom credit - 1983, while for powerloom units, loan is obtained from commercial banks on short-term basis.

The study has been presented in the following manner: Chapter 1 gives a detailed background of the handloom industry describing existing capacity - operational and idle looms, types of loom used, level of employment, productivity, etc. Details on selection of samples and methodology used to collect data and related information pertinent to the study is discussed in Chapter 2. Chapter 3 gives the techno-economic characteristics of the manufacturing units selected as samples. It deals with parameters like investment cost, capacity utilization, employment, productivity, inputs requirement and their costs and economic efficiency (profitability). Aspects of the informal credit market have been discussed in Chapter 4. In

this chapter, structure of the credit market, identification of different sectors, interest structure and its composition, terms of credit, etc. have been discussed in detail. However, the credit market is analyzed here from the demand side i.e. from manufacturers' side (weaving units) and the discussion is mainly focussed on informal sources of finance. Chapter 5 examines the informal credit market from the supply side i.e. characteristics of the credit market is analyzed from the position of yarn traders, co-operatives, NGOs, etc. A detailed account of institutional credit is accommodated in Chapter 6, where emphasis has been given on drawing a linkage between the formal and informal credit market. An attempt has also been made, in the chapter, to measure the impact of institutional credit on non-institutional borrowing, in the form of reduction in credit purchase, term loan, etc. Chapter 7 has attempted to estimate the total investment and working capital demand for handloom and powerloom sector. In the process, measures have been suggested to re-organize the existing credit market, both informal and formal, to achieve appropriate coverage and utilization of loan, to realize efficiency and reduce exploitation of the handloom and powerloom entrepreneurs. In the final Chapter 8, some concluding remarks are incorporated in the light of the overall findings of the study.

## CHAPTER 1

### HANDLOOM INDUSTRY IN BANGLADESH

#### 1.1 Background

Handloom weaving goes back as early as the 17th century and had perhaps existed even earlier. It was an efficient industry at the time and played an important role in the economic activities of the Indian subcontinent. Gandhi's call during the Swadeshi movement in 1906 to boycott cotton textile goods from Lancashire, and the outbreak of the First World War led to the rise of such present day handloom centres day as Baburhat (Norsingdhi), Tangail, Kumarkhali, Shahzadpur and others.

With the independence of India, the handloom industry of East Pakistan was confronted with some serious problems. The supply of yarn was disrupted as most of the yarn-producing mills were located in India. The 11 modern textile mills which fell into Bangladesh were composite in nature and had little or no surplus yarn for the handloom industry. Moreover, a large number of the traditional Hindu weavers migrated to India. During the Pakistan period (1947-71), the handloom sector experienced a rapid growth in the early 1950s, with the Government lifting import restrictions and abolishing sales tax on yarn. This sector was brought under the Small and Cottage Industries Corporation (BSCIC) which was responsible for yarn distribution to the handloom weavers.

However, the handloom weavers always faced the problems of high prices and scarcity of yarn. The survival of the sector, in fact, rested on self-sustenance and the owners' initiative with little help from the Government. On the other hand, in India, the industry flourished since independence under Government intervention together with diverse financial incentives and policies imparting better treatment to the handloom industry than the mill sector.<sup>1</sup> After

independence, the Bangladesh Government set up a new Handloom Board in 1978 which took over the development of the handloom industry from the Small and Cottage Industries Corporation. Since its formation, the Handloom Board has taken some policy measures to develop the industry which appear to be quite in line with the Indian textile policy. Handloom is considered as a priority sector for development because of some of its characteristics such as labour intensity, female employment, product demand and also profitability.<sup>2</sup>

### 1.2 Handloom Capacity in Bangladesh

Because of the dispersed nature of the industry, the total number of handlooms established in different surveys do not correspond with each other. After independence, the Handloom Board undertook a comprehensive survey in 1978 which provided certain essential information on the structure and characteristics of the industry. The Handloom Census of 1978 established the total installed handloom capacity at about 437 thousand, of which two-fifths were idle at the time.<sup>3</sup>

TABLE 1.1  
HANDLOOM CAPACITY IN BANGLADESH

Division	Total Installed looms	Total Operational looms	Total Idle looms
Dhaka	183,612	116,002	67,610
Rajshahi	105,300	63,148	42,152
Chittagong	83,136	48,489	34,647
Khulna	64,967	32,282	32,685
<b>Total</b>	<b>437,015</b>	<b>259,921</b>	<b>177,094</b>

For administrative purposes, the country has been divided into four divisions. Table 1.1 gives the divisionwise distribution of the handlooms.

Dhaka division with the largest concentration of two fifths of the looms is followed by Rajshahi which shares about one-fourth of the total capacity. Chittagong division occupies only one fifth of the loom share, while Khulna has the lowest number of looms. The operational capacity of the total looms was found to be quite low: only about 59 per cent. This low utilization can be assigned to shortage of working capital, raw material supply and some seasonal variations in market demand. It is to be noted that the division which has the leading share of looms has also a higher utilization capacity. Rajshahi and Dhaka Divisions have higher utilization of about 67 and 63 per cent respectively, while Chittagong remains in third position with 58 per cent followed by Khulna with the lowest utilization of 50 per cent.

TABLE 1.2  
AVERAGE SIZE OF UNIT

Division	Number of Units	Total Looms	Total Operational looms	Total looms per unit	Operational looms per unit
Dhaka	84,415	1,83,612	1,16,002	2.18	1.37
Rajshahi	31,543	1,05,300	63,148	3.34	2.00
Chittagong	43,050	83,136	48,489	1.93	1.12
Khulna	38,272	64,967	32,282	1.70	0.84
Weighted Average				2.22	1.32

### 1.3 Size of the Production Units

The sizes of the units vary according to their locational characteristics. The average size in terms of installed and operational looms for the four divisions is shown in Table 1.2

The table shows that Rajshahi has the highest number of total looms per production unit (3.34) followed by Dhaka (2.18), Chittagong (1.93) and Khulna (1.70). The national weighted average size of production units for total and operational looms are 2.30 and 1.36 looms respectively.

TABLE 1.3  
NUMBER OF LOOMS WITH UNIT SIZE

Division	1-5 looms	6-10 looms	11-20 looms	21 and above looms	Total
Dhaka	1,40,763	20,845	7,660	14,344	1,83,612
Rajshahi	71,846	18,359	14,461	20,214	1,25,380
Chittagong	60,336	6,796	4,284	11,720	83,136
Khulna	38,726	2,802	1,207	2,152	44,997
Total	3,11,671	49,302	27,612	48,430	4,37,015
Percentage of the total	71.32	11.28	6.32	11.08	100

Source: Handloom Census - 1978.

The ownership pattern indicates that the handloom units are traditionally dominated by individual households. Table 1.3 shows also the size of household units with upto 20 looms, but those with more than 20 looms are considered as small factories.

It appears from the table that the handloom industry is dominated by unit size of upto 5 looms, and 71 per cent of the total looms fall under this category. Units with 6 to 10, and 11 to 20 looms occupy about 11 and 6 per cent of the total loom capacity respectively, while small handloom factories with 21 or more looms constitute about 11 per cent.

A recent enquiry undertaken by the Ministry of Industries (1982) shows that the share of small factories is 21 per cent.<sup>4</sup> The small handloom factories have no problems of capacity utilization. Given their small size and less working capital problem than the small household units, they purchase raw materials in bulk at very competitive prices. Together with this, reduced overhead costs, division of labour and better marketing facilities make them more viable than the individual household units.<sup>5</sup>

#### 1.4 Loom Technology and Types

The Handloom Census - 1978 established 4 kinds of looms: Pit-throw, Fly Shuttle and Semi-automatic. Their division-wise composition in the total capacity is given in Table 1.4.

The table shows that the Pit loom accounts for about 62 per cent of the total capacity followed by semi-automatic, which occupies about 23 per cent. The other two looms, Fly Shuttle and Pit-throw together share about 15 per cent of the total capacity. The division-wise distribution of different loom types varies considerably; for example, 90 per cent of the looms of Khulna and Chittagong are Pit, while in Rajshahi, Semi-automatic looms occupy 59 per cent of the

**TABLE 1.4**  
**DIVISION-WISE DISTRIBUTION OF THE HANDLOOM TYPES**

Division/ Types	Pit-fly	Pit-throw shuttle	Fly- shuttle	Semi-auto- matic or Chittaran- jan (CR)	Total
Dhaka	97,213	13,744	36,143	36,298	183,398
Rajshahi	40,527	2,650	16	62,058	105,251
Chittagong	74,000	6,351	308	1,963	83,122
Khulna	59,226	3,751	118	1,872	64,967
<b>Total</b>	<b>270,966</b>	<b>26,496</b>	<b>37,085</b>	<b>102,191</b>	<b>436,738<sup>a/</sup></b>
As a % of Total	62.04	6.07	8.49	23.40	100

**Note:** a/ Some rare types of loom are not accounted for.

total capacity. In Dhaka division, the share of Pit looms is just over 50 per cent.

Handloom technology in Bangladesh remained unchanged over the decades with very little technical improvement. One of the reasons for the low productivity of this industry can be ascribed to its rudimentary technology. Unlike Bangladesh, India has made substantial technological improvements to the old looms and has also developed new ones. There are at least 38 different kinds of looms at present in the Indian handloom industry.<sup>6</sup>

### 1.5 Locational Characteristics of the Industry

Although handloom is available throughout the country, traditionally it is concentrated in a few districts, mainly Dhaka, Pabna, Comilla and Tangail. These districts together account for about 70 per cent of the installed looms and over 78 per cent of the total operated looms.

Table 1.5 below shows the handloom concentration in the four districts.

Dhaka alone accounts for about 33 per cent of the total operational capacity and about 35 per cent of the total employment. The next two important centres are Pabna and Comilla, accounting for 22 and 16 per cent of the operational capacity respectively. Dhaka

TABLE 1.5  
LOCATIONAL CHARACTERISTICS OF THE HANDLOOM INDUSTRY

Districts	No. of units	Total looms	Operational looms	Employment
Dhaka % all Bangladesh	52649 (26.6)	120463 (27.6)	85965 (33.0)	303669 (35.8)
Pabna % all Bangladesh	19853 (10.1)	86063 (19.7)	56016 (21.6)	146979 (17.3)
Comilla % all Bangladesh	30034 (15.2)	59868 (13.7)	40627 (13.6)	157586 (18.6)
Tangail % all Bangladesh	15421 (7.8)	37406 (8.6)	21051 (8.1)	64820 (7.5)
<b>Total Bangladesh</b>	<b>197280</b>	<b>437015</b>	<b>259921</b>	<b>847597</b>

Source: Bangladesh Handloom Census, 1978.

has long been established as an important centre for handloom industry because of its skilled craftsmen and specialized products.<sup>7</sup> Even to this day, it continues to play a leading role in Bangladesh.

## 1.6 Input Characteristics

According to the Handloom Census of 1978, the handloom industry uses 94.5 per cent cotton yarn and the remaining 4.5 per cent is composed of cellulose, synthetic and other types. However, in recent years, synthetic yarn is becoming popular among the handloom weavers, as it yields better productivity being less vulnerable to end-breakage. It is increasingly becoming evident that there is a steady growth in the number of powerlooms using synthetic yarn as input; this has adversely affected the handloom industry. The finest yarn that can be woven in handloom ranges from 10s to 100s count. In the Indian industry, the woven fabric uses counts of this range.<sup>8</sup> However, in Bangladesh, handloom industry uses yarn between 10s and 80s count and commonly specializes in medium quality fabric.

According to the Handloom Census, handloom consumes about 71 per cent of medium quality yarn, and about 16 and 7 per cent of coarse and fine qualities respectively. It also appears that Dhaka, Chittagong and Khulna divisions mainly specialize in medium quality fabric, while Rajshahi (in North Bengal) produces finer quality fabric. This is a shift from the pre-partition position when North Bengal specialized in coarse to medium quality fabric.<sup>9</sup>

### 1.6.1 Domestic Sources of Supply and Requirement

Traditionally, the handloom industry depends on the modern mills for its yarn supply. Hand-spun yarn covers only 0.15 per cent of the total yarn production, which is consumed locally.<sup>10</sup> The textile

mills, which have a small weaving capacity, sell their surplus yarn to the private modern weaving and the handloom sectors. But the surplus yarn produced domestically is not sufficient to meet the demand of the handloom sector, so the shortfall in supply has to be met through imports. In 1985 about 30 per cent of handloom yarn consumption was met through import.

### 1.7 Output Characteristics

The handloom industry specializes in coarse to medium quality fabric, but there are still a few core pockets of weavers left who weave muslin, Jamdani and other fine materials for a small section of the society and for export purposes. Handloom fabrics, except for grey material, are mostly cloth pieces such as saree, lungi, gamcha, chaddar and other types, which are ready to be worn right

TABLE 1.6  
PRODUCT-MIX SHARE OF THE HANDLOOM INDUSTRY  
(IN PER CENT)

Division	Saree	Lungi	Gamcha	Chaddar	Others	Total
Dhaka	55.01	23.09	6.45	1.37	14.08	100
Rajshahi	72.43	10.99	9.84	6.74	-	100
Chittagong	4.50	82.94	2.84	3.74	5.98	100
Khulna	28.62	33.62	28.07	1.0	8.69	100
Bangladesh	47.61	31.23	8.77	1.50	10.89	100

Source: Handloom Census - 1978.

after weaving. The product-mix varies according to the location. For example, Pabna district specializes in sari pieces, whereas Chittagong is well known for lungis. Table 1.6 shows the product-mix of the handloom sector.

The table shows that sarree is the most important product, and constitutes about 48 per cent of the production followed by lungi, constituting about 31 per cent. The remaining 21 per cent is distributed among gamcha, chaddar and others. About 72.5 and 83 per cent of the total handloom production of Rajshahi and Chittagong divisions are sarree and lungi respectively. The handloom output has increased from 407 million to 713 million yards during FY 1974 to FY 1985.

Almost 98 per cent of all handloom products are marketed in weekly open markets known as 'hat' and only about 2 per cent through cooperatives and other associations. A long channel of intermediaries create a price differential of 30 to 40 per cent among the weavers and the ultimate consumers. It is the intermediaries who make most of the profit, while the weavers find it difficult to meet their production costs.

### **1.8 Institutional Support for the Handloom Industry**

The handloom weavers receive main institutional support mainly from cooperative associations and the Bangladesh Handloom Board (BHB).

About 79 per cent of the weavers in Bangladesh operate within the framework of Cooperative Industrial Unions at district, sub-division or thana levels, which are organised at the national level by the Jatiya Samabay Samity Ltd. (BJSS). Their main function is to provide purchasing and marketing facilities to the member societies. Although the coverage of handlooms under cooperatives is evi-

dently higher than in India,<sup>11</sup> the Handloom Census - 1978 reveals that just above 2 per cent of the weavers enjoy any service from these societies.<sup>12</sup>

The Bangladesh Handloom Board was formed in 1978 to identify the problems and the scope of future development of the handloom industry.<sup>13</sup> Although a number of development measures such as marketing, distribution and financial support to the handloom weavers were pursued by the Board, they met with little success.

A report of the Dutch Government on the Bangladesh Handloom Industry emphasised that the Board has too weak an organisational structure to be entrusted with the massive task of developing of this sector.<sup>14</sup>

### 1.9 Employment and Productivity of Handloom Sector

The Handloom Census has established that the sector generates direct employment of about 848 thousand and if the ancilliary employment is taken into consideration, the figure would be over a million. Potential further increase in employment has been emphasised in a report of the Planning Commission. The household characteristics of the production units enable most of the family members, sometimes even the very young (of 7 or 8 years of age) to contribute in the cloth making process. The employment involves family members or hired help either on regular or casual basis. Table 1.7 shows some essential characteristics of handloom employment.

Family members constitute about 58 per cent of the total employment, while hired regular and casual labour form about 30 per cent and 12 per cent respectively. The table indicates that the national average weighted employment <sup>operational</sup> per/loom is 3.26, which comprises family and hired labour of 2 and 1.3 persons respectively.

TABLE 1.7  
EMPLOYMENT IN THE HANDLOOM INDUSTRY

Divisions	No. of units	Total looms	Operational looms	Types of Employment						
				Family members	Hired		Total Hired	Total Employment	Employment/ Operational loom	
					Regular	Casual			Unit	Loom
Dhaka	84,415	1,83,612	1,16,002	2,14,989	1,36,015	51,248	1,87,263	4,02,252	4.77	3.47
Rajshahi	31,543	1,05,300	63,148	82,446	65,767	19,895	85,682	1,68,128	5.33	2.66
Chittagong	43,050	83,136	48,489	1,12,733	39,169	27,169	66,338	1,79,071	4.16	3.69
Khulna	38,272	64,967	32,282	81,592	9,978	6,578	16,554	98,146	2.56	3.84
Total	1,97,280	4,37,015	2,59,921	4,91,760	2,50,949	1,04,683	3,55,837	8,47,597	4.30	3.26
% of Total	-	100	59.48	58.02	29.61	12.37	41.98	100		

Source: The Handloom Census - 1978.

According to the Handloom Census, the productivity of a weaver can be calculated as 13.46 yards per day from the production level estimated in the survey. This estimate, however, does not account for different loom types and seasonal variations of production.<sup>16</sup> Another estimate could be made from the information given in the Statistical Year Book 1985, where the total production is based on the total yarn consumption of the handloom industry. According to this, the loom or weaver productivity is found to be 0.14 yards per day (based on 250 working days annually) which is only about 66 per cent of the production calculated from the handloom census. This estimate, however, does not take into consideration the loom types and cloth construction.

## NOTES

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13. Report of the Fact Finding Committee on Handloom, Ministry of Industries, Govt. of Pakistan, Karachi, 1956, P. 185.
14. Assistance to the Handloom Sector in Bangladesh, Ministry of Foreign Affairs, Government of Netherlands and Ten Cate Consultant, 1982, PP. 2-8.
15. Report on Handloom Sub-Sector, Planning Commission, Government of Bangladesh, Dhaka, January, 1980, PP. 26-27.
16. The survey was carried out from July to September, 1978 and took into account the bi-monthly production for the last two months. Handloom production is at its peak during September to January; the figures noted, therefore, are very likely for the low production period. Even then, the production figure appears to be over estimated.

## CHAPTER 2

## SELECTION OF SAMPLE AND SURVEY METHODOLOGY

## 2.1 Selection of Sample

Selection of samples has been done according to the TOR of the study. However, the exact number of samples could not be maintained so as to accommodate proportionate representation of different sectors and activities. Table 2.1 shows the details of the number of samples selected.

TABLE 2.1

## SELECTION OF SAMPLES, HANDLOOM AND POWERLOOM WEAVING

Activities	No. of samples proposed in TOR	No. of samples selected
Handloom Unit	40	43
Powerloom Unit	5	6
Yarn Trader	10	14
Bank	2	5
Co-operative Association	2	3
Bangladesh Rural Advancement Committee (BRAC)	-	1
<b>Total:</b>	<b>59</b>	<b>72</b>

**TABLE 2.2**  
**SELECTION OF SAMPLES ACCORDING TO LOCATION**

Activity area	Population			Sample selected		
	Handloom			Handloom		
	Pit	Semi-auto	Power- loom	Pit	Semi-auto	Power loom
Hasnabad	200	-	70	15	-	2
Goradia	-	150	-	-	12	-
Sreenagar	-	160	-	-	12	-
Sheker Char	-	60	-	-	4	-
Anandi and Norsingdhi	-	-	200	-	-	4
<b>Total:</b>	<b>200</b>	<b>370</b>	<b>270</b>	<b>15</b>	<b>28</b>	<b>6</b>

These samples are selected from four villages in Norsingdhi area. Table 2.2 gives the names of those villages and their populations in terms of number of units.

In selecting samples, the following characteristics of handloom weaving have been taken into consideration:

- a. Product-mix;
- b. type of loom;
- c. importance of the place as handloom area and as trading centre for handloom products;

- d. local input availability and output marketing; and
- e. available institutional support facilities.

It can be seen from Table 2.2 that pitloom weaving can be found only in Hasnabad area, where semi-automatic looms are totally absent. On the other hand, in Goradia, Sreenagar and Sheker Char areas no pitloom weaving is found. In Anandi and near Norsingdhi area the only type of loom found to be operating is power loom.

The type of input used is also found to vary in different locations. For example, in Goradia, Sheker Char and Hasnabad yarn counts of 20's and 40's are widely used, while in Sreenagar 32's and 40's yarn count are used. The use of higher count yarn is rare. It has been found that saree is the most widely woven product in all areas. However, in Goradia, 'Markin' is widely produced. In Hasnabad, out of 15 selected units, 2 units are found to be manufacturing lungi. In Sheker Char area, all the 4 selected units manufacture quilt cover, mosquito net and bed-spread.

Besides the above samples from hand and powerloom weaving, a number of traders, Cooperative associations and financial and other institutions were selected. Table 2.3 provides the relevant details.

The sample for traders, banks and associations were selected from those specific locations wherefrom the handloom and powerloom samples were selected. However, representative number of samples could not be maintained because respondents could not be found. Samples were selected from the nearest trading centre of the selected handloom and powerloom areas.

**TABLE 2.3**  
**SELECTION OF SAMPLE FROM TRADERS, ASSOCIATIONS AND**  
**INSTITUTIONS (HANDLOOM)**

Location	No. of Selected Samples				Total
	Traders	Bank	Co-operative	Other Institution	
Hasnabad (Amirganj)	4	1	1	-	6
Goradia, Sree- nagar and Anandi (Norsingdhi)	5	2	2	-	9
Sheker Char (Madhabdi)	5	2	-	1	8
<b>Total:</b>	<b>14</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>23</b>

## 2.2 Survey Methodology

The survey methodology to be followed for the study initially intended to follow an anthropological and participatory research method with the help of a check list, rather than a pre-designed questionnaire survey. However, the intended methodology was not followed because a similar kind of study (second case study), on 'Informal Credit Market on Handloom', at a different location, has already selected such a methodology. Therefore, it was found appropriate to select an alternative survey methodology, the pre-designed questionnaire method. It has been envisaged that use of two different methods of survey for two case studies would provide more analytical insight and also enable a comparative study of findings.

The mode of collection of data was based on structured questionnaires specifically designed for hand and powerloom weaving to establish their cost and return structures and to collect information relating to informal financial market activities. For yarn traders, handlooms Cooperative Association and financial institutions, semi-structured as well as open-ended questionnaires were used in collecting information pertaining to informal credit activities and to identify linkages between informal and formal financial institutions.

## CHAPTER 3

A PROFILE OF INDUSTRY FEATURING INPUT-OUTPUT  
CHARACTERISTICS, PROFITABILITY AND DIVERSIFICATION

## 3.1 Characteristics of the Industry

The characteristics of the industry are discussed in the light of level of investments in different types of units with different looms, working capital use, employment level and its type, capacity utilization, input-output relationship and family income per unit.

## 3.2 Investment Cost

## 3.2.1 Fixed Cost

Investment cost and its components are shown in Table 3.1.

It can be seen from the table that the total investment cost of pit, semi-auto and powerloom units are Tk. 18.83, 93.62 and 69.25 thousand respectively. The fixed cost in the total investment represents 57.76, 66.23 and 71.67 per cent of the cost for pit, semi-auto and powerloom units respectively. This indicates the relative capital intensity of the respective unit, which is highest for the powerloom, followed by semi-auto and pit loom. Among the fixed cost components, viz. land, structure and machinery and equipment costs, machinery and equipment cost is the most important component. It represents 67.50, 61.60 and 85.42 per cent of fixed cost for pit, semi-auto and powerloom respectively.

Table 4.1 also shows the fixed cost requirement for a single loom unit, with and without land cost. To install a single loom in pit, semi-auto and powerloom units, the fixed cost requirement

TABLE 3.1

## INVESTMENT COST OF HANDLOOM AND POWERLOOM UNITS

Type of unit	No. of sample	Average loom/unit	Cost per unit					Cost per loom		
			Land cost (Tk.)	Structure cost (Tk.)	Machinery and equipment cost (Tk.)	Total fixed cost (Tk.)	Working capital (Tk.)	Total investment cost (Tk.)	Fixed cost with land (Tk.)	Fixed cost without land (Tk.)
Pitloom	15	2.5	1020	2514	7343	10877	7953	18,830	4,351	3,943
Semi-auto loom	28	5.93	4571	19232	35205	62008	31615	93,623	10,457	9,686
Powerloom	6	2.6	2617	4617	42397	49631	19617	69,248	19,089	18,082

is 4.35, 10.46 and 19.09 thousand with land, and Tk. 3.94, 9.69 and 18.08 thousand without land respectively.

### 3.2.2 Working Capital

Working capital need for the handloom and powerloom units is the most important component of investment cost. Table 3.1 shows that the working capital components of pit, semi-auto and power loom units are Tk. 7.95, 31.62 and 19.62 thousand respectively, correspondingly representing 43, 32.55 and 27.45 per cent of the total investment costs. The working capital used for different types of unit is calculated from their use of yarn and other inputs. It would be meaningful to estimate the working capital used per loom as fixed investment costs are estimated similarly. Table 3.2 shows the working capital used for a single pit, semi-auto and power looms unit, which are calculated from Table 3.1.

**TABLE 3.2**  
**EXISTING LEVEL OF WORKING CAPITAL (W.C) PER LOOM (TK.)**

Loom	W.C/Unit	No. of Loom/ Unit	W.C/Loom
Pit	7,953	2.5	3,181
Semi-auto	31,615	5.93	5,331
Power	19,617	2.6	7,545

From the table, it can be seen that the working capital used per loom for pit, semi-auto and power loom is Tk. 3.18, 5.33 and 7.54 thousand respectively.

Pit loom requires the lowest working capital, which increases by 67.61 and 236.5 per cent for semi-auto and powerloom respectively, compared to the pit loom.

The increase in requirement of working capital for semi-auto and power looms is necessitated because the tana (warp beam) used in pit loom has the shortest length i.e. yarn content in the beam is less; it increases progressively for semi-auto and powerlooms.

### 3.3 Investment Cost Requirement for a Single Loom Unit

It would be possible to estimate, from the previous two sections, the requirement of investment fund for a single loom unit. Table 3.3 shows the average investment cost of a single loom in pit, semi-auto and powerloom units.

TABLE 3.3  
INVESTMENT COST OF SINGLE LOOM UNIT

Loom Type	Fixed Cost (Tk.)		Working capital (Tk.)	Total Investment Cost	
	With land	Without land		With land	Without land
Pit	4,351	3,943	3,181	7,532	7,124
Semi-auto	10,457	9,686	5,331	15,788	15,017
Power	19,089	18,082	7,545	26,634	25,627

The table shows that the total cost of investment per loom for pit, semi-auto and powerloom units is Tk. 7.53, 15.79 and 26.63 thousand with land cost, and Tk. 7.12, 15.02 and 25.63 thousand without land cost, respectively.

### 3.4 Employment Levels and Types

Employment level and their types for pit, semi-auto and power looms are shown in Table 3.4. The details may be seen in Appendix 3.1.

TABLE 3.4  
EMPLOYMENT CHARACTERISTICS OF HAND AND POWER LOOM UNITS

Type of Unit	Employment per unit			Employment type per unit/ <sup>1</sup>			Employment/loom		
	Family	Hired	Total	PT	PT	Total	PT	PT	Total
Pitloom	8.4	5.4	13.8	4.6	9.2	13.8	1.84	3.68	5.52
Semi-auto loom	8.3	20.4	28.7	14.6	14.1	28.7	2.46	2.38	4.84
Powerloom	4.8	13.0	17.8	13.9	3.9	17.8	5.35	1.50	6.85

<sup>1/</sup> FT: Full-time; PT: Part-time.

The table shows that the employment levels of pit, semi-auto and powerloom units are 5.52, 4.84 and 6.85 persons respectively. Family employment represents 60.1, 28.9 and 27.0 per cent of the total employment for the corresponding units. This shows that pit loom units are more family based i.e. family members' participation in production process is relatively more, than in semi-auto and power loom units. In fact, most of the semi-auto and power loom units surveyed were small factory type units.

Employment types show that 35.3 per cent of pit, 50.83 per cent of semi-auto and 78.10 per cent of powerlooms employment are full-time employment. The characteristics of the full-time employment show that, among the family members, full-time employment is highest for powerloom unit (73%), followed by pit (31%) and semiauto (29%) loom units. Among hired employment, again, the powerloom has the highest level of full-time employment (80%), followed by semi-auto (60%) and pit loom (37%).

### **3.5 Input-Output Characteristics**

#### **3.5.1 Input-Characteristics**

The inputs used in handloom industry are yarn, dyes, and chemicals, sizing materials (flour, rice powder, maize, starch, etc.) and fire woods. Among these, the main input is yarn which represents about four-fifths of the total raw material cost. It has been found that among the samples selected from handlooms, the main yarn counts used are 20's, 32's and 40's.

Appendix 3.2 shows that 20's yarn count is only used in Hasnabad in selvedge preparation for lungi, while the main body of the lungi is prepared with 40's count. It was noted before that in Hasnabad the use of pit loom weaving is predominant. In Sreenagar and Gora-

dia, only 40's count yarn is used for sarcee making, while in Sheker Char 32's and 40's counts are used. For power loom weaving the input yarn is polyester. Polyester weaving does not need any sizing materials, therefore main input cost is yarn cost.

The total annual yarn consumption of the samples selected is 314.57 thousand lbs. with an estimated annual value of Tk. 14.64 million in grey and Tk. 16.60 million in dyed forms. Of the quantity consumed, 20's, 32's and 40's cotton represent 2.37, 2.29 and 85.86 per cent of the total consumption respectively, while polyester shares the remaining 9.48 per cent. Therefore, 40's cotton yarn is the most widely used input to the handloom sector in the Norsingdhi area. The per-enterprise annual consumption of different counts of yarn is 143.50 thousand lbs. for pitlooms, 460.49 thousand lbs. for semi-auto loom and 258.70 thousand lbs. for powerlooms, while the corresponding annual consumption of yarn for pitloom, semi-auto loom and powerloom are 57.40 thousand lbs., 77.65 thousand lbs. and 99.50 thousand lbs. respectively.

### 3.5.2 Output Characteristics

The main products produced in the selected areas are lungis, sarcee, quilt cover, mosquito net and bed-spread. Appendix 3.3 shows the product characteristics with locations where they are manufactured.

From the appendix, it can be seen that lungis are only produced in a few handloom units in Hasnabad. It represents only about 0.93 per cent of the total product quantity (yds.). On the other hand, sarcee is produced in Hasnabad, Sreenagar and Goradia and represents 55.66 per cent of the total production. Sarcee is produced both in pit and semi-auto looms. However, better quality sarcees are usually woven in semi-automatic looms. In Goradia, besides sarcee, grey markin

cloth is also produced, which represents about 24.18 per cent of the total production. Quilt cover and mosquito net are found to be produced only in Sheker Char and these products constitute 3.98 per cent of the total production.

Powerloom product is mainly polyester cloth, usually measuring between 20 and 50 yards in length. Product characteristics of the selected units are almost identical. All the powerloom units in Hasnabad, Anandi and Norsingdhi produce polyester 'than' (piece) using almost identical yarn quality. Polyester cloth production represents about 10.25 per cent of the total production.

The characteristics of handloom product have a change in recent years. It has been observed that more power looms are under installation and use of polyester fibres are on the increase. In Sheker Char, a few years back, sarce used to be the main product of handloom units, but presently they are mainly producing quilt cover and mosquito net. This diversification is mainly due to availability of raw material (yarn) and easier marketability.

### **3.6 Capacity Utilization**

Capacity utilization of handloom and powerloom weaving is measured in two ways:

- a. Capacity utilization based on installed and operational looms, and
- b. Capacity utilization based on operational characteristics viz. average annual hourly operation compared to the estimated achievable production.

Here, (a) will be referred to as utilization (capacity) while (b) as utilization (operation).

### 3.6.1 Utilization (Capacity)

Utilization based on installed and operational looms for pit, semi-auto and powerloom is shown in Table 3.5.

TABLE 3.5

Loom	Average Installed loom	Average Operational loom	Utilization (%)
Pit	2.56	2.50	70.27
Semi-auto	7.29	5.93	81.34
Power	2.70	2.60	96.15

The table shows that powerloom units have the highest utilization level of 96.15 per cent, followed by semi-auto loom units of 81.34 per cent, while the pit loom has the lowest level of utilization of 70.27 per cent. The main reasons for looms being idle are found to be their poor mechanical condition and shortage of working capital. The working capital shortage, however, is found to be more prominent for pit than the other looms.

### 3.6.2 Utilization (Operation)

Table 3.6 shows the capacity utilization of pit, semi-auto and powerloom units calculated on the basis of operational characteristics observed during the peak and non-peak periods of operation. The details may be seen in Appendix - 3.4.

To estimate the level of utilization, it is assumed that handloom units have annual operating days of 350 on single shift (8 hours) or per day (12 hours) basis. The powerloom unit, on the other hand, will operate the same number of days but on 2-shift basis. It has been observed from the survey that all the handloom units operate throughout the year, except during religious festivals. The number of 350 working days was found to be well-represented among the samples selected.

Capacity utilization based on these two estimates, viz. per shift and per day basis shows that pit and semi-auto looms have very high levels of utilization, 108 and 119 per cent respectively. However, the level of utilization falls to 72 per cent for pit and 79 per cent for semi-auto loom, when utilization level is measured on per day (12 hours) basis. Appendix 3.4 shows that during the peak period both the looms operate about 12 hours a day, while during non-peak period, about 10 hours. It is, therefore, possible to increase the utilization level of the looms during the non-peak period, provided demand for handloom products is there.

TABLE 3.6

Type of unit	Operational month			No. of hours of operation	No. of expected hour of operation		Utilization level (%)	
	Peak	Non-peak	Total		8 hours	12 hours	8 hours	12 hours
Pitloom	5.27	6.73	12	3022	2800	4,200	108	72
Semi-auto loom	5.29	6.71	12	3320	2800	4,200	119	79
Powerloom	7.5	4.5	12	5090	5600	-	91	-

The power looms usually operate on two-shift basis (6 A.M. to 2 P.M. and 2 P.M. to 10 P.M.). The level of utilization, here, found to be 91 per cent, is quite a high achievement.

It appears that the levels of utilization for pit, semi-auto and power loom achieved in Harsingdhi area are significantly high. Increases in utilization (operation) would not have a very significant effect on production. Hence, any increase in production of the sector could only be achieved by reducing the number of idle looms. However, further increase in efficiency of the existing operational looms can be brought about by improving technology to achieve a high level of productivity, by efficient use of inputs and by developed marketing.

### 3.7 Family Income

Table 3.7 shows output values, value-added and family incomes for pit, semi-auto and power loom units. The details of family income calculation may be seen in Appendix 3.4.

**TABLE 3.7**  
**OUTPUT VALUE, VALUE-ADDED AND PROFITABILITY OF HANDLOOM**  
**AND POWERLOOM UNIT**  
**(IN TAKA)**

Loom	Output value	Value-added	Annual family income	Family income per loom
Pit	2,02,516	49,151	14,456	5,782
Semi-auto	6,55,293	1,69,801	55,083	9,289
Power	4,02,370	1,29,755	67,247	25,864

The table shows that semi-auto loom unit has the highest output value of Tk. 655.29 thousand, followed by power- and pit loom units, of Tk. 402.37 and 202.52 thousand respectively. Value-added contributions of these units correspond with their level of output and show semi-auto loom units to have the highest value-added (Tk. 169.80 thousand), followed by power -- (Tk.129.76 thousand) and pit loom (Tk. 49.15 thousand) units.

The profitability of the units, however, does not correspond with their value-added ranking for semi-auto and power loom units. Powerloom unit, although having lower level of value-added than the semi-auto loom unit, has the highest level of annual profit of Tk. 67.23 thousand, while the semi-auto loom unit has the second highest annual profit of Tk. 55.08 thousand. Pit loom unit has the lowest annual profit of Tk. 14.46 thousand.

So far, the discussion has focused on profitability of a production unit. It would be useful, for analytical purposes, for profitability to be discussed on loom basis. Table 3.7 also shows loom-wise profitability of pit, semi-auto and powerloom units. It shows that the profits per loom of a pit, semi-auto and powerloom unit are Tk. 5.78, 9.29 and 25.86 thousand respectively. Therefore, profit generated by the powerloom is about 4.84 and 2.90 times higher than the pit and semi-automatic loom respectively.

### **3.8 Changes of Production Technology**

At the time of the Handloom Census - 1978, there were only 277 powerlooms in the country, out of which 214 were located in Dhaka. According to the Department of Textiles, there are about 8.8 thousand ordinary powerlooms in the country, of which, about 5 thousand are operating in the Norsingdhi area.

In recent years there has been a tremendous rise in the number of powerlooms. Official statistics given above have grossly underestimated the actual capacity of powerlooms. Many of the units are operating unregistered or with much higher installed capacity than stated at the time of registration. These looms mainly produce grey polyester fabric and sell their output to wholesalers in Dhaka for dyeing and printing. Some of the reasons observed for this increase in powerloom capacity are:

- a. raw material availability;
- b. extra premium on sales, when output is marketed in India through backdoor;
- c. good profit margin because of less power cost - usually part of the power cost is paid through informal arrangements with the local Power Development Board; and
- d. high productivity, but relatively low wage cost, which helps to realise higher surplus.

These reasons, inter alia, have caused a tremendous growth in the number of powerloom in the Norsingdhi area. It has been observed that the local engineering workshops are manufacturing powerlooms (Hattersely type) in Madhabdi and Norsingdhi areas.

The survey has investigated the willingness of the existing pit and semi-auto loom entrepreneurs to change their production technology to powerloom weaving. Table 3.8 shows the results obtained.

From the table it appears that about 67 per cent of the pitloom entrepreneurs would like to change to powerloom weaving compared to 61 per cent of the semi-auto loom. Among the pit loom entrepreneurs, there is a general belief that they will generate much more profit if they can change to powerloom technology. On the other hand a sizeable number of semi-auto loom enterprises are of factory

type with above 8 looms, and these units have been operating for the last 15-25 years; willingness among these entrepreneurs to change to powerloom was not pronounced. However, those entrepreneurs who have less than 3 looms would like to change to powerloom manufacturing technology, because they believe they can generate thereby greater surplus.

**TABLE 3.8**  
**WILLINGNESS AMONG ENTREPRENEURS REPRESENTING**  
**DIVERSIFICATION TO POWERLOOM**

Entrepreneur of the type of unit	No. of sample	Willingness to change to powerloom			
		Yes	% of total	No	% of total
Pitloom	15	10	66.7	5	33.3
Semi-auto loom	28	17	60.71	11	39.29

## CHAPTER 4

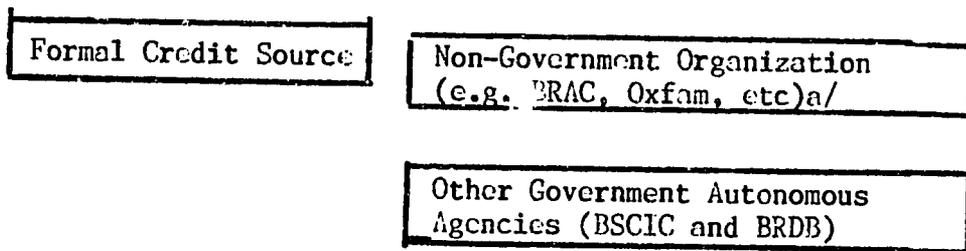
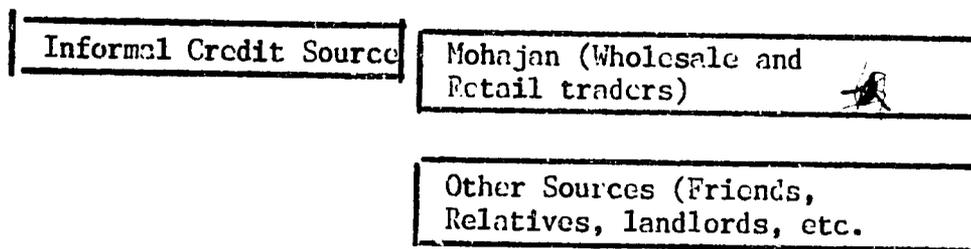
## INFORMAL CREDIT MARKET FOR HANDLOOM AND POWERLOOM WEAVING

## 4.1 Credit Structure of Handloom and Powerloom Weaving

The credit structure of handloom and powerloom weaving mainly encompasses sources of credit, area of credit needs and flow system. These are discussed below in turn.

## 4.2 Credit Structure in Terms of Sources

There are two main sources of credit, formal and informal. The structure of these sources may be shown in diagram 4.1.

(i) Formal Source:(ii) Informal Source

<sup>a/</sup> BRAC - Bangladesh Rural Advancement Committee.

Formal credit mainly comes from Commercial and Krishi Banks, non-Government organisations and from some autonomous Corporations and Boards responsible for the development of small and cottage industries. On the other hand the possible informal sources are: professional money lenders/pawnbrokers, mohajans (Wholesalers and Retailers) who trade with yarn and cloth, friends and relatives and other miscellaneous sources.

### **4.3 Structure of Informal Credit Market**

Interest lies here in identifying the informal credit sources and evaluating their role in delivering credit needs to the handloom and powerloom units. Hence, in this chapter, all discussion will be on credit structure of informal sources that relates with the production and trading channels.

#### **4.3.1 Area of Credit Needs**

Credit needs are mainly observed in the following areas:

- a. Credit needs for investment and expansion of production unit; and
- b. Credit needs for working capital for the operation of production unit.

Credit needs and deliveries of the selected production units, for this study, are investigated with the above two aspects in view. In the process of investigation, different actors in the credit market, the types of transactions, interest rate structure and composition and terms of credit are identified and their impacts on efficiency of the production units are analysed.

#### 4.4 Financing of Investment and Expansion Capital

##### 4.4.1 Investment Capital

None of the production units had taken credit from any formal source in setting up the establishment. The use of informal credit was limited to semi-auto and powerloom. Table 4.1 shows the detail of informal credit used by the production unit at the time of establishment.

It can be seen from the table that all pitloom units were established entirely with entrepreneurs' own funds, while 89.7 and 83.4 per cent of semi-auto and powerloom units respectively used own funds at the set-up. The remaining 10.7 per cent semi-auto and 16.6 per cent powerlooms units used own as well as borrowed capital in finan-

TABLE 4.1  
USE OF CREDIT IN SETTING UP THE PRODUCTION UNIT

Production unit	Total no. of unit	Average no. of loom	Unit used own capital		Unit used own and borrowed capital	
			No.	% of total	No.	% of total
Pitloom	15	2.5	15	100	-	-
Semi-auto loom	28	5.93	25	89.3	3	10.7
Powerloom	6	2.6	5	83.4	1	16.6

cing their investment. This clearly demonstrates that the role of informal sector financing in the establishment of hand and powerloom activities was limited.

The entrepreneurs' funds mainly came from savings, sale of assets, and other sources. Table 4.2 shows the share of these sources which contributed in financing investment for pit, semi-auto and power loom units.

The table shows that average fixed capital (excluding land) used in pit, semi-auto and powerloom units is Tk. 813, Tk. 9.39 thousand and Tk. 43.17 thousand respectively. In financing fixed capital of the power loom, the savings of the entrepreneur contributed the highest share (66%) followed by semi-auto (58%) and pit loom (47%). The mobilization of fund from sale of assets in meeting the fixed capital was highest for pit loom, 44 per cent and for semi-auto and power loom, about 29 and 28 per cent respectively. The

TABLE 4.2  
SOURCE OF ENTREPRENEUR'S CAPITAL

Type of unit	% of total no. of units	Average <sup>a/</sup> own capital (Tk.)	Sources of Fund (%)			
			Savings	Sale of Assets	Others	Total
Pitloom	100	813	46.74	43.63	9.63	100
Semi-auto loom	89.3	9,387	58.30	28.58	13.12	100
Powerloom	83.4	43,167	65.78	27.74	6.48	100

<sup>a/</sup> Own capital used at the time of initial set-up.

remaining set-up fund of between 6 and 13 per cent was met from other sources, such as, from wife's contribution, sale of cash crops, etc.

Sources of capital for units which were financed partially from own and borrowed capital show that the level of own contribution is higher than the borrowed capital. Table 4.3 provides the details of own contributions and borrowed capital and their sources.

TABLE 4.3  
SOURCE OF CAPITAL FOR PRODUCTION UNITS, FINANCED  
FROM ENTREPRENEUR'S OWN AND BORROWED CAPITAL

Type of unit	% of total unit	Source of capital		Average own capital (Tk.)	Source of own capital (%)			
		Own	Borrowed		Savings	Sale of Asset	Other	Total
Semi-auto loom	10.7	55.61	44.39	6,389	32.76	18.20	4.65	56.61
Powerloom	16.6	72.20	27.80	38,408	48.92	17.65	5.63	72.20

The table shows that entrepreneurs of semi-auto and powerloom units contributed on average Tk. 64 thousand and 38.5 thousand respectively, representing correspondingly about 56 and 72 per cent of the total investment capital. The remaining capital of about 44 per cent for semi-auto and 28 per cent for power loom units were financed from borrowed capital.

Table 4.3 also shows that between 51 and 67 per cent of entrepreneur's capital was generated from saving and sale of assets. Contribution from savings was higher for power-(49%) than for semi-auto loom units (33%). The remaining investment capital, about 5 per cent, was generated from other sources.

Sources of borrowed capital are of interest here and a matter of importance. Table 4.4 shows sources, interest structure and other details of borrowed capital.

**TABLE 4.4**  
**SOURCE, INTEREST STRUCTURE AND THE DETAILS OF BORROWED CAPITAL**

Type of unit	No. of unit	% of total unit	Average loan (Tk.)	Source of loan	Duration (year)	Interest rate (%)
Semi-auto loom	3	10.7	4,167	Landlord/ Businessman	2	52.41
Powerloom	1	16.6	12,000	Brother	1	50 (Implicit)

The table shows that 3 units of semi-auto loom, which were partly financed from borrowed capital, had on average used borrowed capital of Tk. 4.17 thousand per unit. These loans were taken from local landlords and businessmen. Average duration of these loans was about 2 years and the average annual interest rate paid was about 52.4 per cent. On the other hand, one powerloom unit borrowed Tk. 12.0 thousand at the time of establishment, for a period of 1 year. This money was borrowed from the entrepreneur's brother and apparently no interest was paid. However, there existed a reciprocal credit arrangement between the entrepreneur and the brother. Although there appears to be no interest payment involved, an implicit interest rate can be calculated. Such an interest rate can be estimated from the opportunity cost of the borrowed capital if lent in the informal credit market. According to the entrepreneur, such an interest rate could be between 35 and 40 per cent.

#### 4.4.2 Expansion Capital

Expansion of the production unit in terms of addition of structure, machinery and equipment and tools and the means of financing of such expansion have been studied. Table 4.5 shows the number of production units expanded, types of expansion and sources of capital for pit, semi-auto and power loom units.

It is evident from the table that no powerloom unit had made any expansion since establishment. In fact all selected powerloom units were established between 1985 and 1986 and were since then operating in the market. However, most of the entrepreneurs have expressed their willingness to expand. During the last five years, semiauto loom units had the highest level of expansion, about 40 per cent of these units have expanded as against 20 per cent of the pitloom units. In both types of unit, expansion in structure and machinery and equipment have taken place. The average cost of expansion was Tk. 4.17 and 17.15 thousand for pit- and semi-auto loom units respectively.

TABLE 4.5

## EXPANSION OF HAND AND POWER LOOM UNITS

Type of unit	Total no. of unit	No. of unit expanded	% of the total unit	Average cost of expansion (Tk.)	Type of expansion	Use of fund	
						Own	Borrowed
Pitloom	15	3	20	4,167	Machinery/ Structure	1	2
Semi-auto	28	11	39.28	17,154	Machinery/ Structure	6	5
Powerloom	6	-	-	-	-	-	-

Financing of the expansion capital shows that expansion of only one pitloom unit (33.4%) was financed from entrepreneur's own source of capital, while two other units (66.6%) used borrowed capital. In case of semi-auto loom units, the expansion of 6 out of 11 units was entirely financed by the entrepreneurs, while 5 units used both entrepreneur's fund as well as borrowed capital.

The sources used for mobilizing entrepreneurs' resources in financing the expansion capital for units which were entirely financed by entrepreneurs are shown in Table 4.6.

Table 4.6 shows that about 62 per cent of the pitloom expansion capital was financed from re-investment of profit, while about 29 and 9 per cent from sale of assets and other sources respectively. Financing through re-investment of profit for semi-auto loom units was much lower than for pit loom, about 44 per cent. Sale of assets contributed almost 50 per cent of the expansion capital, while other

sources met the remaining 6 per cent. In most of the cases, a significant proportion of the fund from sale of assets came from disposing of old looms (both pit and semi-auto looms).

For expansion of 2 pitloom and 5 semi-auto loom units, which were financed partly from own resources and partly from borrowed capital, it was seen that that for pitloom, entrepreneurs' contributed less in expansion capital than the semi-auto loom units. Table 4.7 shows the percentage of contribution from the entrepreneurs, sources of the funds and utilization of borrowed capital.

It can be seen from the table that average contribution of the entrepreneur's capital for the expansion of pit and semi-auto loom unit is Tk. 2.30 and 13.43 thousand respectively, correspondingly representing about 50 and 67 per cent of the total expansion capital. The entrepreneur's fund largely came from re-investment of profit of 73 and 85 per cent for pit and semi-auto loom units respectively. The remaining 15 to 27 per cent of expansion capital came from the sale of assets.

**TABLE 4.6**  
**SOURCE OF EXPANSION CAPITAL FOR ENTREPRENEURS**

Type of unit	Average of cost of expansion (Tk.)	Source of capital (%)			Total
		Re-invested profit	Sale of assets	Other sources	
Pitloom	3,231	62.22	28.89	8.89	100
Semi-auto loom	14,832	44.10	50.14	5.76	100

TABLE 4.7

## PERCENTAGE OF CONTRIBUTIONS AND SOURCES OF EXPANSION FUND

Type of unit	Average cost of expansion (Tk.)	% of own capital	% of borrowed capital	Average contribution (Tk.)	Source of fund		
					Re-invested profit	Sale of asset	Total
Pitloom	4,635	49.60	50.40	2,070	36.38	13.22	49.60
Semi-auto loom	19,940	67.38	32.62	11,560	56.98	10.40	67.38

It is interesting to note here that when the expansion capital was entirely financed by the entrepreneurs, the pit loom unit was proportionately financed by a proportionately larger share (62.2%) of re-investment of profit compared to the semi-auto loom units (44.4%). On the other hand, when the expansion was financed from own and borrowed capital, the share of re-invested profit for pit loom (36.4%) was lower than the semi-auto loom unit (56.98%). In fact, when the expansion was entirely financed by the entrepreneurs, the re-investment capital of pit and semi-auto loom was Tk. 2.01 and 6.54 thousand respectively, which correspondingly increased to Tk. 2.30 thousand for pit and to Tk. 13.43 thousand for semi-auto loom units when expansion was financed through own and borrowed capital. This shows that pit loom units have limited expansion to units where there were comparatively large number of units. On the other hand, semi-auto loom units for which less depended on sale of assets, financed their expansion capital through higher utilization of profit and borrowed fund.

Table 4.8 shows the sources of borrowed capital and credit details for 2 pitloom and 5 semi-auto loom units.

about 62 per cent for the loan taken from the landlord for a duration one year. On the other hand, interest rate paid for loans taken from local businessmen by the entrepreneurs of semi-auto loom units was about 52 per cent annually, with a duration of one and half years. It is to be noted that about 25 per cent of the borrowed capital used in semi-auto loom units was from relatives and no interest was paid for such loans. As mentioned earlier, there remain informal financial transactions between relatives, for which apparently no interest rate is paid by anyone. If the opportunity cost of such funds is taken into account, assuming they are lent to others, then such funds will generate an annual rate of at least about 50 per cent, which is the interest rate charged by the land lords and businessmen for borrowed capital in the market.

#### **4.5 Informal Credit Market Association with the Working Capital Requirement for Handloom and Powerloom**

From the above discussion, it has become clear that the role of informal credit market in meeting the requirements for fixed capital and its expansion has not been very significant. However, informal credit market is important in meeting working capital need for handloom and power loom weaving. In the following, the identification of different sectors contributing in informal credit market, terms of credit and interest structure are discussed specific to:

- a. Credit to meet raw material requirement, and
- b. Working capital loan.

#### **4.6 Raw Material Consumption of Enterprise and Informal Credit Associated with it**

Yarn is the main raw material for handloom and powerloom weaving. The total quantity of yarn which goes into the preparation of warp beam (tana) is the main cost that the enterprises incur.

Once the entrepreneurs manage to prepare a warp beam and mount it on a loom, woven fabric can be taken off from the beam, once in a week, and sold in the market to meet the other input costs, such as payment for wagon, repairs, spares, sizing materials, etc.

Therefore, the study has emphasized the role of informal credit market in meeting the yarn requirement, either in grey or in dyed form for the pit, semi-auto and powerloom units. From the survey, it has emerged that the professional money lenders play a less significant role in the credit market i.e. entrepreneurs very seldom borrow money from the professional lenders to buy the raw material (yarn) required. Yarn retailers and wholesalers play an important role in providing credit to the enterprises and credit transaction is concentrated between entrepreneurs and traders.

In discussing the informal credit market relating to yarn purchasing by the entrepreneurs, it would be useful to look into the yarn distribution system presently in practice in the country. Diagram 4.2 shows the existing yarn distribution system.

Yarn production of textile mills, after consumption in weaving section where available, is allocated among the tag dealers, Bangladesh Handloom Board (BHB) and Co-operative Association for distribution and marketing among the weavers. In case of BHB and Co-operative Associations, yarns are distributed among their members who have pass book or other form of membership card stating the number of looms installed and under operation. On the other hand, tag dealers, who are usually wholesalers, market the yarn to other wholesalers and retailers or directly to weavers.

From the flow diagram 4.2 of the yarn distribution system, the different factors in yarn marketing can be identified. The study has selected samples from all important actors to establish the marketing of yarn and informal credit market associated with the marketing.

#### 4.6.1 Sources of Yarn Purchase: Retailer and Wholesaler

The informal financial market in handloom weaving is mainly associated with the raw material purchase i.e. yarn purchase from the retailers and wholesalers. Therefore, to know about the informal financial transaction, it is essential to study in detail about the marketing of yarn from wholesalers and retailers to manufacturers.

From the survey of pit, semi-auto and powerloom enterprises, the sources of purchasing have been established and shown in Table 4.9.

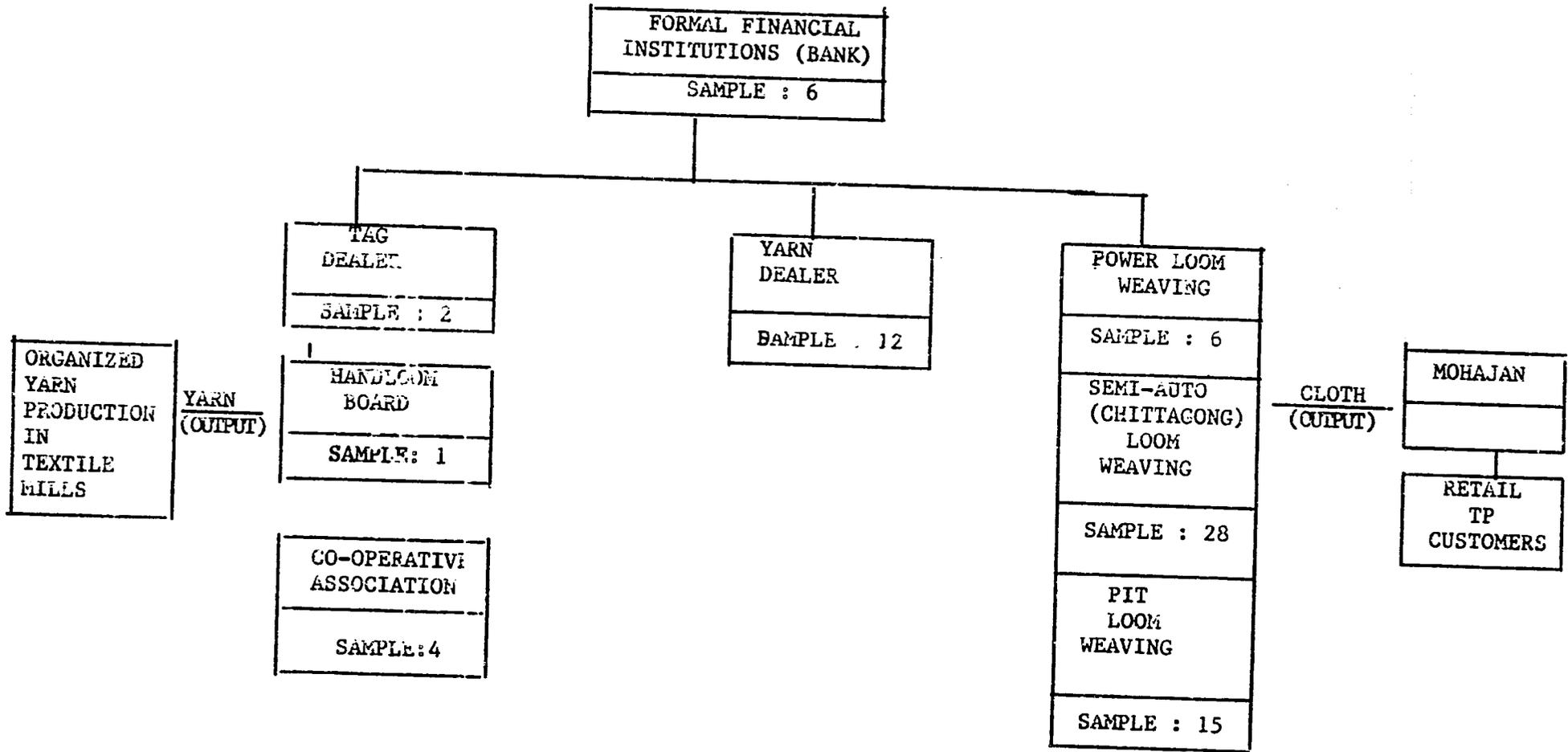
TABLE 4.9

#### SOURCE OF RAW MATERIAL PURCHASE OF HANDLOOM AND POWERLOOM UNITS

Type of unit	No. of sample	Source of purchase			Total	Location
		Retailer	Wholesalers	Wholesaler & retailer		
Pitloom	15	46.67	1.00	33.33	100	Hasnabad Norsingdhi
Semi-auto loom	28	21.43	50.00	28.57	100	Madhabdi Norsingdhi
Powerloom	6	-	100.00	-	100	Norsingdhi

Diagram 4.1

Yarn Distribution and Informal Credit Flow Diagram For Handloom Weaving



It can be seen from the table that purchase of yarn from the retailers is predominant among the pitloom units: about 47 per cent of them buy yarn from retailers. On the other hand, 50 per cent of semi-auto and 100 per cent of power loom units buy yarn from wholesalers. However, about 33 and 29 per cent of the pitloom and semi-auto loom units respectively buy yarn from both sources i.e. from retailers and wholesalers. These retailers and wholesalers are mainly in Hasnabad, Madhabdi and Norsingdhi from where the enterprises are selected. It appears, therefore, that preference of larger units viz. semi-auto and power loom units is for wholesalers, because they purchase a relatively larger quantity of yarn than the pit loom units.

The purchasing behaviour of enterprises shows that pit loom uses multiple sources of purchase within either retailers or wholesalers. Semi-auto and powerloom, on the other hand, prefer to maintain a single source of supply. Table 4.10 provides details of single and multiple sources of purchase used by the enterprises.

**TABLE 4.10**  
**SINGLE AND MULTIPLE SOURCES OF RAW MATERIAL PURCHASE**

Type of unit	Total sample	Source of purchase (%)		Total
		Single	Multiple	
Pitloom	15	26.7	73.3	100
Semi-auto loom	28	53.6	46.4	100
Powerloom	6	66.7	33.3	100

The table shows that pitloom enterprises use the highest percentage of multiple sources (73.3%) as compared to semi-auto (46.4%) and power loom units. The reason for using high level of multiple sources is because it gives them the opportunity to bargain and strike a better deal. Furthermore, it provides the benefit of having multiple credit sources. In the event that the entrepreneur fails to pay to one creditor, he uses alternative credit sources. Semi-auto and powerloom enterprises prefer to maintain a single source of supply, because in a bulk purchase a single source is preferable from the consideration of credit as well as quality of raw material. It is to be noted that semi-auto and powerloom enterprises who have small number of looms usually use multiple sources.

#### 4.6.2 Mode of Purchase

It has been found that almost all the hand and powerloom enterprises selected for the survey make credit purchase. Table 4.11 provides the monthly consumption of yarn (in lbs.) and its value, the percentage of enterprises who buy yarn on credit and proportion of the total consumption bought on credit for pit, semi-auto and powerloom units.

The table shows that the average monthly value of purchase of yarn is Tk. 8.88, 34.19 and 21.56 thousand for pit, semi-auto and power loom units respectively. About 93 per cent of the pitloom units make credit purchase as against 89 and 83 per cent of semi-auto and powerloom units respectively. Although the highest percentage of pitloom buys raw materials on credit, the proportion of yarn it purchases on credit (about 49%) is lower than for the semi-auto loom units (about 53%). The powerloom only purchase about 36 per cent of its total requirement of yarn on credit.

**TABLE 4.11**  
**CONSUMPTION AND SHARE OF CREDIT PURCHASE FOR HANDLOOM**  
**AND POWERLOOM UNITS**

Type of unit	No. of sample	Average monthly consumption(lb)	Value of consumption(Tk.)	% of <sup>1/</sup> units buying on credit	% of yarn bought on credit
Pitloom	15	192.0	8,883	93.34(14)	48.82
Semi-auto loom	28	744.64	34,190	89.29(25)	52.71
Powerloom	6	414.0	21,558	83.34(5)	35.65

<sup>1/</sup> Figures in bracket show the number of units that made credit purchases.

It can, therefore, be deduced from the table that powerloom has the least working capital problem, followed by pit and semi-auto loom units. Pitloom units overcome their working capital problem by making frequent purchase of raw material, hence, their proportion of credit is lower than for the semi-auto loom unit. This however, has an adverse effect on efficiency because of small warp beam. It appears from the discussion with the entrepreneurs that prior to 1983, the need for credit for handloom was more acute but, due to the handloom loan of Tk. 1000 million given to the weavers in 1983, the extent of the need has eased a little. However, not all the weavers have benefited from this loan as will be seen later.

The credit purchases are made from both retailers and wholesalers. Table 4.12 shows the average monthly credit purchase, frequency of purchase and duration of credit for pit, semi-auto and powerloom units.

TABLE 4.12  
VALUE, FREQUENCY AND DURATION OF CREDIT PURCHASE

Type of unit	% of credit	Amount of credit purchase (Tk.) per month	Purchase/ month	Source and value of credit (Tk.)			Duration (days)	
				Retailer	Whole-saler	Total	Retailer	Whole-saler
Pitloom	93.34	4,337	5	3,036 (70%) <sup>1/</sup>	1,301 (30%)	4,337 (100%)	10.3	15.5
Semi-auto	89.29	18,021	4	4,505 (25%)	13,516 (75%)	18,021 (100%)	11.8	18.8
Powerloom	83.34	7,685	3	-	7,685 (100%)	7,685 (100%)	-	17.8

<sup>1/</sup> Figures in bracket show % of share of credit purchase.

The table shows that the monthly credit purchase is valued at Tk. 4,337, Tk. 18,021 and Tk. 7,685 for pit, semi-auto and powerloom units respectively. A pitloom unit makes a higher number of purchases per month than semi-auto and powerloom units. This is because pitloom units mostly suffer from shortage of working capital. They usually sell their output and buy their yarn more often to ease their liquidity problem. It can be seen from the table that 70 per cent of the pit loom units buy on credit from retailers semi-auto and powerloom units buy 75 and 100 per cent on credit from wholesalers. The duration of credit shows that frequency of payment is higher for retailers than wholesalers. This is because retailers do not like to extend credit for a longer period, because they also buy on credit from the whole-salers, with whom they need to maintain a schedule of payment.

### 4.6.3 Payment of Credit Purchase by Cash

Based on the information provided in the above table and from the premium price paid per unit of output (lb.) bought on credit, the interest rate paid by pit, semi-auto and power loom units can be calculated. Table 4.13 shows the differential interest rate paid by the corresponding units for the proportion of yarn requirement bought on credit.

From the table it can be seen that retailers charge a higher level of interest rate compared to the wholesalers. The pitloom units paid highest level of interest rate of 90.38 per cent to retailers as against 67.18 per cent to the wholesalers. Retailers, on the other hand, charged semi-auto loom unit an interest rate of 75.45 per cent, which is substantially lower (by about 15%) than the interest rate charged from the pitloom enterprises. These differential rates of interest are found to be due mainly to the

TABLE 4.13

#### ANNUAL INTEREST RATE PAID BY PIT, SEMI-AUTO AND POWERLOOM UNITS

Type of unit	% of unit	Premium Price Paid per lb. of yarn (Tk.)		Interest rate paid to	
		Retailer	Wholesaler	Retailer (%)	Wholesaler (%)
Pitloom	93.34	1.18	1.32	90.38	67.18
Semi-auto loom	89.29	1.12	1.26	75.45	53.28
Powerloom	83.34	-	1.30	-	51.19

bulk purchases that the semi-auto loom enterprises make, regularity of purchase from the same yarn traders and the long trading associations that prevail between the traders and enterprises. Interest rates charged by the wholesalers to semi-auto and powerloom units are 53.28 and 51.19 per cent respectively. These are again substantially lower than the interest rate charged by the retailers. The main reasons for charging these low rates of interest are again the bulk purchases that these types of units make, regularity of purchases from the same traders and personal and trading relation that has developed over the years now, which makes the credit transaction risk free.

Comparison of the levels of interest rate between the retailers and wholesalers show that the retailers charged about 23 and 22 per cent higher interest rates than the wholesalers for credit sales to pitloom and semi-auto loom units respectively. The differences in interest rate are quite substantial and, thus, therefore, brings up the issue as to why the handloom weavers do not buy their yarn from the wholesalers, whereby they can save between 22 and 23 per cent of interest rate from the total payable rate. From the evidence gathered, it is revealed that (i) purchase of raw material from retailers can be in a small quantity for which retailers more readily cater to the enterprises than the wholesalers. Also, (ii) as pitloom units have higher frequency of purchase, the weavers feel comfortable to deal with the retailers and they maintain a better personal relationship with them. Furthermore, (iii) the pitloom weavers can bargain with retailers and sometimes make deferred payment to one retailer and meanwhile make purchase from a different retailer. Wholesalers, very often, refuse to sell on credit to pitloom or semi-auto loom units which buy yarn in small quantity. The reason for doing so appears to be due to the relative cost involved in dealing with credit sales to small purchases, when alternative large sales are readily available. However, they do negotiate small credits, but mainly to friends, relatives or to customers who are maintaining trading links for a number of years.

Finally, it was observed that there existed differences in interest rates according to location. Interest rates charged in Norsingdhi bazar by retailers and wholesalers are between 2 and 5 per cent lower than interest rates charged by the retailers and wholesalers in Hasanbad. However, there is found to be a marginal difference in interest rates between retailers in Madhabdi and Norsingdhi. Madhabdi retailers charged between 1 and 2 per cent higher interest than traders in Norsingdhi. Interest rate is rather variant on quality of yarn. Credit sales of high quality yarn is usually charged between 5 - 10 per cent more interest rate than the inferior quality of yarn of same count.

#### 4.6.4 Payment of Credit Purchase by Output

It has been found that only some of the semi-auto loom units pay for their credit purchase in output, while pit and powerloom units pay in cash. Out of the 28 semi-auto loom units 6 units, i.e. 21.42 per cent of the total number of units, are found to have paid for their credit purchase in output. It is interesting to note that those units which produce sarces and lungis, irrespective of type of units, always pay for their credit in cash. Payment in output is only observed for enterprises which are producing markin and quilt cover pieces. Among 28 units selected for semi-auto, 6 produce markin, 3 quilt cover and 1 mosquito net pieces. It has been found that out of the 6 units which are producing markin, 5 units, i.e. 83.3 per cent, pay in output for their credit purchase, while 1 unit (i.e. 33.3%) producing quilt cover also pays in output. All the 5 units which are producing markin pieces are located in Goradia, while the unit producing quilt cover is located in Sheker Char, Madhabdi.

Table 4.14 shows quantity and value of input, credit purchase, frequency of purchase and monthly production of semi-auto loom units which sell their output on credit.

TABLE 4.14  
QUANTITY AND VALUE OF INPUT CREDIT AND OUTPUT FOR SEMI-AUTO LOOM  
UNITS WHICH PAY IN OUTPUT

Product	Total no. of unit	% of unit buys on credit	Average monthly consumption (lb)	Value of input (Tk.) (monthly)	Value of input credit (Tk.)	Frequency of purchase/ month	Monthly output (yds.)
Markin	6	83.3	900	40,074	40,074	4	5,376
Quilt cover	3	33.3	660	27,400	27,400	4	3,550

The table shows that the average monthly consumption is 900 lbs. for units producing markin and 660 lbs. for the unit producing quilt cover. The corresponding value of yarn is Tk. 40,074 and Tk. 27,400. The entire yarn requirement of these units is purchased on credit and from the wholesalers. The frequency of purchase is found to be 4 times a month on an average.

Supplementing the above table with information on duration of credit and discount given per unit of output due to credit purchase of input, the interest rate paid by the enterprises can be calculated. Payment of credit in output is worked out on the output price. The lender i.e. wholesaler pays an output price, which is less than the market price, hence, the margin generated is the interest payment to the wholesalers. Therefore, paying for input credit in the form

TABLE 4.15

**DISCOUNT IN PRICE/UNIT OF OUTPUT, DURATION OF CREDIT AND INTEREST RATE PAID TO WHOLESALERS BY THE SEMI-AUTO LOOM UNITS**

Product type	% of unit buys on credit	Discount/unit of output (Tk.)	Duration of credit (days)	Rate of interest (%)
Markin	83.3	0.136	11.4	58.42
Quilt cover	33.3	0.15	14.0	50.47

of output, the entrepreneurs do not pay premium price on the input, but instead receive a negative premium for their output. Table 4.15 shows the discount in price/unit of output (yd), duration of credit and interest rates paid by the enterprises to the wholesalers.

The table shows that the interest rates paid to the wholesalers by the semi-auto units for two products viz. markin and quilt cover are 58.42 and 50.67 per cent respectively. The interest rate for the production of quilt cover is 7.75 per cent less. This is because semi-auto units located in Madhabdi which produce quilt cover buy raw materials in bulk from wholesalers and receive favourable prices. It is to be noted, however, that yarn used in production of quilt cover is usually of inferior quality than the yarn used for the production of markin pieces although the same yarn count (40's) is used. It also appears that the rate of interest paid for yarn in the production of markin is about 5.14 per cent higher (source

of yarn: wholesaler) than the rate paid for the part of consumption credit taken for producing saree (see Table 4.13). The reason for this higher level of interest rate is due to the quality of yarn used in producing markin pieces. It has been established from the survey that better quality yarns, which usually have such characteristics as higher tensile strength, uniformity and, above all, the exact length of yarn in the package, sell readily in the market at a premium price. Interest rate charged for such type of yarn is always higher than the inferior quality. It has, therefore, emerged that in Goradia, interest rate charged by the wholesalers is relatively higher than the average interest rate prevailing in other areas of Norsingdhi.

#### **4.7 Informal Credit Associated with the Dyeing of Yarn**

Among the pit, semi-auto and power loom units the entire products of powerloom and pitlo 1 units are produced in grey and finished forms (sarees and lungis) respectively. These products do not require any dyeing. On the other hand, semi-auto loom units produced both grey fabric and finished products. Table 4.16 gives the details.

From the table it can be seen that although all pitloom units produce fabric in finished form, they do not have their own dyeing facilities. On the other hand, about 18 per cent of the semi-auto loom units have their own dyeing facilities and produced about 64 per cent of their total product in finished form. Those units which have their own dyeing facilities are usually large units with 10 to 15 looms. As powerloom fabrics are produced in grey form, they do not require any dyeing facilities. Powerloom fabrics are sold in grey form to the wholesalers who market them in dyed form.

**TABLE 4.16**  
**AVAILABLE DYEING CAPACITY AND PRODUCT TYPES**  
**OF HAND- AND POWERLOOMS**

Type of units	No. of sample	% of unit with dyeing facilities	% of units produced fabric in the form		
			Grey	Finished	Total
Pitloom	15	-	-	100 (15)	100 (15)
Semi-auto loom	28	17.86	35.71 (1)	64.29 (18)	100 (28)
Powerloom	6	-	100 (6)	-	100 (6)

**TABLE 4.17**  
**PERCENTAGE OF UNIT, VOLUME OF CREDIT AND RATE OF INTEREST FOR CREDIT DYEING**

Type of unit	% of units used dyeing facilities	Average dyeing cost/unit (Tk.)	% of the total dyed on credit	Average credit amount (Tk.)	Duration	Rate of interest (%)
Pitloom	100	36,905	27	9,864	15	121.67
Semi-auto loom	46.43	48,545	16	7,767	15	97.32

Almost all production units buy a substantial portion of their yarn requirement in grey form. Yarns are then dyed from the local dyers. It has been found that credit dyeing is relatively more pronounced among the pitloom, than the semi-auto loom units. However, credit dyeing has been generally observed to be less in practice than the credit sales of yarns. Table 4.17 shows detail on credit dyeing and the rate of interest paid by the units which use credit facilities.

From the table, it can be seen that the average annual dyeing cost of pit and semi-auto loom units are Tk. 36, 905 and Tk. 48,545 respectively. Of this, only 27 and 16 percent of the dyeing cost for the corresponding units are met through credit. It has been observed that the premium charged on credit dyeing is Tk. 5 and Tk. 4 per Tk. 100 worth of dyed yarn for pit and semi-auto loom units respectively. The duration of credit is usually 2 weeks for both the types of looms.

The rate of interest charged on credit dyeing varies according to location. Dyers in Hasnabad, who mainly dye yarn for pitloom units charge a higher rate of interest than the dyers located in Goradia, Sreenagar and Sheker Char.

Rate of interest for credit yarn dyeing is between 31 and 34 per cent higher for pitloom and between 22 and 44 per cent higher for semi-auto loom than the interest which prevails for credit purchase of yarn from retailers and wholesalers. The reason for this high interest rate is the small number of manufacturers using credit dyeing facilities, who are, therefore, charged with a higher interest rate.

#### 4.8 Working Capital

The need for working capital to increase the level of utilization and efficiency of the handloom weavers has been emphasised by many studies. According to the Handloom Census-1978, the requirement of working capital has been assigned to be the main reason for non-operational looms.<sup>1</sup> About 81 per cent of the handloom units are said to be non-operational mainly due to the dearth of working capital. A BIDS study has estimated the contribution of the entrepreneurs, according to the size of units, to the total working capital requirement.<sup>2</sup> The study reveals that in terms of working capital availability, the smaller units are at a disadvantage compared to the larger units. It has been found that weavers with 1 - 2 and 35 looms can meet about 38.5 and 43.6 per cent respectively of their working capital need. On the other hand, weavers with between 11 and 25 looms can meet about 73 per cent of their working capital requirement. Hence, with the increase in the size of unit, the requirement of working capital from the borrowed or other sources decreases, at least, in terms of percentage of the total requirement. The problem of working capital for the smaller weavers is found to be even worse as described in a report prepared by the Task Force for the Handloom-1982.<sup>3</sup> According to this report, weavers with upto 3 looms depend for more than 90 per cent of their working capital need on the non-institutional sources. However, the report also mentions that larger units (above 20 looms) also have working capital problem.

Therefore, from the studies mentioned above, it is clear that availability of working capital is the main problem for handloom enterprises to achieve higher level of utilization and efficiency. Thus far, a component of working capital i.e. raw material (yarn) consumption has been dealt with very extensively. It has been found that 93.94, 89.29 and 83.34 per cent of the surveyed pit, semi-auto and power loom enterprises respectively meet correspondingly 48.82,

52.71 and 35.65 per cent of their yarn requirement from retailers and wholesalers on credit purchase. In the following, the existing and required level of working capital will be estimated identifying the sources from where the total working capital is met.

#### 4.9 Estimation of Working Capital Requirement and Its Proportion Met Through Credit Purchase

From the survey of 15 pitloom, 28 semi-auto loom and 6 powerloom units, it has been found that all the enterprises in the sample are faced with working capital problem. Table 4.18 shows the existing and required level of working capital and share of yarn value in working capital for pit, semi-auto and powerloom units.

TABLE 4.18  
EXISTING AND REQUIRED LEVEL OF WORKING CAPITAL PER LOOM

Type of units	No. of sample	No. of loom/unit	Existing level of W.C./loom (Tk.)	W.C. required/loom (Tk.)	% of short-fall of W.C./loom	W.C. in <sup>1/</sup> yarn form as R/M, W/P & F/G (Tk.)	% of total W.C. in yarn form
Pitloom	15	2.5	3,181	5,505	42.22	2,252	70.60
Semi-auto loom	28	5.93	5,331	7,774	31.42	4,311	80.87
Powerloom	6	2.6	7,545	9,162	17.65	6,747	89.42

**Note: 1/** W.C. : Working capital  
R/M : Raw material  
W/P : Work in progress  
F/G : Finished goods.

The existing level of working capital/loom for pit, semi-auto and power loom is Tk. 3.18, 5.33 and 7.55 thousand respectively. The required level of working capital is calculated based on 20 days yarn consumption, dyeing, sizing and other costs for material under process and finished stock for one week.<sup>4</sup> According to such estimates, the required level of working capital for pit, semi-auto and power loom weaving is Tk. 5.50, 7.77 and 9.2 thousand respectively.

From the table, it can be seen that the existing level of working capital is not adequate to meet the required level for all types of production units. The pitloom has the most acute of shortage of working capital of 42.22 per cent followed by semi-auto (31.42%) and power looms (17.65%). To meet this shortfall in working capital, the pitloom units make short length tana (short warp beam) which require less quantity of yarn and, therefore, pitlooms buy yarn frequently relative to the semi-auto and power loom units. The table also shows that raw material cost constitutes 70.8, 80.9 and 89.4 per cent of the working capital for pit, semi-auto and powerloom units respectively.

#### 4.10 Working Capital Loan

Apart from meeting the working capital need credit purchases of yarn from the retailers and wholesalers, entrepreneurs also borrowed money from institutional and non-institutional sources to meet their working capital need. Table 4.19 shows details of manufacturing units which have borrowed working capital and their sources.

From the table it can be seen that about 61 per cent of the semi-auto loom units have taken loan for working capital as against one-third of the pit and powerloom units.<sup>5</sup> Of these units a high percentage of units obtained loan from the institutional sources.

TABLE 4.19  
ENTERPRISES WHICH BORROWED WORKING CAPITAL (W.C) WITH SOURCES OF CAPITAL

Type of unit	No. of sample	No. of units took working capital loan		Sources (as % of the units obtained loan)	
		Yes	No	Inst.	Non-Inst.
Pitloom	15	5 (33.3%)	10 (66.7%)	3 (60%)	2 (40%)
Semi-auto loom	28	17 (60.71%)	11 (39.29%)	16 (94.12%)	1 (5.88%)
Powerloom	6	2 (33.3%)	4 (66.7%)	1 (50%)	1 (50%)

TABLE 4.20  
NON-INSTITUTIONAL LOANS TO HAND AND POWERLOOM UNITS

Type of units	% of <sup>a/</sup> units taken non-inst.loan	Year of loan	Source of loan	Average amount of loan	Collateral
Pitloom	13.33 (2)	1983 1986	Landlord/ Businessman	1,600	Personal Trust/ Security by Chairman
Semi-auto loom	3.57 (1)	1975	Relative	8,500	Personal Trust
Powerloom	16.67 (1)	1986	Brother	15,000	Personal Trust

<sup>a/</sup> Figures in bracket specify the number of units.

About 94 and 60 per cent of the semi-auto and pitloom units' loans are from institutional sources, while for powerloom it is 50 per cent. Therefore, in terms of percentage share of the total units, the powerloom unit obtained highest level (50%) of non-institutional loan followed by pit (40%) and semi-auto looms (about 6%). In the following, the details of non-institutional loans are discussed, while institutional loan and its linkage with the informal loan will be dealt with later.

Non-institutional loan specific to working capital has not been a dominant feature of credit among the handloom and powerloom weavers as shown in Table 4.20.

From the table it is evident that very few enterprises have used non-institutional loan for working capital. Altogether, only 4 enterprises from pit, semi-auto and power loom units have used non-institutional loan, correspondingly representing 13.33, 3.57 and 16.67 per cent of the total enterprises. These loans are mainly from the local landlords, businessmen and relatives. The powerloom unit has taken the highest amount of loan of Tk. 15,000, followed by semi-auto loom (Tk. 8,500) and pitloom (Tk. 1,600). All these loans are mainly obtained based on personal trust, while for pitloom, the local Chairman acted as a security to the loan obtained from a local businessman.

It is interesting to note that only the semi-auto loom unit has borrowed working capital in 1975, but the remaining units in 1983 and 1986. The handloom credit of Tk. 1000 million was extended to the weavers in 1983. It appears that about 57 per cent of the semi-auto loom units, who did not take any credit earlier, have availed of institutional credit. Though the remaining 2 pitloom and 1 powerloom units could have availed of institutional credit, they instead used noninstitutional credit from local sources viz. landlords, businessmen and relatives. The main reason for using

non-institutional loans has been that the entrepreneurs could not find proper intermediaries, who could process their loan application.

Table 4.21 shows the duration of loan, interest rate paid, loan outstanding and utilization of loans taken by the pit, semi-auto and powerloom units.

TABLE 4.21  
INTEREST RATE, UTILIZATION OF NON-INSTITUTIONAL LOANS

Type of unit	Amount of loan (Tk.)	Duration of loan (year)	Annual interest rate (%)	Utilization of loan			Outstanding loan (Tk.)
				Working capital	Expansion	Consumption	
Pitloom	1,600	2	52.0	1,300	-	300	1,600
Semi-auto loom	8,500	2	40.0	6,000	2,500	-	2,000
Powerloom	15,000	2	35.40	15,000	-	-	10,000

From the table it can be seen that the pitloom unit pays an annual rate of interest of 52 per cent. This interest rate is paid on weekly basis. In fact, the entrepreneur pays Tk. 1 for each Tk. 100 per week. This interest rate is about 15 and 38 per cent lower than the interest rate paid to the wholesalers and retailers respectively. The entrepreneur of the semi-auto loom unit, who has borrowed working capital from his relative, pays much less interest rate: 40 per cent only. This interest rate is calculated for the current year. The borrower pays Tk. 200 quarterly for the outstanding loan that the entrepreneur still owes to his relative. The borrower has repaid the loan, on an average, at the rate of Tk. 500 a year. Powerloom unit, on the other hand, does not pay any interest. However, there are reciprocal arrangements between the entrepreneur and his brother to borrow from each other at the time of need. Therefore, an implicit interest rate could be calculated here, which would be the opportunity cost of the capital. According to the entrepreneur, such interest rate could vary between 35 and 40 per cent.

Utilization of the borrowed capital shows that pit loom has used about 81 per cent of the borrowed capital as working capital, and about 19 per cent for consumption. The semi-auto loom unit, on the other hand, used 71 per cent of the borrowed capital in meeting the working capital need, while 29 per cent was used in expansion. The powerloom unit has entirely used borrowed capital entirely as working capital.

The existing loan position of the units shows that pitloom units have not repaid any part of the loan. Semi-auto and powerloom units have repaid about 76 and 33 per cent of the total loan respectively. The re-payment of the loan for the semi-auto loom unit, has been at a lower level compared to the powerloom unit, although the duration of loan was 2 years. The main reason stated for the delay in re-payment of loan is that the units are still experiencing severe working capital problems.

#### 4.11 Output Marketing of Handloom and Powerloom Products

Handloom products are entirely sold either to retailers or wholesalers or to both. Table 4.22 shows the existing marketing of products for pit, semi-auto and powerloom units.

The table shows that pitloom units do not use a single source of output sales; instead they, market their products to both wholesalers and retailers depending on where they can strike a better deal. The pitloom entrepreneurs believe that such a marketing strategy can bring greater benefit than using a particular source of output sales. On the other hand, all the semi-auto and powerloom units sell their output to wholesalers. According to these entrepreneurs as they market production in bulk, it is easier to market products through wholesalers.

The mode of sales shows that the entire pitloom products are sold in cash, while semi-auto and powerloom products are marketed both in cash and credit forms. Table 4.23 shows the existing mode of sales of handloom and powerloom products.

The table shows that all the pitloom units sell their products for cash, while 57.14 and 66.67 per cent of semi-auto and power loom units sell for cash and the remaining 42.86 and 33.33 per cent of the corresponding units sell on credit. It is to be noted here that out of 42.86 per cent (12 units) semi-auto units who sell on credit, 6 units (21.43) produced markin and quilt covers. These units buy their entire yarn from the wholesalers, where payment is usually deferred for a week, for which no extra premium on sales is involved. Therefore, effectively, 21.42 per cent of the remaining semi-auto loom units sell their output on credit.

According to the units who sell their output on credit, there is no extra payment involved for the delayed payment. Usually, the wholesalers buy the output in the weekly bazar from the entrepreneurs

**TABLE 4.22**  
**MARKETING OF PRODUCTS OF HANDLOOM AND POWERLOOM UNITS**

Type of unit	No. of sample	Products marketing to:			Total
		Retailer	Wholesaler	Wholesaler & retailer	
Pitloom	15	-	-	15	15
Semi-auto loom	28	-	28	-	28
Powerloom	6	-	6	-	6

**TABLE 4.23**  
**MODE OF SALES OF HANDLOOM AND POWERLOOM PRODUCTS**

Type of unit	No. of sample	Mode of sale (in per cent)		
		Cash	Credit	Total
Pitloom	15	100(15) <sup>1/</sup>	-	100(15)
Semi-auto loom	28	57.14(16)	42.86(12)	100(28)
Powerloom	6	66.67(2)	33.33(4)	100(6)

<sup>1/</sup> Figures in bracket show the number of units.

and make payment for the same output in the next weekly bazar i.e. payments are made with a delay of 7 days. This form of transaction is widely practised among the wholesalers and their regular suppliers, and for most of the transactions no extra payment is involved.

#### 4.12 Historical Perspective of Informal Credit Market

The historical pattern of change of the informal credit market has been analysed and compared between two periods. These periods are (i) 1947-1970 i.e. during Pakistan period; and (ii) 1971-85 i.e. after Bangladesh came into being. The comparison is based on the following:

- a) availability of fund;
- b) availability of lender;
- c) access to loan, and
- d) increase in interest rate.

These characteristics are measured for the manufacturing and trading units for the above two periods, separately. It has been found, however, that a substantial number of entrepreneurs of the manufacturing units did not recognise the change in some of the characteristics, such as availability of funds and lenders. However, regarding the access to informal loan and increase in interest rate, the responses were significant. The incidence of those who do not know is found to be higher for the traders. The change in characteristics of the informal credit market was first discussed for the manufacturers (Table 4.24) and then for the traders (Table 4.25).

The table shows that availability of informal credit fund during 1971-85 has increased compared to the period 1947-71 but the availability of fund may reflect the fact that the credit extended through Handloom Credit - 1983, may have been improperly channelised into the informal market and probably this fund has fallen into the hands

TABLE .24

**CHANGE IN CHARACTERISTICS OF INFORMAL CREDIT MARKET  
FOR THE MANUFACTURERS (IN PER CENT)**

Characteristic of change	P e r i o d					
	1947-70			1971-85		
	Yes	No	Don't know	Yes	No	Don't know
Lending fund is available	22.4	14.3	63.3	26.53	-	73.5
Lender is available	20.4	2.0	77.6	12.2	-	87.8
Access to loan is easy	49.0	26.5	24.5	61.2	18.4	20.4
Interest rate has increased	63.3	10.2	26.5	73.5	6.1	20.4

TABLE .25

**CHANGES IN CHARACTERISTICS OF INFORMAL CREDIT  
MARKET FOR THE TRADERS**

Characteristics of change	P e r i o d					
	1947-70			1971-85		
	Yes	No	Don't know	Yes	No	Don't know
Lending fund is available	28.6	21.4	50.0	28.6	21.3	50.1
Lender is available	35.7	7.1	57.2	28.6	21.4	50.0
Access to loan is easy	31.9	17.3	50.8	14.3	21.4	64.3
Interest rate has increased	14.3	21.4	64.3	21.4	14.3	64.3

of a few persons; consequently, access to loan has increased, while the number of lenders has fallen from the previous period (1947-70). Although there has been an increased supply of fund in the informal credit market, but the interest rate has increased during the later period.

Table 4.25 shows the change in the above mentioned characteristics for the trading units.

It can be seen from the table that according to the traders, during 1947-70 and 1971-85, the availability of informal credit funds has remained the same, while the availability of lenders has been reduced in the later period. Easy access to credit for traders during the period 1971-85 has fallen by more than half compared to the period 1947-70. This reflects the fact that characteristics of the credit has changed, credit has increased in terms of sales, while term loans from the lenders have decreased. The increase in interest rate during 1971-85 has been higher than during the period 1947-71; however, it has been so less significantly.

From the above it emerges that borrowing of term loans from informal credit sources is not widely practised among the manufacturers and traders. Rather, credit purchase of raw material or stock, as appropriate, is gaining importance. It is alleged that such kind of informal credit bears less risk of misappropriation of capital and also fetches higher rate of interest for the lenders. The changes in characteristics of the informal credit market between the period 1947-71 and 1971-85 shows that, there has been an increase in the availability of funds for the manufacturers and this is due to Handloom credit-1985 given to the weavers. It is widely believed that there has been gross mis-appropriation in the disbursement of the loan and actual weavers did not benefit from the Handloom loan (Section 6.3.2); rather, this credit has been absorbed by the local elite, politicians and touts who may have channelled the money to

the informal credit market. For traders, it is decisively the case that informal credit market has reduced in size during 1971-85 from the period 1947-81. For the manufacturers and traders, the availability of lenders has declined. This reflects the fact that the money lenders haild mainly from the Hindu community, many of whom migrated to India.

**NOTES**

1. Report on Handloom Census-1978, Miah, A, Institute of Business Administration, University of Dhaka, March, 1979, PP. 108-9.
2. A study on the Relative Efficiency of Handloom and Small Power-looms versus larger Mills, Rahman, A, Bangladesh Institute of Development Studies, December, 1980, PP. 94-7.
3. Report of the Task Force for the Handloom Sector, Textile Division, Ministry of Industries, June, 1982, PP. 60-61.
4. In the Report of the Task Force for the Handloom Sector, op. cit., PP. 63-66, the required level of working capital is estimated by considering the consumption of yarn for 20 days, cost of dyes and chemicals, etc. as 35 per cent of the yarn cost and cost of 3 weeks of finished goods. In estimating working capital requirement for the present study, cost of finished goods, however, is considered for 1 week, because it is found that manufacturing units sell off their production on weekly basis.
5. It is to be noted that entrepreneurs who have borrowed money from the non-institutional sources have specified it to be for meeting working capital needs. However, as the loans were later used for other purposes. Here, as the loans were intended to be used as working capital, the loans have been referred to as working capital loans.

## CHAPTER 5

### INFORMAL CREDIT MARKET FROM THE SUPPLY SIDE

#### 5.1 Introduction

In the previous chapter the credit structure, terms of credit and rates of interest are studied from the demand side i.e. from the manufacturers' side. Here, an attempt has been made to estimate the informal credit market parameters from the supply side i.e. from the traders' (viz. retailers and wholesalers) side. It is to be noted that a detailed cost and return accounts of the traders will not be presented here; instead, an effort will be made to identify sources of capital, especially for working capital, for the traders. In identifying such sources, viz. formal and informal, the rate of interest paid by the traders will be estimated. However, in this chapter only non-institutional credit will be considered. Most importantly, the credit sales given to the handloom and power loom enterprises by the traders will be estimated in terms of quantity and value and thereby interest rates will be calculated from the information provided by the traders. Although the traders are selected from the same or nearby areas from where handloom and powerloom samples are selected, credit sales given by the traders specific to the pit, semi-auto and power loom units cannot be established, because such specific information is not available. Information on credit market is therefore presented on a locational basis, i.e. regarding from where the traders are selected, rather than based on the type of units.

#### 5.2 Structural and Financial Details of Traders

Yarn traders, as mentioned in chapter 2, were selected from Hasnabad, Madhabdi and Norsingdhi areas, wherefrom the sample for

the manufacturing units were also selected. The wholesalers mainly buy their yarn from Narayanganj Tan Bazar and Norsingdhi Bazar and some receive yarn from the textile mills. On the other hand, the retailers mostly buy their yarns from the wholesalers in Norsingdhi, sometimes from Narayanganj. For example, retailers of Hasnabad mainly buy yarn either from wholesalers in Hasnabad or Norsingdhi and Narayanganj bazar. All the yarn traders in Hasnabad mostly supply yarn to pit loom units and some to the powerloom units. Retailers in Norsingdhi and Madhabdi mainly supply yarn to pit, semi-auto and powerlooms. It appears, in general, that those traders who buy yarn in bulk usually prefer to buy them from Narayanganj bazar, because they get competitive prices and also, some traders have years of trade-links with the yarn merchants in Narayanganj.

Table 5.1 shows the number and types of traders selected from Hasnabad, Madhabdi and Norsingdhi areas.

The table shows that a total of 14 yarn traders have been selected, of whom 5 are wholesalers and 9 are retailers. Among the 5 wholesalers, 2 selected from Norsingdhi bazar are also Tag dealers, who receive yarn from BTMC mills.

It has been found that some of the trading businesses established as early as 1950 are still operating. Some of the traders have other business besides yarn trading. Table 5.2 provides the period of establishment and information regarding other types of businesses that the selected traders have.

It can be seen from the table that 3 traders in Hasnabad have other businesses, which are weaving, dyes and chemicals and yarn dyeing. The wholesaler who has been selected as a sample from Hasnabad has a dyes and chemicals business and a yarn dyeing factory. Among the remaining two yarn retailers, one retailer owns a dyes and chemicals shop, while the other has a weaving unit. In Norsingdhi, out of two yarn traders, one is a wholesaler, who owns

**TABLE 5.1**  
**NUMBER AND TYPES OF SELECTED TRADERS**

Location	No. of sample	Types of traders		
		Retailer	Wholesaler	Total
Hasnabad	4	3	1	4
Madhabdi	5	3	2	5
Norsingdhi	5	3	2	5
<b>Total</b>	<b>14</b>	<b>9</b>	<b>5</b>	<b>14</b>

**TABLE 5.2**  
**PERIOD OF ESTABLISHMENT AND OTHER BUSINESSES OWNED BY THE TRADERS**

Location	Period of Establishment	No. of traders with other businesses	Types of Business
Hasnabad	1954-72	3	Weaving/Dyes and Chemical/Yarn Dyeing
Madhabdi	1960-86	1	Gold
Norsingdhi	1951-84	2	Weaving/Cloth trading

a cloth wholesale shop, while the other trader is a retailer who owns a weaving unit. The traders in Hasnabad and Norsingdhi who own other businesses are all related to the textile trades. However, the trader in Madhabdi owns a completely different type of business: a gold shop.

It has appeared that all these businesses are set-up from the re-invested profit from the yarn trading business. All these businesses have obtained bank loan at the set-up, a fact which will be discussed chapter-7. According to the yarn traders, cost and return accounts for the other businesses are maintained separately from the yarn trading business. However, cash money is drawn from other businesses whenever there is a need for working capital by any business.

### **5.3 Some Financial Details of Yarn Trading Businesses**

Financial information gives details of sources of fixed capital, existing levels of working capital and their sources and interest rates paid on borrowed capital used for fixed and working capital for the selected traders in Hasnabad, Madhabdi and Norsingdhi areas.

#### **5.3.1 Fixed Capital**

Although information on fixed capital for the yarn traders is not available, sources of borrowed component of fixed capital have been established. Table 5.3 shows the details of borrowed capital of the traders, based on their locations.

From the table it can be seen that 4 out of 5 wholesalers and retailers in Norsingdhi bazar used entirely their own set-up capital. On the other hand, 2 (50%) and 3 (60%) traders of the Hasnabad and

TABLE 5.3  
SOURCES OF BORROWED FIXED CAPITAL AT SET-UP FOR THE YARN TRADERS

Location	No. of traders	Own capital	Source of loan for the traders				% of total capital	
			Bank	Whole-saler	Friend	Total	Own	Borrowed
Hasnabad	4	2	1	1	-	4	70	30
Madhabdi	5	2	1	1	1	5	55	45
Norsingchi	5	4	-	-	1	5	100	-

TABLE 5.4  
RATE OF INTEREST AT SET-UP FOR YARN TRADERS

No. of traders	Average loan (Tk.)	Source of non-institutional loan		Duration (year)	Collateral	Rate of interest (%)
		Wholesalers	Friend			
2 (Hasnabad)	2000	1(1960)	1	N.A.	Personal	26
2 (Madhabdi)	3000 <sup>a/</sup> 20000 <sup>b/</sup>	1(1966)	1(1986)	N.A. 1 <sup>a/</sup>	Personal Trust/ Security	26 <sup>a/</sup> 42 <sup>b/</sup>

Note: <sup>a/</sup> and <sup>b/</sup> information pertinent to trades setup in 1966 and 1986 respectively.

<sup>b/</sup> duration of credit for the trades setup in 1986.

Madhabdi bazars respectively used borrowed capital. Among the two traders in Hasnabad, who used 30 per cent of the total set-up capital from borrowed sources, one borrowed the capital from a bank and the other from a wholesaler. Three traders in Madhabdi who financed 45 per cent of the total set-up capital from borrowed sources used three different sources of finance: commercial banks yarn wholesaler and a friend. All the yarn traders who borrowed from wholesalers mostly received their borrowed capital in the form of commodity (yarn).

All the yarn traders, except one, who used borrowed capital in setting up the business had established their business during 1960s and early 1970s. Information available from these traders, especially for informal loans, are not adequate to calculate the exact interest rates, hence estimated rates of interest are given. However, for the unit which was established in 1986, the exact rate of interest rate has been calculated. Table 5.4 shows details of amounts of loan, duration of credit, rates of interest, etc.

It can be seen from the table that one trading business in Hasnabad and the other in Madhabdi borrowed capital in 1960 and 1966 respectively. These businesses have already paid up all the loans. The interest rate shown in the table against these businesses is based on the interest rate they have estimated, which appears to be, on average, Tk. 5.00 per week for each Tk. 1000 of borrowed capital. However, the business which was setup in 1986, paid an interest rate of 42 per cent.

### **5.3.2 Working Capital**

As working capital is the most important cost element of investment cost, the existing levels of working capital and their sources have been established for the yarn traders selected for the

study. Table 5.5 shows the details of working capital for the yarn traders.

The table shows that wholesalers require much higher working capital than retailers. Wholesalers in Hasnabad, Madhabdi and Norsingdhi require about 2.8, 3.5 and 4.3 times more working capital than retailers of the respective areas. Table 5.5 also shows that traders in Hasnabad met the highest level of working capital of 62 per cent from their own sources, followed by traders in Norsingdhi (55%) and Madhabdi (46%).

**TABLE 5.5**  
**LEVEL OF WORKING CAPITAL (W.C) AND THEIR SOURCES FOR YARN TRADERS**

Location	No. of traders	Level of W.C (Tk.000s)			Source of W.C. (%)	
		Retailers	Whole-salers	Weighted Average	Own	Borrowed
Hasnabad	4	39.30	110.10	57.00	62	38
Madhabdi	5	58.50	204.75	117.00	46	54
Norsingdhi	5	94.50	408.25	220.20	55	45

Sources of borrowed capital have been investigated for the traders and it has been found that traders in Norsingdhi bazar did not take any institutional loan, but 4 wholesalers in Hasnabad and Madhabdi did. All 14 traders, however, made credit purchase in the same way as the manufacturing units do, from the large wholesalers in Narayanganj and Norsingdhi bazars. Here, only the informal credit transaction is discussed. Table 5.6 gives details of the borrowed capital and credit purchases made by the yarn traders.

From the table it can be seen that none of the traders in Norsingdhi have taken any bank loan, but one trader has taken loan from a mohajan in Dhaka. On the other hand, 40 per cent yarn traders in Madhabdi and 50 per cent in Hasnabad have taken bank loan. All the traders, however, make credit purchase of yarn. Average monthly purchase of yarn varies between Tk. 398.67 thousand and Tk. 1,430 thousand with the traders in Norsingdhi bazar making highest amount of purchases and in Hasnabad the lowest. All the yarn traders buy their yarn either from Norsingdhi or Narayanganj.

The collateral for credit purchase from wholesalers in Norsingdhi is mainly based on personal trust. Some of the yarn traders have been doing business with the wholesalers in Narayanganj for almost 3 decades now; therefore, personal trust plays an important role in credit purchases. A long trading relationship also confers benefit in terms of low rates of interest. Some of the retailers who buy yarn from Narayanganj have been introduced to the yarn merchants by the wholesalers of Norsingdhi and it appears they act as a security for these retailers.

From the above table, it is possible to calculate the rate of interest paid by the yarn traders in Hasnabad, Madhabdi and Norsingdhi to the wholesalers by estimating the amount of credit, premium paid on credit purchases and duration of credit. Table 5.7 shows the calculated rate of interest paid by the yarn traders.

TABLE 5.6

## SOURCE OF BORROWED CAPITAL AND VALUE OF PURCHASE FOR THE YARN TRADERS

No. of traders	Source of credit			Monthly yarn purchase (lb)	Value of purchase (Tk.000s)	Place of purchase	Collateral
	Bank loan	Other source	Credit purchase				
4 (Hasnabad)	2(50%) <sup>1/</sup>	-	4	9,665	398.67	Norsingdhi Narayanganj	Security from wholesaler
5 (Madhabdi)	2(40%)	-	5	13,814	569.83	"	Personal trust/wholesalers
5 (Norsingdhi)	-	1(20%)	5	34,670	1430.00	"	"

<sup>1/</sup> bracket shows the % of trading business.

TABLE 5.7

## VOLUME OF CREDIT PURCHASE AND RATE OF INTEREST FOR YARN TRADERS

Location	% of credit purchase	Monthly credit purchase (Tk.000s)	Duration of credit (day)	Premium/bale (400 lb) in Tk.	Rate of interest (%)
Hasnabad	38	151.49	15	140	20.62
Madhabdi	54	307.71	7	60	18.93
Norsingdhi	45	643.50	10	50	11.06

The table shows that traders in Norsingdhi made the highest credit purchase of Tk. 643.50 thousand, followed by traders in Madhabdi (Tk. 307.71 thousand) and Hasnabad (Tk. 151.49 thousand). Yarn traders in Norsingdhi bazar pay the lowest level of rate of interest of 11.06 per cent, because they buy yarn in bale (400 lbs) form. They pay a premium of about Tk. 50 per bale of yarn for a duration of 10 days. Traders in Hasnabad pay almost double the rate of interest (20.62%) than the traders in Norsingdhi for their credit purchase. This is because most of the traders here buy yarn from Norsingdhi. Yarn wholesalers in Norsingdhi charge higher premium for credit sales than the wholesalers in Narayanganj. The traders in Madhabdi buy yarn from Norsingdhi as well as from Narayanganj. They pay an interest rate of 18.93 per cent which is less than the interest rate paid by yarn traders in Hasnabad.

From the table, it therefore appears that there is a correlation between the volume of purchase and the rate of interest payment for the credit purchase. The rates of interest paid by the yarn traders to the wholesalers are comparatively much less than the interest paid by the manufacturing units to the yarn traders. In fact, traders in Norsingdhi pay a rate of interest which less than the market rate of interest of the financial institutions. When the wholesalers sell yarn in bale form they charge a token interest. It is a usual practice that the purchase made today will be paid for at the next purchase. For this delayed payment, a token premium is taken. For example, average price of 32's cotton yarn bale is Tk.16,500. The wholesalers in Narayanganj charge about Tk. 16,550 to their regular customers for credit purchase. However, wholesalers in Norsingdhi charge a higher premium, as has been reflected in the interest rates of Hasnabad and Madhabdi.

#### 5.4 Credit Sales to Customers

In this section, an attempt has been made to calculate the rate of interest paid by the customers to the yarn traders from the information collected from the supply side. Calculation of such interest rates is important because it will facilitate a comparison with the interest rates established from the survey of the manufacturers. It is to be noted, however, that yarn traders supply yarn to manufacturers as well as to yarn retailers and wholesalers. Therefore, calculated interest rates would not represent manufacturers alone.

Before calculating the interest rates paid by the customers to the traders, the characteristics of the customers and monthly sales value have been established. Table 5.8 shows the number of customers that yarn traders attended to on an average per month, the types of customers, average monthly sales and proportion of credit sales for the traders at different locations.

The table shows that the yarn traders in Hasnabad attended to the highest number of customers, with an average sales of TK. 2.09 thousand per customer per month, and most of these sales are made to pitloom weavers. This corresponds with the previous finding that the pitloom, in comparison to semi-auto and powerloom units, use more alternative sources for purchase and consequently buy less quantity of yarn per purchase. On an average, 60 per cent of the sales is made on credit; this indicates that yarn traders not only give credit to the regular but also to other customers. Among the other customers, a large number of them are known to the yarn traders; however, these customers do not maintain a regular purchase schedule. Traders in Madhabdi serve the lowest number of customers and have an average monthly sales of Tk. 3.24 thousand per customer. About 53 per cent of sales is given on credit. The sales value of these traders is about 55 per cent higher than the traders in Hasnabad. The traders in Madhabdi mainly sell yarn to semi-auto loom units. Finally the traders in Norsingdhi bazar have the highest number of

**TABLE 5.8**  
**CHARACTERISTICS OF CUSTOMERS AND VALUE OF SALES FOR YARN TRADERS**

Location	Average no. of customers	Types of customers (%)		Monthly sales (Tk.000s)	Sales/ customer (Tk.000s)	% of credit sales
		Regular	Others			
Hasnabad	182	38	62	380.20	2.09	60
Madhabdi	169	35	65	547.50	3.24	53
Norsingdhi	173	47	53	1368.75	7.91	45

**TABLE 5.9**  
**VALUE OF CREDIT SALES AND RATE OF INTEREST CHARGED BY THE TRADERS**

Location	Monthly credit sales (Tk.000s)	Collateral	Duration credit (day)	Premium/ bundle (10 lbs.) in Tk.)	Rate of interest (%)
Hasnabad	228.12	Personal trust	8	6.0	66.39
Madhabdi	290.18	"	7	4.5	56.73
Norsingdhi	615.94	"	11	5.0	40.22

regular customers, 47 per cent, and have, on an average, a monthly sales of Tk. 7.91 thousand per customer, which is 3.78 and 2.19 times higher than the traders in Hasnabad and Madhabdi bazar respectively. Traders in Norsingdhi bazar sell yarn mainly to semi-auto and powerloom units as well as to retailers and wholesalers. Compared to other yarn traders, traders in Norsingdhi bazar sell yarn to a larger number of retailers and wholesalers.

The rates of interest paid by the customers to different yarn traders can be calculated from the sales value, premium of credit sales and duration of credit. Table 5.9 shows the calculated rates of interest charged by the traders in Hasnabad, Madhabdi and Norsingdhi.

The table shows that monthly credit sales made by traders in Hasnabad, Madhabdi and Norsingdhi is Tk. 228.12, 290.18 and 615.94 thousand respectively. All the credit sales made by the traders were based on personal trust, which developed between the traders and customers because of long term business associations. According to the traders security on credit is required only in a very few cases where the traders do not know the customers, but in most cases all weavers of the locality are known to the traders.

Interest rate charged by the trades to customers for credit sales is 66.39 per cent in Hasnabad, 55.73 per cent in Madhabdi and 40.22 per cent in Norsingdhi area. These interest rates are substantially lower than the rates of interest calculated according to the information provided by the manufacturers.

### **5.5 Yarn Distribution Through Bangladesh Handloom Board and Industrial Co-operatives**

Bangladesh Handloom Board (BHB) receives yarn allocation from the Bangladesh Textile Mills Corporation (BTMC), which is then distributed among the Central Industrial Co-operative Societies.

Central Industrial Co-operatives, on the other hand, distribute the yarn to weaver-members through the primary Co-operatives.

The Central Industrial Co-operative in Norsingdhi has 155 registered primary members. It distributes the yarn received from the BHB to its primary societies, which in turn distribute the yarn to the handloom units. Table 5.10 shows the quantity of yarn (in lb.) received by the Central Co-operative and members of primary societies to whom the yarn is distributed.

From the table it can be seen that in 1983-84, the highest quantity of yarn of 625.6 thousand lbs. was distributed. Quantity of yarn was reduced almost to half in 1984-85 and in 1985-86 no yarn was distributed through the Central Industrial Co-operative. The reason for this drop in quantity of distribution of yarn was that the price at which BTMC supplied the yarn to industrial societies was higher than the market price, at least for some counts of yarn. The industrial sources did not lift off their quota for such type of yarn, hence the quantity of distribution declined in 1984-85.

TABLE 5.10

DISTRIBUTION OF YARN THROUGH CENTRAL CO-OPERATIVE ASSOCIATION

Year	Quantity	Distribution to no. of primary societies	Estimated consumption of Norsingdhi in 1978 (1000 lbs)
1982-83	4,80,800	100	-
1983-84	6,25,600	143	44,840 <sup>1/</sup>
1984-85	3,28,800	112	-
1985-86	-	-	-

Note: <sup>1/</sup> Estimated from the Handloom Census - 1978.

In fact, for some yarn counts the market price was 5 - 10 per cent lower. In 1985-86 industrial societies did not distribute any yarn to the weavers because for all yarn counts the market prices were lower than the BTMC prices. During 1983-84 and 1984-85, the yarn market experienced an influx of smuggled yarn. Therefore, supply dominated the demand of yarn. To combat this situation, the BTMC was forced to sell yarn in auction at a discount price in order to stop the piling up of stock. The Central Industrial Co-operative and the primary societies, therefore, did not lift off their quota, allotted to them by the BHB, from the BTMC. However, in recent times, BHB is again taking initiative in marketing yarn through the Industrial Co-operative Societies.

In the table annual consumption of the Norsingdhi District has been estimated from the Handloom Census-1978.<sup>1</sup> The estimated annual consumption according to the Census is 44,840 thousand lbs. Yarn distributed during 1982-83, through the Central Industrial Co-operative, if compared with the annual consumption of Norsingdhi district, represents between 0.75 and 1.40 per cent of the total consumption. Therefore, it shows the significance of marketing yarn through the retailers and wholesalers who occupy almost 98.5 per cent of all trading. This corresponds with the finding of the Handloom Census-1978, that about 2 per cent of the total purchase was procured from the co-operative societies and Government agencies.<sup>2</sup>

**NOTES**

1. Report on Handloom Census-1978, Annexure VII subdivision table, Miah. A, Institute of Business Administration, University of Dhaka, March, 1979, P. 19.
2. Report on Bangladesh Handloom Census-1978 (Main Report), op. cit., P. 106, table 114.

**CHAPTER 6****INSTITUTIONAL CREDIT AND ITS IMPACT ON INFORMAL CREDIT  
MARKET FOR HANDLOOM AND POWERLOOM SECTOR****6.1 Institutional Credit to Handloom and Powerloom Sector**

Institutional loan to handloom and powerloom sectors have been identified for the manufacturing units i.e. handloom and powerloom weaving and for yarn traders i.e. for yarn retailers and wholesalers. These loans are mainly channelled to weavers through the commercial banks. However, in Norsingdhi it has been found that, in 1972-73, some Co-operative loans are extended to the weavers through the local Primary Co-operative Societies. Also, in recent years a Non-Governmental Organisation (NGO) known as Bangladesh Rural Advancement Committee (BRAC) has extended some working capital loans to weavers who have single loom units.

There are two main types of loans which are extended to the handloom and powerloom weavers and to yarn traders. These are:

- (a) loan for establishment and expansion; and
- (b) loan for meeting the working capital need of the handloom and powerloom units and for yarn traders.

**6.2 Loan for Establishment and Expansion of Manufacturing and Trading Units****6.2.1 Manufacturer**

None of the handloom or powerloom entrepreneurs have taken institutional loan for setting up or for expansion of their units. Among the surveyed 15 pit, 28 semi-auto and 6 power loom units, all the pitloom units used entirely own capital in setting up the units,

while about 11 and 17 per cent of the semi-auto and powerloom units used borrowed capital, but from non-institutional sources. It is to be noted that a large number of pitloom and semi-auto looms were set up during 1940s and 1960s, while the powerlooms were set up in 1980s. Irrespective of their time of establishment, they have made very little use of borrowed capital.

Although about 20 and 39 per cent of the pit and semi-auto looms respectively had expansion in their production capacity and correspondingly borrowed about 50 percent (Tk. 2.1 thousand) and 33 (Tk. 5.6 thousand) per cent of their total expansion capital, none of the units borrowed from the institutional sources. The main reason for the use of non-institutional capital is that the entrepreneurs found institutional loan inaccessible.

### 6.2.2 Traders

Among the yarn traders, some have used institutional loan in setting up the business. These traders are from Hasnabad and Madhabdi, while the traders in Norsingdhi did not use any institutional loans. Table 6.1 shows the details of the institutional loan used at the set-up by the yarn trading business.

One yarn trader in Hasnabad and another in Madhabdi have used institutional loans, which contributed 20 per cent of their total set-up capital requirement. These two traders are wholesalers who appear to be economically well placed in the locality and have always maintained a good relationship with the bank manager. The wholesalers in Hasnabad and Madhabdi, who took loans in 1960 and 1972 respectively, have repaid their loans. These loans were for a duration of 5 years and the interest rate paid by the corresponding wholesalers were 12 and 16 per cent.

TABLE 6.1

## USE OF INSTITUTIONAL LOAN IN SETTING UP THE YARN TRADING BUSINESS

Location	No. of trader	% of unit used loan	Amount (Tk.)	% of total capital	Collateral	Duration (yr.)	Rate of interest (%)
Hasnabad	4	25	5000 (1960)	20	Business & land	5	12
Madhabdi	5	20	10,000 (1972)	20	"	5	16

It has been seen in chapter 5 that the borrowed capital for yarn traders were from the institutional sources as well as, from wholesalers, and from financial and other sources. The capital borrowed from the institutional sources appears to have been used in the construction of structures or as deposit for leasing the shop, while capital from the wholesalers came mainly as initial opening stock (yarn) for the business. It emerges that institutional loan helped the entrepreneurs to set up the business, but did not have any direct impact on borrowing from the wholesalers or yarn merchants.

It appears from the surveyed traders that expansion of business has been in the form of addition of yarn stock or diversification to other businesses. Any addition to stock was mainly financed through credit purchases from the wholesalers, while institutional loans have been used to finance diversification. Table 6.2 provides the details of diversification to other businesses.

From the table it can be seen that traders in Norsingdhi did not take any institutional loan to finance diversification of business. On the other hand, traders in Hasnabad and Madhabdi used bank finance of Tk. 13.5 and 15.0 thousand per trader on an average, for their diversification. Duration of these loans was about 5 years, and on an average, the rate of interest paid was 16 per cent.

Therefore, it emerges that institutional loans were used for diversification only, while expansion of business was in the form of addition of stock, which was, for almost all traders, financed from re-investment of profit and through credit purchase of stock.

### **6.3 Loan for Meeting the Working Capital Need**

The subject of the loan for meeting the working capital needs has been discussed first for the manufacturers, viz. pit, semi-auto and powerlooms units, and then for the yarn traders.

#### **6.3.1 Pit, Semi-auto and Powerloom Units**

It has been already seen that yarn requirements of the manufacturing units share about 71, 81 and 89 per cent of the working capital need of pit, semi-auto and powerlooms respectively. Of the total monthly requirement of yarn, the credit purchases of yarn contribute, for the corresponding units, about 49, 53 and 36 per cent to the raw material cost. The remaining shares of raw material cost are presumed to be met from own or other sources. Here, it will be examined how many of the units selected for the study have taken institutional (bank) loans and, through availing of such bank loans, whether there has been any direct impact on these units in reducing their dependence on the informal credit market.

TABLE 6.2

## EXPANSION OF OTHER BUSINESSES FINANCED FROM BANK LOANS

Location	No. of other businesses	No. of bank financed businesses	Amount of loan	Duration of credit (years)	Rate of interest (%)
Hasnabad	3	2	13,500	3	16
Madhabdi	1	1	15,000	5	16
Norsingdhi	2	-	-	-	-

TABLE 6.3

## ALLOCATION OF LOAN ACCORDING TO THE TYPES OF LOOM

Looms	Loan allocation per loom (Tk.)
Pitloom	3,500
Fly frame loom	5,000
Semi-auto loom	5,500
Banarasi and Jamdani loom	9,000

It would be appropriate here to discuss in detail the effort taken by the Government to provide working capital loan to the handloom weavers. This is very important, because after much direct extension of loan facility, some weaves who did not get any institutional loan earlier have benefited. However, although a sizeable proportion of weavers would have liked to avail of the Handloom Loan, they could not manage to get it because of their failure to arrange suitable intermediaries for processing the loans. It has been alleged that the local elite, politicians and touts have managed to secure a sizeable proportion of the handloom loans through fraudulent practices.

### **6.3.2 Handloom Credit - 1983**

The Task Force for the Handloom sector was constituted by the Ministry of Industries and Commerce in May, 1982 to study the handloom sector and identify its problems and suggest measures which would help to increase the efficiency and growth of this sector.<sup>1</sup>

The Task Force in its report identified the need for working capital as one of the major problems of the sector and recommended providing credit to the weavers. Based on the recommendation of the Task Force, the Government decided in early 1983 to extend a direct credit of Tk. 1000 million to the handloom weavers, especially to meet their working capital needs. This loan was distributed through three commercial banks, viz. Sonali, Agrani and Janata, and through Krishi Bank. This loan was strictly for handloom weavers and was given to them based on the types of loom they have. The amount of loan allocated per loom, according to their types, is shown in the table 6.3.

According to the above allocation per loom, loans were given through a pass book, which maintained the number of looms of the weavers. This pass book was issued by the Department of Textiles.

TABLE 6.4  
DISBURSEMENT OF HANDLOOM LOAN IN BANGLADESH (1983-84)

Bank	Amount disbursed (Tk.000s)	% of the total	No. of members
Sonali Bank	1,61,670	16.93	15,393
Agrani Bank	3,46,210	36.27	37,160
Janata Bank	2,75,300	28.84	30,161
Bangladesh Krishi Bank	1,71,454	17.96	21,207
<b>Total:</b>	<b>9,54,634</b>	<b>100.00</b>	<b>1,03,921</b>

TABLE 6.5  
HANDLOOM LOAN DISBURSED IN THE NORSINGDHI AREA (1983-84)

Bank	Amount disbursed (Tk. '000')	No. of members	Duration (year)	Rate of interest (%)
Sonali	33,334	N.A.	3-5	13-15
Agrani	44,575	N.A.	3-5	13-13
Janata	43,650	N.A.	3-5	13-15
Bangladesh Krishi Bank	29,507	N.A.	3-5	13-15
<b>Total:</b>	<b>151,006</b>	<b>-</b>	<b>-</b>	<b>-</b>

The total loan disbursed to handloom weaver members through the commercial and Krishi banks is given in Table 6.4.

It can be seen from the table that a total of Tk. 954.63 million was distributed as loan among 1,03,921 members. The actual disbursement of loan is 95.46 per cent of the total allocation. The highest proportion of the loan was distributed through the Agrani Bank (36.3%), followed by Janata (28.84%) Krishi (17.96%) and Sonali Bank (16.93%).

A capital injection of such dimensions to the sector must have had an impact on the informal credit market transactions. Therefore, an attempt will be made here to establish whether the formal or institutional credit has had any impact on the credit transaction in informal credit market. Before attempting to identify such a factor, it would be useful to discuss the level of formal credit extended to the weavers of the Norsingdhi district. Table 6.5 gives the total credit disbursed in the Norsingdhi area through different banks.

The table shows that a total loan of about Tk. 151.07 million was disbursed in the Norsingdhi area. The duration of credit varied between 3 and 5 years and the interest rates between 13 and 15 per cent. Loans with the shorter duration have higher rates of interest. The loans in the Norsingdhi area represent 15.82 per cent of the total loans disbursed. According to the Handloom Census-1978, the total loom capacity of Norsingdhi district represents 12.91 per cent of the total, 12.73 per cent of the operational and 6.56 per cent of idle handloom capacity of Bangladesh.<sup>2</sup> The loan in Norsingdhi area, therefore, corresponds to the share of handloom capacity.

The information on loan disbursement specific to the sample selected for the study is not available; hence, a direct comparison is not possible. However, from the survey data it is possible to identify weavers who have taken Handloom and other institutional

loans. From this information it would be possible to analyse whether the dependency on informal credit market of those entrepreneurs who have taken bank loans has been reduced.

#### 6.4 Institutional Loans to Handloom and Powerloom Weavers

From the survey of the manufacturers, it has been found that all types of unit viz. pit, semi-auto and power looms have taken institutional loans. Table 6.6 gives in detail the number of units which have taken loans, the amount of loans, year of loan, types of collateral given, duration of loans and interest rate paid for the loans.

From the table it can be seen that only 20 and 57 per cent of the pit and semi-auto loom units respectively have taken loans in 1984 and these loans are handloom loans. They have correspondingly taken loans of Tk. 13.30 and 18.35 thousand. On the other hand, one powerloom unit has taken a loan of Tk. 40,000 from a commercial bank and this loan does not come under the purview of the handloom loan 1983. The production units were taken as collateral for all the loans; however, for powerloom units beside the production unit, additional landed property had to be given as collateral.

Duration of the loan, interests rate paid and amount of outstanding loan are given in Table 6.7.

From the table, it can be seen that the difference in interest rates between the units is due to the duration of the loan. These interest rates represent the interest rate stated by the entrepreneurs. Duration of the loan varies between 3 and 4.2 years for semi-auto, power and pitloom units. There is no repayment of loan by any unit of semi-auto looms and powerloom, while pitloom has paid almost 41 per cent of the loan taken. From the discussion with the bankers, it appears that repayment level of loans for all the

**TABLE 6.6**  
**INSTITUTIONAL LOANS TO HANDLOOM AND POWERLOOM WEAVERS**

Types of Unit	No. of sample	No. of unit taken loan	Average amount of loan (Tk.)	Year of loan	Collateral
Pitloom	15	3(20%)	13,330	1984	Weaving Factory
Semi-auto loom	28	16(57%)	18,350	1984	"
Powerloom	6	1(17%)	40,000	1985	Weaving Factory and land.

**TABLE 6.7**  
**INTEREST RATE AND OUTSTANDING LOAN FOR HANDLOOM AND POWERLOOM WEAVING**

Types of unit	Amount of loan (Tk.)	Duration (year)	Rate of interest	Amount due on loan (Tk.)
Pitloom	13,330	4.3	14.5	7,833
Semi-auto loom	18,350	3	13	15,350
Powerloom	40,000	4	16	40,000

commercial banks is very low and in some cases no repayment of loan was made at all.

### **6.5 Impact of the Handloom Credit on Informal Market**

It has been seen that all the institutional loans to handloom units were given in 1983, and these loans entirely came from the handloom loan - 1983, earmarked for the weavers. Before this, no working capital loan was given, as such, to the handloom weavers.<sup>3</sup>

Here, an attempt has been made to measure the impact of this loan on the informal credit market. Institutional loan, henceforth, will be referred to as 'Handloom loan' and vice-versa.

Although the handloom loan was intended for all weavers, it failed to reach a large section of the handloom weavers. Coverage of the loan has been very small among the pitloom weavers, (20 per cent), but a large section of semi-auto loom (57%) have benefited. The advantages of this loan, will be assessed in terms of the following:

- (a) Whether the handloom loan has reduced borrowing of the terms loans from the non-institutional sources;
- (b) Whether the handloom loan has reduced the credit purchase of the enterprises; and
- (c) Whether the loan has been utilised for meeting the working capital need.

### **6.6 Reduction of Term loan from the Non-institutional sources:**

Among the 3 pitloom, 16 semi-auto loom and 1 powerloom units who have availed of institutional loans, none have taken loan from non-institutional sources for working capital or other uses. However, these units have made credit purchase from the yarn retailers

and wholesalers. The main reasons which prevented these enterprises from borrowing capital from the non-institutional sources are:

- (a) high rates of interest of the non-institutional loans;
- (b) credit purchase which is a better way of borrowing, because manufacturers do not feel financial pressure of borrowing; and
- (c) term borrowing which is usually required to finance investment or expansion or a large shortfall of working capital. As the institutional loan has met such need, they did not have to borrow from the non-institutional sources.

It, therefore, emerges that institutional loans have impact on non-institutional borrowing i.e. these enterprises which availed of institutional loans did not borrow from non-institutional sources. It would,, however, be relevant to see how they have financed purchases of raw materials, which is the next topic discussed.

### **6.7 Credit Purchase from Non-Institutional Sources**

The credit purchases of the manufacturing units which have obtained institutional loans have been compared with those units who did not avail of institutional loans. Table 6.8 shows the details.

From the above table, it can be seen that out of 3 manufacturers who have taken bank loans, only 2 manufacturers made credit purchase. It is important to note that their share of credit purchase of 56.33 per cent is higher than for the manufacturers who have not borrowed from the bank; the latter's share was 46.43 per cent. This clearly demonstrates that borrowing from the bank did not have any impact on credit purchase for the pitloom weavers. However, it might be that they probably used to borrow at a much higher percentage of the total purchase than at the present. It is also possible that the bank loan may have been utilised for some

TABLE 5.8

COMPARATIVE CREDIT PURCHASES OF MANUFACTURING UNITS, WHICH HAVE OR  
HAVE NOT OBTAINED INSTITUTIONAL LOANS

Types of unit	Use of credit purchase by the manufacturers				No. of manufacturers without credit purchase	
	Manufacturers with bank loan		Manufacturers without bank loan		Manufacturers with bank loan	Manufacturers without bank loan
	No.	% of credit	No.	% of credit		
Pitloom	2	56.33	12	46.43	1	-
Semi-auto loom	14	39.41	11	70.69	2	1
Powerloom	1	27.24	4	40.88	-	1

other purposes, such as in purchasing machinery and equipment, consumption, etc. This will be examined in the next section.

With regard to semi-auto loom, out of 16 units, 2 units did not buy any raw material on credit, while 14 units bought 39.41 per cent of the total raw material consumption on credit purchase. On the other hand, 11 manufacturing units who did not take any bank loans financed 70.69 per cent of the total raw material consumption by credit purchase. This clearly shows that bank loans have reduced the dependence of manufacturers using semi-automatic looms on credit purchase, but, however, have not eliminated it. Finally, the single powerloom unit which obtained bank loan has also made credit purchase, but relatively less in share (27.24%) than the other powerloom units (40.88%) which did not take any bank loan. Therefore, formal credit has helped the semi-auto and powerloom enterprises to become less dependent on the informal credit market.

### 6.8 Utilization of the Institutional Loan

Handloom credit was extended primarily to meet the working capital need, while bank loan was given to the powerloom, not specifically to meet the working capital need. Utilization of borrowed capital has been investigated for all the enterprises, and it has been found that loans have been utilized in meeting working capital need, purchasing of machinery, equipment and tools, as working capital for agricultural production, purchase of landed property and for meeting consumption needs. Table 6.9 provides the details in percentage use of borrowed capital in the above areas for pit, semi-auto and powerloom enterprises.

It is clear from the table that no unit has used the entire loan as working capital. Rather, a substantial part of the loan has been used for purchasing machinery, equipment, tools, etc. Among the manufacturing units, pitloom has used the lowest level of 37.80

TABLE 6.9

#### UTILIZATION OF BANK LOAN FOR PIT, SEMI-AUTO AND POWERLOOM ENTERPRISES

Types of unit	No. of unit	Area of utilization (in per cent)					Total
		Working capital	Machinery equipments & tools	Agricul- culture	Land	Consump- tion	
Pitloom	3	37.80	36.59	-	-	25.61	100
Semi-auto loom	16	41.14	54.43	1.27	3.16	-	100
Powerloom	1	50	50	-	-	-	100

per cent of the total loan as working capital, followed by semiauto (41.14%) and powerloom units (50%). It is only the pitloom units which have used a substantial portion (25.61%) of the loan in meeting consumption needs. It has been seen earlier that these pitloom units which obtained institutional loans, in fact, bought a higher proportion (56.33%) of their raw material on credit purchase, compared to those units (46.43%) which did not take any institutional loan. This characteristic tends to show that units which obtained institutional loan did not perhaps have financial solvency. Table 6.9 also shows that a sizeable portion of the loan is spent in buying machinery, equipment and tools. Semi-auto loom units have used the highest percentage (54.43%) of the loan in the purchase of machinery, equipment and tools, followed by powerloom (50%) and pitloom (36.59%) units. Semi-auto loom units also used some percentage of the loan as working capital for agricultural production, (1.27%) and buying landed property (3.16%).

### **6.9 Working Capital Loan for Traders**

It has been seen in chapter 5 that the traders borrowed capital to meet their working capital need from institutional and non-institutional sources. A large portion of the non-institutional loans comes from credit purchases and also there have been some term loans from non-institutional sources. Details of these loans have been discussed in the mentioned chapter. Here, the traders who have borrowed working capital from the institutional (banks) sources will be identified and thereby examined to see whether such loan has any impact on their borrowing or credit purchase from the non-institutional sources. Table 6.10 shows the details of the traders who have borrowed from the institutional sources.

**TABLE 6.10**  
**INSTITUTIONAL LOANS FOR WORKING CAPITAL FOR YARN TRADERS**

Location	No. of sample	No. of traders taken bank loan	Average amount of loan (Tk.)	Year of loan	Collateral
Hasnabad	4	2(50%)	15,670	1983	Trading business
Madhabdi	5	2(40%)	17,500	1984	"
Norsingdhi	5	-	-	-	-

**TABLE 6.11**  
**RATES OF INTEREST AND OUTSTANDING LOANS OF YARN TRADERS**

Location	Average amount of loan (Tk.)	Duration (year)	Rate of interest	Amount due on loan (Tk.)
Hasnabad	15,670	4	16	6,700
Madhabdi	17,500	3	17	9,300

From the table it can be seen that no trader in Norsingdhi took bank loan for working capital. It was also seen earlier that these traders did not take any institutional loan at the setup. The main loans for the traders in Norsingdhi has been the credit purchase from wholesalers in Narayanganj and Norsingdhi bazar. On the other hand, 50 and 40 per cent of the traders in Hasnabad and Madhabdi respectively have taken institutional loans, correspondingly Tk. 15.67 and 17.5 thousand, on an average, per enterprise. These loans were taken during 1983-84 and the trading businesses were given as collateral for the loans. It appears that the relationship of the entrepreneurs with the bank managers played a more important part in securing bank loans, rather than the collaterals. Duration of the loans, interest rates, and outstanding loans are shown in Table 6.11.

The table shows that the interest rate charged by the banks varies with the duration of the loan i.e. for shorter duration the rate of interest on loan is higher, and vice versa. The traders in Hasnabad and Madhabdi paid interest rate of 16 and 17 per cent respectively for their borrowed capital. It appears from the table that the repayment rate of trading loans from the banks is higher than that of handloom loan given to the handloom weavers. The traders in Hasnabad and Madhabdi have repaid about 43 and 53 per cent of their bank loans respectively.

#### **6.10 Impact of the Trading Loan on Informal Credit Market**

The impact of non-institutional loans on the traders has been analysed by comparing the credit purchases of the traders who have or have not taken institutional loans. It is to be expected that the traders who have received institutional loan will buy a comparatively smaller percentage of their raw material needs on credit than those traders who have not obtained institutional loans. Table 6.12 shows the details.

**TABLE 6.12**  
**USE OF CREDIT PURCHASE FOR TRADER (PER CENT)**

% of raw material bought on credit		
Location	Traders with bank loan	Traders without bank loan
Hasnabad	37.5	65
Madhabdi	30.0	45

From the table it can be seen that traders who obtained bank loan have substantially financed their stock purchase through own resources more substantially than those who did not take bank loans. The traders in Hasnabad and Madhabdi who obtained bank loans have met 37.5 and 30 per cent respectively of their total raw material requirement by credit purchases. On the other hand, traders in Hasnabad and Madhabdi who did not take any bank loan have made 65 and 45 per cent of the stock purchases under credit. This clearly demonstrates that traders who received bank loans are less dependent on credit purchases. It also appears that those traders who obtained bank loans did not take any term loan from the non-institutional sources.

### **6.11 Other Institutional Loans**

Besides the Handloom Credit - 1984 and bank loans, there are other institutional loans given only to the handloom weavers. These loans are:

- i) Co-operative loans.
- ii) Loans from the Bangladesh Rural Advancement Committee (BRAC)

#### 6.11.1 Co-operative Loan

In 1973-74, co-operative loan of Tk. 400 thousand was given to weavers in Norsingdhi area through 19 primary co-operative societies. This loan was administered through the Central Co-operative and Industrial Society. Duration of this loan had been for 5 years and rate of interest was 8.25 per cent. According to the Central Co-operative, most of the weavers did not repay these loans, which were later written off by the Government.

#### 6.11.2 BRAC Loan

A project of the BRAC is operating near the Sheker Char bazar of Norsingdhi. This project mainly provides loan to the members of 'Prathamic Somajjibi Samity', who own only one loom and are landless. During 1981-86 BRAC provided a total loan of Tk. 3.28 million. Of this, Tk. 2.82 million has been re-paid by the weavers i.e., the recovery rate was 86 per cent. It has provided loans to 225 weavers. However, some of the weavers were given loans more than once, provided they had cleared their previous loans. This loan is usually for a duration of 50 weeks and no collateral is required. The loan bears an interest rate of 26 per cent which comprises the following charges:

Principal interest of BRAC	18 per cent
Group tax	5 per cent
Management Committee allowance	3 per cent
<b>Total annual interest rate charge:</b>	<b>26 per cent</b>

Therefore, the rate of interest charged by BRAC for the loans is substantially higher than interest rate charged by other institutional agencies. According to BRAC, even with such interest rate, the weavers can generate profit from their enterprises and repay their loans on time. BRAC maintains a policy that the duration of loans should not exceed a period of 50 weeks. If any weaver requires a further loan, he has to repay the previous loan with interest, and then a new loan may be given. The BRAC not only provides loans but also extends follow up services, viz. production and marketing services. It also monitors how the loans are being utilized.

### **6.11.3 Impact of BRAC Loans on Informal Credit Market**

It was not possible to assess the impact of BRAC loans on the informal credit market, because weavers who received BRAC loans were not included in the samples of the survey. According to the Manager of the Project, the weavers who have received BRAC loan do not generally make credit purchases, because loans given to them are adequate to meet the total raw material cost of a tana (warp beam). Moreover, BRAC officials monitor the utilization of the loan and offer help with raw material purchases and also with marketing of the output. The loans given to the weavers vary between Tk. 3 and 7 thousand. Nevertheless, some of the weavers may have made some credit purchase, but these purchases would not have been more than 20 per cent of the total raw material requirement cost.

**NOTES**

1. Report of the Task Force for the Handloom Sector, Ministry of Industries and Commerce, Govt. of Bangladesh, June, 1982, PP. 1-3.
2. Report on Bangladesh Handloom Census-1978, Annexure VII, Sub-division Tables, A. Miyan, University of Dhaka, 1979, P. 1.
3. It is to be noted, however, that a co-operative loan of Tk. 400 thousand was given to the weavers in 1973-74, through primary co-operative societies. Details of this loan are discussed later in the text.

## CHAPTER 7

### INVESTMENT AND WORKING CAPITAL DEMAND AND THEIR MOBILIZATION AND DISBURSEMENT TO INCREASE EFFICIENCY FOR HANDLOOM AND POWERLOOM SECTORS

#### 7.1 Introduction

This chapter attempts to assess the investment and working capital needs for handloom and powerloom sectors in Bangladesh. In estimating the need for investment and working capital of handloom and powerloom, first, the total capital requirement has been assessed. For the total requirement of working capital, the existing level of contributions from the institutional and non-institutional sources will be isolated, so that the resource gap can be identified. This analysis will be limited to working capital, because informal credit market is pronounced there, while for investment, as the existing credit level is not significant, such analysis will be ignored. Further, investment and working capital requirement for traders will be limited to Norsingdhi area, as there are no national statistics available for the number of traders in Bangladesh. The assessment of capital requirement will be studied first for investment and then for the working capital.

#### 7.2 Investment Capital Requirement

The requirement of capital for investment is assessed from the following considerations:

- a) expansion of handloom and powerloom capacity; and
- b) modernization of obsolescent handloom capacity.

These are done first for the handloom and then for the powerloom sector.

### 7.2.1 Expansion of handloom Capacity

Expansion of handloom capacity is assessed based on the Third Five Year Plan (1985-90) target of supplying 12.03 yds of cloth per capita in 1989/1990,<sup>1</sup> i.e., the supply of cloth in 1988/89 should be about 11.6 yds. per capita to meet the Plan target. As the handloom unit mainly produces cotton cloth, expansion of handloom capacity to meet the Plan target will only be assessed for cotton cloth. According to the per capita cloth consumption level of 1984-85 of 8.6 yds., handloom production met about 84 per cent of it. Based on this, it is assumed that the handloom sector is required to supply 9.75 yds. per capita to meet the Plan target. However, there has to be an increased supply of 10.56 yds., if import of cloth is to be totally replaced by domestic handloom production. In projecting the supply requirement it would be assumed that handloom sector will supply 10 yds. cotton cloth per capita in 1988/89.

According to the population projection of 1985-2000, the population in the year 1988/89 would be about 110 million.<sup>2</sup> Therefore, the total supply requirement of cotton cloth is 1100 million yds. which is to be met from the handloom sector.

Handloom production in 1984-85 was 713 million yds, which is the highest level of production attained in the last 10 years. According to the Department of Textiles, this is the highest level of production that the sector can achieve. Any further increase in production has to come about through modernization of obsolescent looms and expansion of handloom capacity. According to the Handloom Census - 1978, at present 259.92 thousand looms are operational. Assuming that the number of working days is 300 annually, the productivity level achieved per loom to meet the production of 713 million yds. is 9.14 yds./day.

To meet the supply target of 10 yds. per capita, with the existing level of production of 713 million yards there is a supply gap of 387 million yds. To meet this supply gap, there is a requirement of 141.14 thousands handlooms, assuming daily production/loom of 9.14 yds. According to the Handloom Census - 1978 there are 177.01 thousand idle looms. Therefore, some of these looms can be made operational to meet the required expansion in capacity.

The age of looms shows that some of the handlooms were manufactured as early as 1940s and are still operating. From the survey of this study, it has been found that about 70 and 54 per cent of the pit and semi-auto looms units respectively were established during 1946-65. Most of the looms in these units have lost their economic lives and need modernization and replacement. Further, idle capacity as reported in the Handloom Census refers to 1978, which is 10 years before now; therefore, all of these idle looms may not be operable now. In assessing the investment need of the sector, the state of existing technology i.e. technological consideration must be taken into account. From the total existing handloom capacity, the technological condition of the looms is assessed based on the survey conducted for this study and from the discussion with the Department of Textiles. Table 7.1 shows the details of technological status of operational and idle looms.

The table shows that out of the total capacity of 437.01 thousand, 45.95 per cent is operational, 25.95 per cent requires modernization and the remaining 28.10 per cent needs replacement.

If it is assumed that the present level of production of 713 million yds. of cloth has been achieved with the 259.92 thousand operational looms, then to achieve a supply of 10 yds. of cloth per capita from the handloom sector, there is a requirement of total operational looms of 401.06 thousand (i.e. existing capacity 259.92 thousand plus expansion capacity 141.14 thousand). Based on the above table, the capacity to be modernized and expanded has been

**TABLE 7.1**  
**TECHNOLOGICAL CONDITION OF HANDLOOM CAPACITY (IN 000s)**

Type	Handloom capacity 1978	Technological condition					
		Operational		Required modernization		Required replacement	
		%	No.	%	No.	%	No.
Operational	259.92	50	129.96	30	77.98	20	51.98
Idle	177.09	40	70.84	20	35.42	40	70.84
<b>Total</b>	<b>437.01</b>	-	<b>200.80</b>	-	<b>113.40</b>	-	<b>122.82</b>

**TABLE 7.2**  
**CAPACITY TO BE MODERNISED AND EXPANDED TO MEET THE  
PLAN SUPPLY TARGET OF CLOTH**

	(in 000s)
Required capacity	401.06
<u>Existing capacity</u>	
Operable capacity	200.80
Capacity to be modernised	113.40
	314.20
<u>Expansion capacity</u>	
Required expansion in capacity	(401.06 - 314.20)
	86.86

calculated and shown in Table 7.2.

The table shows that to meet the supply target of 10 yds. of cotton cloth per capita, 113.4 thousand looms from the existing capacity are to be modernised and 86.86 thousand new looms are to be installed. According to the Handloom Census-1980, it can be assumed that about 68 and 32 per cent of the total looms are pit and semi-automatic types respectively. Table 7.3 shows the capacities to be modernised and expanded according to loom types.

It can be seen that 77.11 thousand pit and 36.29 thousand semi-auto looms are to be modernised. However, expansion of capacity will only be done with semi-auto looms. This has been considered from the fact that pitlooms are less efficient in terms of productivity and product quality therefore if new looms are to be installed to replace obsolete capacity, then it would be appropriate to do so with semi-automatic looms.<sup>3</sup> Hence, entire installed capacity is taken to be of the semi-automatic loom types.

In chapter 3, the required investment costs per pit and semi-auto looms have been estimated. As the installed capacity is actually the replacement capacity, there would not be any land and structure costs. The only cost that would be considered is machinery and equipment cost. On the other hand, the modernization cost has been estimated from the survey. Modernization cost is usually required to replace Sana, bar, frame, etc. Such cost is estimated to be 50 and 40 per cent of the total machinery and equipment cost of the pit and semi-auto looms respectively. Based on these estimates, the investment requirement of the handloom sector has been estimated in Table 7.4.

The table shows that to modernize the obsolescent looms, there is a capital requirement of Tk. 206.72 million. And, to install new capacity of 86.86 thousand semi-auto looms, a further investment

**TABLE 7.3**  
**CAPACITY ACCORDING TO LOOM TYPES FOR MODERNIZATION**  
**AND EXPANSION (IN 000s)**

Type	Types of loom		Total
	Pitloom	Semi-auto loom	
Modernization	77.11	36.29	113.4
Expansion	-	86.86	86.86

**TABLE 7.4**  
**INVESTMENT REQUIREMENT OF THE HANDLOOM SECTOR**

Type of cost	No. of loom (000s)	Cost/loom (Tk.)	Total cost (Mill Tk.)
<u>Modernization</u>			
Pitloom	77.11	1,468	113.20
Semi-auto loom	36.29	2,577	93.52
<b>Sub-total:</b>	<b>113.40</b>	<b>-</b>	<b>206.72</b>
<u>Replacement</u>			
Semi-auto loom	86.86	6,443	559.64
<b>Total:</b>	<b>200.26</b>	<b>-</b>	<b>766.36</b>

of Tk. 559.64 million is required. Hence, to supply cotton cloth of 10 yds per capita from the handloom sector an investment of Tk. 766.36 million is required.

### 7.2.2 Investment Requirement of Powerloom Weaving

According to the Department of Textiles, Ministry of Textiles, there are 10,763 registered powerlooms (1987) now operating in Bangladesh. Of these, about 2000 looms are operating in the private sector under organised production system; these looms are mainly imported. The remaining 8,763 looms are locally manufactured and are in operation as small-scale production units. These looms are producing both cotton and synthetic fabrics. According to the Department of Textiles, 2,325 powerlooms produce cotton grey fabric, while the remaining 6,448 looms are producing synthetic fabrics.

Out of these 6,448 powerlooms, it is estimated that about 80 per cent are operating in Dhaka division. A majority of these looms are of Hattersely type, were first imported in early 1900s and are now being produced locally. These looms are common in Norsingdhi and Narayanganj areas and in recent years, there has been a tremendous growth of this type of loom.

With the existing powerloom capacity of 8,763, operating as small and cottage unit forms, it has been estimated that there will be a growth rate of at least 20 per cent in 1988/89. Table 7.5 shows the expansion in capacity and investment requirement of the powerloom sector.

The table shows that to have an expansion of 1,753 looms in 1988/89, there would be an investment capital requirement of Tk. 33.46 million. It is to be noted that investment requirement of powerloom will include all fixed cost viz. land, structure, machinery and equipment, as these looms are to be newly installed.

**TABLE 7.5**  
**EXPANSION OF POWERLOOM CAPACITY AND INVESTMENT REQUIREMENT**

	Capacity	Investment requirement/ loom (Tk.)	Total investment requirement (Tk. million)
Existing capacity	8,763	-	-
Growth in capacity (at the rate of 20%)	1,753	-	-
Investment requirement	-	19,090	33.46

**TABLE 7.6**  
**INVESTMENT DEMAND OF HANDLOOM AND POWERLOOM SECTOR**

Sector	Tk. (mill)	
<u>Handloom Sector</u>		
Modernization cost	206.72	
Replacement cost	559.64	766.36
<u>Powerloom sector</u>		33.46
<b>Total:</b>		<b>799.82</b>

### **7.2.3 Total Investment Requirement of Handloom and Powerloom Sector**

Total investment requirement of the handloom and powerloom sector can be computed as shown in Table 7.6.

Table 7.6 shows that the total investment requirement of the handloom and powerloom sectors together is Tk. 799.82 million.

### **7.3 Working Capital Requirement**

Working capital requirement of handloom and powerloom sector has been estimated based on the capacity required to supply 10 yds of cotton cloth per capita. As has been assumed earlier, at present there are 259.92 handlooms under operation, therefore, working capital requirement for this capacity will be calculated based on the findings of this study, while, for the installed handloom capacity, the total working capital will be estimated.

#### **7.3.1 Working Capital Requirement for the Handloom Sector**

The total handloom capacity required to supply 10 yds. of cotton cloth per capita is 401.06 thousand, of which 259.92 thousand looms are presently operating. Table 7.7 shows the composition of total capacity according to the types of loom.

The working capital requirement of 259.92 thousand operational looms has been estimated based on the calculated requirement given for pit and semi-automatic looms in Table 4.18. Further, it has also been found in Table 4.11 that 51.18 and 47.29 per cent of the working capital for the corresponding looms is financed from own resources. Based on this information, the working capital requirement for the operational looms is calculated. For the new installed looms, the calculated working capital requirement will be the actual requirement, as these looms are presently not operating. Therefore,

**TABLE 7.7**  
**COMPOSITION OF TOTAL HANDLOOM CAPACITY**  
**(IN 000s)**

Type	Pitloom	Semi-auto loom	Total
Operational	176.75	83.17	259.92
Modernization/ expansion	54.28	86.86	141.14
<b>Total:</b>	<b>231.03</b>	<b>170.03</b>	<b>401.06</b>

**TABLE 7.8**  
**WORKING CAPITAL (W.C) REQUIREMENT OF THE HANDLOOM SECTOR**

Type of loom	Calculated W.C. (Tk.)	Own W.C. (Tk.)	Required W.C./loom (Tk.)	No. of loom (000)	Total required (Tk. in million)
<u>Operational</u>					
Pitloom	5,505	2,818	2,687	176.75	474.93
Semi-auto loom	7,774	3,676	4,098	83.17	340.83
<b>Sub-total:</b>	-	-	-	<b>259.92</b>	<b>815.76</b>
<u>Modernised/expansion</u>					
Pitloom	5,505	-	5,505	54.28	298.81
Semi-auto loom	7,774	-	7,774	86.86	675.25
<b>Sub-total</b>	-	-	-	<b>141.14</b>	<b>974.06</b>
<b>Total:</b>	-	-	-	<b>401.06</b>	<b>1,789.82</b>

to make them operational, the entire working capital calculated has to be raised either from own or from institutional or non-institutional sources. Table 7.8 shows the details of working capital requirements of the handloom sector.

The table shows that for the existing operational looms, there is a working capital requirement of Tk. 815.76 million. This takes into account of the existing level of working capital that the handloom sector commands from own resources.<sup>4</sup> For the modernised or expanded capacity, the total calculated working capital will be entirely required to make the new capacity operational. For 141.14 thousand looms, the working capital requirement is Tk. 974.06 million. Therefore, the total requirement of working capital to attain cotton cloth supply of 10 yds. per capita is Tk. 1,789.82 million.

### **7.3.2 Working Capital Requirement for Powerloom**

As has been seen earlier, powerloom manufactures grey polyester fabric, therefore, its working capital requirement is not contributing to the supply of cotton cloth requirement of the projected level determined for the handloom sector. The working capital requirement of the powerloom sector has been calculated following the methodology used for the handloom sector. In calculating the working capital, table 4.11 and table 4.18 have been used. Table 7.9 shows the details of working capital requirements of the powerloom sector.

It can be seen from the table that for the operational powerlooms, there is a working capital requirement of Tk. 28.62 million and for the expansion capacity, the requirement is Tk. 16.06 million. Hence, the total requirement of working capital for the powerloom sector is Tk. 44.68 million.

**TABLE 7.9**  
**WORKING CAPITAL REQUIREMENT OF THE POWERLOOM SECTOR**  
**(PER LOOM)**

Type	Calculated W.C. (Tk.)	Own W.C. (Tk.)	Required W.C./loom (Tk.)	No. of looms	Total required W.C. (Tk. in million)
Operational	9,162	5,896	3,266	8,763	28.62
Expansion	9,162	-	9,162	1,753	16.06
<b>Total:</b>	-	-	-	<b>10,516</b>	<b>44.68</b>

**TABLE 7.10**  
**WORKING CAPITAL DEMAND FOR HANDLOOM AND POWERLOOM SECTOR**

Sector	Tk. (mill.)
<u>Handloom</u>	
For existing loom	780.66
For modernised and expanded looms	974.06
<b>Sub-Total</b>	<b>1,754.72</b>
<u>Powerloom</u>	
For existing looms	28.62
For expanded looms	16.06
<b>Sub-Total</b>	<b>44.68</b>
<b>Total Requirement</b>	<b>1,799.40</b>

### 7.3.3 Working Capital Requirements of Handloom and Powerloom Sector

The total working capital requirement of handloom and powerloom sectors is computed below.

Table 7.10 shows that the total requirement of working capital for the handloom sector is Tk. 1,754.22 million and for the powerloom sector 44.18 million. Therefore, the total requirement for both the sectors is Tk. 1,799.40 million.

### 7.4 Working Capital Requirements for the Yarn Traders

Unlike Handloom sector, no census had been carried out on traders, therefore the number of traders operating in the country is unknown. However, according to the yarn traders' estimate there are around 300 traders operating in the Norsingdhi area. Therefore, working capital requirement for traders in Norsingdhi only is estimated.

TABLE 7.11

#### WORKING CAPITAL REQUIREMENT FOR TRADERS IN NORISINGDHI AREA

Type	Value of purchase (TK.000s)	Weighted average W.C. (Tk.000s)	Short-fall in W.C. (Tk.000s)	Requirement of W.C. (Tk.000s)
Average trader	414.07	136.71	277.36	273.36
All traders	124.221	41,013	82,208	83,208

The working capital requirement for the traders is assumed to be the value of purchase for at least 15 days. From section 5.3.2, it is possible to calculate the weighted average value of purchase, the existing level of working capital and the shortfall of working capital for traders in Hasnabad, Madhabdi and Norsingdhi. Table 7.11 shows the details.

The table shows that the total shortfall in the requirement of working capital for the traders in Norsingdhi is Tk. 63.21 million. This shortage in working capital is presently met through credit purchase of stock from Norsingdhi and Narayanganj bazar. It is to be noted that the interest rate paid by the traders for credit purchase varies between 11.06 and 20.62 per cent, which is substantially lower than the interest rate paid by the manufacturer and not markedly higher than the interest rate charged by the commercial banks. Therefore, it can be argued here that present sources of credit purchases of the yarn traders is comparatively better than the institutional sources and there is economic justification for their continuation.

#### **7.5 Organization of Informal Credit Market to Increase Efficiency**

In the preceding section it has been seen that the handloom sector requires 200.26 looms to be modernised and replaced. This will have an investment demand of Tk. 766.36 million. To meet the existing level of working of the operational looms, there is a working capital demand of Tk. 780.66 million, which is presently met through credit purchase. If the TFYP target of 10 yds. cotton cloth is to be met through the handloom sector, then a number of looms from the existing idle capacity is either to be modernised or replaced. The demand for working capital for this modernised and replaced capacity would be Tk. 974.06 million. The investment and working capital demand for the powerloom sector, on the other hand, are

Tk. 33.46 and 44.68 million respectively. Hence the total investment and working capital demand for the handloom and powerloom sectors together are Tk. 799.82 million and Tk. 1,799.40 million respectively.

This investment and working capital demand can be met through:

- a. mobilising own resources from savings, re-investment of profit, sale of assets, etc.
- b. raising capital from the non-institutional sources; and
- d. raising capital from the institutional sources.

Mobilization of resources for meeting the projected investment and working capital demand can, therefore, be met either from any of the above or the use of two or from three sources. Here, mobilization of investment and working capital have been suggested in two ways.

#### **7.5.1 Institutional Credit Through Intermediate Agency**

From the Handloom credit - 1983, it has been seen that institutional credit given to meet the working capital need, directly to the weavers failed to reach the weavers, and local elites, politicians and touts have benefited from the loans. Although the handloom credit - 1983 was intended to cover almost all the weavers, the survey conducted for this study suggested that only 20 per cent of pitloom, 57 percent of the semi-auto loom weavers obtained this loan.

The recovery of the loans has been very low, only about 3 per cent, according to the regional banks. Hence, the objective of the handloom loan to ease the working capital problem of the weavers did not meet with much success.

One of the main reasons for the failure of the handloom loan to bring about the anticipated impact on the informal credit market was that the agencies i.e. commercial banks, which administered the

loan did not have adequate experience or close working relationship with the weavers. Moreover, providing loans to the individual weavers was indeed a big administrative task, which was difficult to monitor and control. This has resulted in disbursement of the loan to the wrong hands and consequently, a very low recovery rate.

It is, therefore, suggested here that intermediate agencies between the financial institutions, who provide capital and the weavers (borrowers) are needed. Such agencies will have the experience of working closely with the weavers and, therefore, will be in a position to administer and monitor the loans. Handloom associations and co-operatives, organised through the membership of the weavers can be trusted upon to act as such agencies.

These agencies can borrow capital according to their memberships from the institutional sources and then distribute this borrowed capital to the member weavers, as practised by the BRAC (See section 6.11.2). The agencies will charge some premium on the interest rate charged by the commercial institutions, which will cover the administrative and other costs and leave some surplus for future expansion of activity of the agencies. Alternatively, the intermediate agencies can buy raw material from public and private sectors textile mills and also from other sources with the capital borrowed from the institutional sources and money raised from the membership contributions to the equity capital. The raw material can then be distributed to the weavers as input credit with a premium charged to cover administrative and other costs and profit. Such input credit has the advantage of a better level of utilization. The weavers can pay back their credit after they have marketed their output or alternatively, the agencies can buy output at market prices and then market them in bulk. The loan given as input can be deducted from the output payment of the weavers.

Intermediate agencies of this kind are already operating in India under the name of 'Apex' societies. These agencies are generously supported by the Indian Government and at present market more than 50 per cent of the handloom output or products. These agencies are also involved in promoting their own spinning mills to establish backward linkage and also provide pre- and post- processing facilities, such as dyeing of yarn, printing of grey fabric and bleaching and calendering of finished fabrics.

Using the intermediate agencies viz. handloom associations, cooperative societies, etc. between the institutions and the weavers, a wide coverage of institutional benefits can be channelled and monitored efficiently, because such organisations have close working relationship with the weavers. This will reduce the quantum of credit purchase from the yarn traders and thereby reduce exploitation of the weavers. There has been a direct impact of institutional loan on credit purchase. It was found that 57 per cent of the entrepreneurs with semi-auto loom units, who received institutional loan, have bought about 39 per cent of their raw material on credit as against 71 per cent of the entrepreneurs who did not have institutional credit. However, this was not true for the pitloom weavers, where credit purchase was about 10 per cent higher for the weavers who received bank loan than those who did not. This is because a substantial proportion of the loan taken for the working capital was, in fact, spent on machinery and equipment and for consumption. It has emerged, therefore, that institutional loan for working capital alone is not sufficient to reduce dependence of weavers on credit purchases from the traders; efficient utilization of the loan is equally important. Intermediate agencies between the institutions and weavers can ensure proper distribution of the loan as well as its utilization in productive activity. By extending physical input credit, as suggested above, proper utilization can be ensured.

### 7.5.2 Re-organization of Informal Credit Through Intermediate Agency

In the preceding section, better distribution and utilization of the institutional loans through intermediate agencies have been suggested. Here, it has been proposed that these agencies can help to organise the informal credit market to benefit both the traders and weavers with minimum financial assistance from the institutional sources.

Intermediate agencies like handloom associations or co-operative societies can organise the input distribution on credit with contribution from their member weavers. They can sort institutional credit to help with their working capital need, while the bulk of raw material purchases for distribution to weavers can be made on credit from the existing wholesalers, as the yarn retailers and wholesalers presently do from the Mohajans in Norsingdhi and Naryanganj bazar. Yarn wholesalers would be ready to extend credit sales to the association, but would not do so to the individual weavers. If the raw materials are bought in bulk from the wholesalers, then the association or societies would be charged with the same interest rates as the yarn traders. It has been observed earlier that such interest rates vary between 11 and 21 per cent, which are substantially lower than the interest rates paid by the individual weavers to wholesalers and retailers, which vary between 44 and 50 per cent. Yarn traders in Norsingdhi make bulk credit purchases of raw material, compared to the traders in Hasnabad and Madhabdi. The interest paid by the traders in Norsingdhi is a minimum of 11 per cent. The duration of the credit purchase is about 10 days. This interest rate is substantially lower than the interest rate prevailing on loans from institutional sources. Intermediate agencies can derive benefit from such credit purchases, which will make them more competitive than if they borrow from institutional sources. The reason for these low interest rates arises from the fact that it is an usual practice between the yarn traders and large wholesalers

to pay for the purchase partly on the day of purchase and the remaining after 7 - 15 days, as the arrangement prevails between the borrower and the creditor. There is no interest rate involved in these transactions as they see it. However, it has been found that Tk. 50 is charged for 1 bale (400 lbs.) of cotton yarn.

Intermediate agencies can benefit from such credit purchases to buy their raw materials, which they can then distribute to the weavers, who are the members of the association or societies. Such purchases will, in fact, be economically more rewarding than the purchases to be made from money borrowed from institutional sources, as the rate of interest of the institutional credit varies between 13 and 17 per cent, while the rate of interest charged by the wholesalers for credit purchases is only 11 per cent. The agencies can charge a premium on the input price to cover the administrative and other expansion costs, as well as have some surplus left over to be used for the expansion of the activities of the association or society.

Organization of the informal credit transaction in such a manner will reduce exploitation of weavers and at the same time help the informal credit market to achieve efficiency. In this manner of organization, however, the role of yarn retailers will be undermined substantially, but the wholesalers can still operate efficiently. However, it is possible to buy raw materials even from the retailers. In such circumstances, the retailers will have to reduce their premium charged on credit sales.

The informal credit market, re-organised in this manner, will reduce the risk of bad debts for the traders, because they will be transacting with associations or societies, rather than a large number of yarn traders. On the other hand, it will help to increase efficiency of the production units, because the weavers would not be paying high interest rate on their credit purchases, a payment which erodes their profitability.

## NOTES

1. The Third Five Year Plan - 1985-90, Planning Commission, Govt. of Bangladesh, December, 1985, P. 241.
2. Statistical Pocket Book of Bangladesh - 1986, Bureau of Statistics, December, 1986, P. 157.
3. So far, all production estimates are based on the total number of looms, which include pit, semi-auto and a small percentage of other types of looms. Therefore, ideally, the expansion capacity should have been about 68 per cent pit and 32 per cent semi-auto looms, to maintain consistency. By installing all looms of semi-auto types, the total production will increase by about 6 per cent over the projected level.
4. The total calculated working capital requirement for the operational looms is Tk. 1,619.57 million, of which Tk. 803.81 million is financed from own resources. Here, own sources of working capital have been given emphasis for yarn requirement only, therefore, the requirement may have been under estimated to some extent. However, as the raw material cost consists between 70-80 per cent of raw material costs for pit and semi-auto looms, and further, as other cost elements of working capital are met from weekly sales, the working capital estimated here is representative.

## CHAPTER 8

## CONCLUDING REMARKS

Handloom weaving is characterised by working capital problems. Trading credit from non-institutional sources has been the main source of funds for meeting the working capital needs. The role of professional money lenders has been found to be insignificant. However, they were the important source of credit during 1940s and 1950s, when handloom weaving was dominated by Hindu artisans, traders, money lenders, etc., most of whom have now migrated to India. In working capital cost, raw material cost represents a major share. It has been found that between 71 and 90 per cent of the working capital requirement for the pit, semi-auto and powerloom units arises from raw material costs. Therefore, it is the financing of the raw material (input) cost that is most important for the operation of production units.

Trading credit is confined to raw material sales i.e., yarns are sold on credit either in grey or dyed form. Between 36 and 51 per cent of the yarn requirement of the manufacturers (weavers) and about 46 per cent of the yarn stock purchase of the traders are bought on credit. The credit flows operate from yarn wholesalers to yarn traders and then to manufacturers (weavers). Capital for setting up and expansion of production units mainly came from the entrepreneurs' own sources, except in a few cases, where non-institutional sources of funds were used.

The importance of the informal credit market arises from the fact that it presently meets about 48 per cent of the working capital need. In terms of value of credit, it contributes Tk. 781 million to the working capital. Judging from the importance of the handloom and powerloom sectors, where the handloom sector meets about 84 per cent of the cotton cloth needs of the country (1985), and the

powerloom sector produces about 220 million yds. of cloth annually (1986), the states of their existing production capacities and requirement for their modernization and expansion are of profound interest. It has been estimated that to meet the TFYP (1985-90) target, the handloom sector is required to supply 10 yds. of cotton cloth per capita in 1988/89, and that the powerloom to continue the present level of growth in capacity, needs a growth of 20 per cent in 1988/89. To attain this, the handloom sector requires to modernise 113.40 thousand and expand 86.86 thousand looms and the powerloom sector requires to expand 1.75 thousand looms. Considering the investment and working capital requirement per loom, as well as present level of working capital from own sources, it has been estimated that the handloom and powerloom sectors will have investment demand of Tk. 766.36 and Tk. 33.46 million and working capital demand of Tk. 1,754.72 and 44.68 million respectively, in 1988/89. Such investment and working capital demands need to be met either from own or from institutional and non-institutional sources.

It is evident that own sources, viz. savings, re-investment of profit, sales of assets, etc. can not meet such investment and working capital demand, therefore, resources or capital need to be mobilised from institutional and non-institution sources. It has been seen that the role of non-institutional credit for investment and expansion are not significant, therefore, for the required modernization and expansion, the institutional sources of finance can make an important contribution. Such finance can be mobilized from the commercial and krishi banks and from the proposed Small and Cottage Industries banks. However, it is to be ensured that borrowed capital from institutional sources is utilised appropriately. This requires proper monitoring and control which can be done through intermediate agencies well connected with the handloom and powerloom sector, viz. co-operatives, ECOs and other organisations.

In meeting the working capital demand for handloom and powerloom sectors, both institutional and non-institutional finance can be mobilized. How these finances can be raised, disbursed and utilised is important. For example, it has been seen that although the handloom credit was intended to provide coverage for almost all the weavers, according to the findings of this study about 20 and 57 per cent of pit and semi-auto looms units respectively have been benefited. There has been positive benefit of this loan, at least, for those semi-auto loom entrepreneurs who obtained institutional loans. Credit purchase for these units was 32 per cent less than those units which did not obtain institutional loans. However, for pitloom units, this was not true. In fact, credit purchases by entrepreneurs who obtained handloom credit is about 10 per cent higher than those units which did not take institutional loans. It is found that a large proportion of the loans for these weavers was utilized in buying machinery and equipment and in consumption, rather than in working capital.

Working capital loans from institutional and non-institutional sources can be re-organised. In the case of institutional loans, it has been suggested in the text that loans can be given to intermediate agencies viz. handloom associations, co-operatives, NCOs, etc., which have close working experience with handloom and powerloom entrepreneurs, to ensure proper disbursement and utilization. Alternatively, these agencies can buy raw materials (yarn) from public and private sector textile mills, with the money borrowed from institutional sources, and distribute them to weaver-members of the association or societies. The payment of input loan can be in cash or in output over which a premium to cover administrative and other costs could be charged. Such re-organization of the formal credit flow will ensure efficient disbursement, monitoring and utilization. This re-organisation, however, involves only formal institutions. The informal credit market can also be re-organised, as explained

in the text, with a minimum borrowing from the institutional sources. Here, use of formal loans will contribute as working capital, while the bulk of raw materials will be purchased on credit from the wholesalers in Norsingdhi and Narayanganj and then these raw materials will be distributed among the weavers who are members of the associations or societies. The repayment of input credit from the manufacturers (weavers) can be in the form of cash or output, while the intermediate agencies will repay, for the credit purchase, in the same manner as the yarn traders do, or can arrange special terms of payment. Yarn wholesalers would be willing to give such credit, as they are giving the credit to institutions rather than individuals. Such credit purchases by the associations or societies will have more economic justification, because interest rate prevailing for such credit is about 11 per cent, as against the rate of interest for commercial banks, which varies between 15 and 18 per cent.

Finally, it can be concluded that institutional sources of credit would not be able to meet the investment and working capital demand of the handloom and powerloom sectors; therefore it is necessary to mobilise non-institutional sources of funds. If the existing informal market can be organised and developed (in ways suggested above) to make it less exploitative then it can make a positive contribution to increasing the efficiency of the hand- and powerloom sectors.

## APPENDIX A: Tables

## APPENDIX 3.1

## EMPLOYMENT AND ITS CHARACTERISTICS FOR HANDLOOM AND POWERLOOM

Type of unit	Employment type <sup>1/</sup>						Total employment/unit			Employment per loom		
	Family			Hired			FT	PT	Total	FT	PT	Total
	FT	PT	Total	FT	PT	Total						
Pitloom	2.6	5.8	8.4	2.0	3.4	5.4	4.6	9.2	13.8	1.84	3.68	5.52
Semi-auto loom	2.4	5.9	8.3	12.2	8.2	20.4	14.6	14.1	28.7	2.46	2.38	4.84
Powerloom	3.5	1.3	4.8	10.4	2.6	13.9	13.9	3.90	17.8	5.35	1.50	6.85

Note: 1/ FT = Full-time employment  
PT = Part-time employment.

## APPENDIX 3.2

**ANNUAL RAW MATERIAL CONSUMPTION AND THEIR CHARACTERISTICS AND VALUE  
(FOR 5 PITLOOM, 28 SEMI-AUTO LOOM AND 6 POWERLOOM UNITS)**

Loom	Location	20's cotton (lb)	32's cotton (lb)	40's cotton (lb)	Polyes- ter 75 (lb)	Total quantity (lb)	Total yarn value (Tk.)	Total byeing value (Tk.)	Total yarn and dyeing value (Tk.)
Pitloom	Hasnabad	2520	-	32,040	-	<u>34,560</u>	15,98,947	5,53,574	21,52,521
<b>Sub-total:</b>						<b>34,560</b>	<b>15,98,947</b>	<b>5,53,574</b>	<b>21,52,521</b>
Semi-auto loom	Sreenagar	4920	-	94,200	-	99,120	45,37,108	13,68,066	59,05,174
	Sheker Char	-	7200	23,040	-	30,240	13,30,560	37,640	13,68,200
	Goradia	-	-	120,840	-	<u>120,840</u>	<u>56,20,268</u>	-	<u>56,20,268</u>
<b>Sub-total:</b>						<b>250,200</b>	<b>114,87,936</b>	<b>14,05,706</b>	<b>128,93,642</b>
Powerloom	Anandi	-	-	-	6600	6,600	3,52,836	-	3,52,836
	Hasnabad	-	-	-	9,528	9,528	4,96,895	-	4,96,895
	Norsingchi	-	-	-	13,680	<u>13,680</u>	<u>7,02,468</u>	-	<u>7,02,468</u>
<b>Sub-total:</b>						<b>29,808</b>	<b>15,52,189</b>	<b>-</b>	<b>15,52,189</b>
<b>Total:</b>		<b>7,440</b>	<b>7,200</b>	<b>270,120</b>	<b>29,808</b>	<b>314,568</b>	<b>14,639,072</b>	<b>19,59,280</b>	<b>165,98,352</b>

## APPENDIX - 3.3

**OUTPUT CHARACTERISTICS OF HANDLOOM AND POWERLOOM PRODUCTS  
(ANNUAL OUTPUT IN YDS. AND VALUED IN TAKA)**

Location	Product	Pitloom		Semi-auto loom		Powerloom		Total	
		Quantity (yds)	Value (Tk.)	Quantity (yds)	Value (Tk.)	Quantity (yds)	Value (Tk.)	Quantity (yds)	Value (Tk.)
Hasnabad	Saree	168,335	28,00,150	-	-	-	-	168,335	28,00,150
"	Lungi	16,200	2,37,600	-	-	-	-	16,200	2,37,600
Sree Nagar	Saree	-	-	462,500	84,91,800	-	-	462,500	84,91,800
Goradia	Saree	-	-	336,440	41,19,992	-	-	336,440	41,19,992
"	Markin	-	-	420,095	41,07,136	-	-	420,095	41,07,136
Sheker Char	Quilt cover	-	-	77,960	9,01,122	-	-	77,960	9,01,122
"	Moshery	-	-	78,060	7,28,154	-	-	78,060	7,28,154
Hasnabad	Polyester than	-	-	-	-	57050	7,72,186	57,050	7,72,186
Norsingdhi	"	-	-	-	-	78,590	10,45,740	78,590	10,45,740
Anandi	"	-	-	-	-	42,400	5,96,296	42,400	5,96,296
<b>Total:</b>		<b>184,535</b>	<b>30,37,750</b>	<b>13,75,055</b>	<b>183,48,204</b>	<b>178,040</b>	<b>24,14,222</b>	<b>17,37,630</b>	<b>238,00,176</b>
<b>Average/unit</b>		<b>12,302</b>	<b>2,02,517</b>	<b>49,109</b>	<b>6,55,293</b>	<b>29,673</b>	<b>4,02,370</b>	<b>91,084</b>	<b>12,60,180</b>

## APPENDIX - 3.4

## LEVEL OF OPERATION OF HANDLOOM AND POWER LOOM UNITS

Type of unit	No. of peak months	No. of working day in a peak month	No. of hours worked in a peak day	No. of non-peak months	No. of working days in a non-peak month	No. of hours worked in non-peak day	Total hours in peak months	Total hours in non-peak months	Total hours in peak non-peak month
Pitloom	5.27	26.33	11.40	6.73	22.13	9.67	1582	1440	3022
Semi-auto loom	5.29	26.46	12.14	6.71	24.25	9.96	1699	1621	3320
Powerloom	7.50	28.00	16.60	4.50	23.00	15.50	3486	1604	5090

## APPENDIX - 3.5

## OUTPUT VALUE, VALUE-ADDED AND PROFITABILITY OF HANDLOOM AND POWERLOOM UNITS

Type of unit	Total value of output	Input cost (Tk.)					Value added (Tk.)	Wage cost (Tk.)	Family income (Tk.)	Depre- cia- tion (Tk.)	Net income (Tk.)
		Raw materials output (Tk.)	Other inputs	Mainten- ance	Misce- llanc- ous costs	Total					
Pitloom	202,517	1,43,501	4,956	2,251	2,657	1,53,365	49,152	33,705	15,447	991	14,456
Semi-auto loom	655,293	4,60,487	12,216	7,018	5,771	4,85,492	169,801	108,934	60,867	5,784	55,083
Powerloom	402,370	2,58,698	-	6,112	7,805	2,72,615	129,755	57,806	71,949	4,702	67,247

**APPENDIX B:****Study on Urban Informal Financial Market****INDICATIVE TERMS OF REFERENCE****INFORMAL FINANCIAL MARKET AND THE HANDLOOM  
AND SMALL SCALE COTTON TEXTILE SECTOR  
IN BANGLADESH**

The handloom and small scale cotton textile sector is probably the largest non-farm production activity. The handloom sector alone contributes about 60 per cent of GDP of the Small and Cottage Industry sector, which in turn contributes about 45% of industrial GDP.

The handloom and small scale cotton textile sector like many other informal activities, suffers from various problem — and one of the major ones is the lack of credits. More than eight-tenths of weavers indicate the need for loans and only an insignificant 6 per cent get support from organised financial sector. The rest had to depend on informal financial market.

This dependence on informal financial sector has significant implication both for the growth of the financial sector and the industry. In the absence of credit from formal sector, the informal sector has facilitated production in the handloom and cotton textile sector to continue by adapting to the credit needs in various way, by extending both kind and cash loans, by linking credit to trading activities and by providing much needed working capital to weavers, etc. The IFM on the other hand in also alleged to have served their own short-run interests of maximising financial returns through exploitative credit relations, by channelling producer's surplus to traders and middlemen, etc. While credits from friends and relatives remain a major source of funds, and so does own resources, informal loans from traders and middlemen are seen to charge interest

rates as high as 135 per cent. Concealed interests in the form of higher prices in case of delayed payments also remain a favoured mode of exploitation. There seems to have certain specialisation in the trading of cotton yarn and textile products. The earlier system of advancing yarn on credit at higher than market prices and compulsory delivery of output at lower than market prices are reported to have given way to single transaction specialisation.

### The Case Study Methodology

Given the importance of the handloom and the small cotton textile industry sector, it is advisable to conduct two case studies on the sector in two different locations in order to know more about informal financial transactions in these sectors. One of the case studies could be conducted in Norsingdi in Dhaka and the other in Shahjadpur in Pabna.

In conducting the case studies, an anthropological approach would first be taken to know about the intricate details of direct financial transaction or financial transaction in the garb of other transactions. On the basis of the details, about 50 handloom/small textile units would be surveyed to form a quantitative idea. Moreover a few yarn dealers and marketing intermediaries would also be covered for specific case studies.

In conducting the study, it would be useful to have initial discussions with the executive members of Bangladesh Handloom Industries Association and get their assistance in developing rapport with handloom unit and small textile unit owners, yarn dealers, etc.

### Specific Terms of References for the Case Studies

The TORs for the case study on the informal financial transactions in handloom and small textile unit sector should include, inter alia, the following:

- a) A brief account of the sector, its present size and growth underlining the importance case study.
- b) An identification of inputs and outputs with a view to determine working capital requirement for an average unit, and blowing up the requirement for the sector as a whole. Along with an assessment of investment requirement, an assessment will be made of credit needs of the sector.
- c) Analysis of trading/production channels and the existing system of informal financial transactions among various actors (yarn dealers-producers-marketing intermediaries-wholesalers-money lenders-etc).
- d) Establishment of linkages among various transactions and components with a view of find out and analyse the interest rate structure, and its composition.
- e) Identification of specific characteristics of the IFM which made it different from formal financial market transactions, and identification of ways of making IFM more competetive.
- f) Identifying and analysing any formal-informal FM interaction and connction.
- g) Estimating resource base of lenders in order to see how much resources are being mobilised through this particular segment of IFM.
- h) Analysing the equity and efficiency impact of IFM, and lastly.
- i) Providing recommendations about further development of the IFM to serve this specific activity.