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STUDY ON TEXTILE AND READYMADE
GARMENTS INDUSTRY OF BANGLADESH

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GLOSSARY

BBS	Bangladesh Bureau of Statistics
BEA	Bangladesh Economic Association
BER	Bureau of Economic Research
BGMEA	Bangladesh Garments Manufacturers and Exporters Association
BIDS	Bangladesh Institute of Development Studies
BMRE	Balancing, Modernization, Replacement and Expansion
BPMI	Bangladesh Project Management Institute
BSB	Bangladesh Shilpa Bank
BTMA	Bangladesh Textile Mills Association
BTMC	Bangladesh Textile Mills Corporation
CEPZ	Chittagong Export Processing Zone
CES	Constant Elasticity of Substitution
CR	Chitta Ranjan
EEC	European Economic Community
EPB	Export Promotion Bureau
ESEPP	Employment and Small Enterprise Policy Planning
FFYP	Fourth Five-Year Plan
FOB	Free On Board
GoB	Government of Bangladesh
HIID	Harvard Institute for International Development
ICB	Investment Corporation of Bangladesh
L/C	Letter of Credit
RMG	Ready-Made Garments
RPM	Rotation Per Minute
TFYP	Third Five-Year Plan
ToR	Terms of Reference
TSMU	Textile Strategic Management Unit
UNIDO	United Nations Industrial Development Organization
WES	Wage Earners Scheme
XPB	Export Performance Benefit
XPL	Export Performance License

EXECUTIVE SUMMARY

The total textile economy of the country now comprises 69 spinning mills with an installed capacity of 1.517 million spindles, divided between 7.49 and 7.68 million spindles respectively in the public and the private sector. The number of weaving mills stands at 27 with a total of 8447 looms, having a production capacity of around 98 million metres per annum. In addition, there are 897 powerlooms, specialized cotton weaving and specialized synthetic weaving units with 18724 looms in the registered factory sector, about 42,500 handlooms and close to 16000 powerlooms in the unorganized sector. The annual production capacity of the organized powerlooms and the handlooms is estimated to stand together at 740 million metres of fabrics annually. In the hosiery sector, there are 318 hosiery units producing 21 million metres of fabrics per annum. Latest information also indicate establishment of 169 semi-mechanised and 58 mechanised dyeing and finishing units with a total production capacity of nearly 550 million metres of fabrics annually.

However, despite having traditional advantages and considerable market prospects, the growth of the cotton textile sector as a whole during the past decades has not been very satisfactory. The industry has neither been able to meet the domestic demand for yarn and fabrics nor has been able to produce quality items. Shortage of rawmaterials, capacity underutilization, management inefficiency, marketing problems and competition from illegal imports are identified as important factors responsible for unsatisfactory growth performance of the textile sector.

Further, the industry being oriented primarily towards meeting domestic demand, has not been able to meet the requirements of the fast growing apparel sector. This, to some extent, seems to have resulted from lack of policy coordination pertaining to different subsectors comprising the textile industry. For example, the phenomenal growth in the export garment subsector has taken place without corresponding development of any linkage with the domestic fabric producing industry since its entire rawmaterials, especially fabrics are imported from abroad.

The emergence of an export garment sector in the economy of Bangladesh though a phenomenon of the eighties, it reached an enviable position very rapidly, growing at a phenomenal rate. The number of RMG enterprises increased from a paltry 9 units in 1977/78 to a sizeable figure of 754 in 1988/89, recording a spectacular growth of nearly 60% per annum, with the greatest growth spurts having occurred between 1982/83 and 1983/84. Virgin international markets, especially in the U.S.A. simple technology, and availability of a vast reservoir of cheap labour force combined with dynamic entrepreneurship and a quota-free locus to provide a big fillip to the growth of RMG industry of Bangladesh.

Though a reality of the recent past, the RMG industry constitutes a vital segment of Bangladesh's national economy. The RMG industry of Bangladesh appears to be a particularly significant factor in her foreign trade. The total value of the industry's exports in 1988/89 represented over 36% of total national exports. The industry not only recorded an unheard of average annual growth rate of over 200% over the last decade it also had turned into the single largest source of foreign exchange earnings surpassing jute and jute goods exports by 44% since 1987/88.

Though the export-oriented segment of the RMG industry consists of relatively large-sized production units, there are wide variations in the unit sizes with many small-scale operations serving the specialized consumer needs and working as subcontractors of large units. Extreme diversity in product types, styles and designs and consequent short production runs (i.e. batch process as opposed to continuous process) prohibit mass production on a large-scale basis. While there has generally been a positive association between firm size and capital intensity, no such continuous relationship could be identified between firm size and efficiency in the RMG industry.

The RMG industry of Bangladesh is seen to be concentrated in the two major urban centres (i.e. Dhaka and Chattagong) of the country, reflecting urban-oriented locational characteristics of the overall industrial sector.

The RMG industry generally produces standard apparels like men's and boys' shirts, jeans pants, jackets and trousers, womens' blouses and skirts, and other plain dresses. Overall, the industry is still confined to the "low end" as opposed to "high fashion, greater unit value regime." Hence future growth of the industry is contingent, among other things, on steady movement and penetration into high-fashion, greater unit-value regime.

Inter-firm differentials in the overall performance in the industry is ascribed by the knowledgeable quarters to a complex of factors. However, the firms performing better than others generally mention better capacity utilization, ready access to export markets, moral support from the foreign buyers (in terms of accepting products of even low quality) improved technical capability and good labour-management relationships to be the important determinants of success.

Though the RMG units in Bangladesh are generally oriented towards practising modern management techniques both by hiring qualified managers and also by delegating managerial responsibilities to them, making important decisions by one key person in each unit, mostly by the owner (himself), is still believed to be a general practice.

Currently, the apparel exporting firms of Bangladesh meet their requirements for fabrics and other accessories through imports from abroad. This implies absence of backward linkages of the industry with the domestic fabric economy of the country which is making the net foreign exchange earnings ratio to remain relatively low, varying between 25-30 percent range.

While the future growth potential of the RMG industry still appears to be bright, sustained long-term growth seems critically dependent upon successful diversification of products into non-quota categories and into high unit-value fashion items, penetration into non-quota markets, general upgradation of product quality and design, better utilization of production capacity and establishment of

effective backward linkages with the domestic fabric economy in order to ensure domestic sourcing of fabrics as well as other accessories.

The overall structure of policies and incentives offered to the export garment manufacturers appears to be by and large favourable for the growth of the industry. However, important modifications in , the back-to-back L/C operations, bonded warehouse scheme, quota administration procedures, and application of XPB scheme designed to provide cash benefits to the exporters, have been suggested in order to make the overall incentive structure more flexible and effective.

Study On Textiles and Readymade Garments Industry of Bangladesh

Introduction

This report is an outcome of a part-time consultancy offered to the author by the HIID/Dhaka, Bangladesh. This is a subsector study on Textiles and Readymade Garment industry of Bangladesh, with particular focus on the readymade garments subsector. As part of carrying out intensive analysis of some of the most dynamic and promising industries in Bangladesh, the objective of the present study on textile and readymade garments industry is to assess the industry's performance and potentials for employment generation and productivity and exports growth in relation to other subsectors and the overall manufacturing sector. Special emphasis has been placed in the ToR of the study on Exploring the ways in which existing government policies have shaped the growth of the industry and suggesting additional policy measures that may be undertaken to enhance its future overall growth potentials.

Since the primary focus of the study has been an in-depth analysis of the RMG industry, no attempt has been made to study the Textile industry per se in any greater detail than needed to shade light only on those aspects which are relevant to examining and analysing the prospects and problems of the garment sector.

The organization of the study is as follows. The study has been divided into two parts, part I and part II. In Part I, a brief review of size, structure and performance of the cotton textile industry of Bangladesh has been made. The mode of analysis has been to elaborate on those aspects of various subsectors of the industry which might influence directly or indirectly the growth and development of the garments subsector. While Part II examines the process of growth and development of the RMG industry in Bangladesh from a historical perspective, the main focus has been to assess present status and future potentials of growth of the industry in the country. Evolution and growth of the RMG industry has been outlined in Section 2.1. The importance of the industry in the national

economy of Bangladesh has been examined in Section 2.2. In Section 2.3 various structural characteristics such as, age and size of enterprise, location, output composition and technology etc. have been analysed. Organization and management aspects of the industry have been discussed in Section 2.4. Section 2.5 has explored the possibilities for promoting backward linkages between RMG industry and the domestic textile economy. While section 2.6 identified the constraints, analyses policy issues and makes policy recommendations, the final section in Part II presents a summary of the major findings of the study.

The data base of the study has primarily been secondary information collected from various published sources. To fulfil contractual requirements envisaged in the ToR, primary data collected through field survey by the HIID/ESEPP project has also been used. Additionally, a small sample of entrepreneurs and officials of various policy-making bodies were also interviewed by the author personally to supplement various information gaps.

The generous cooperation extended in various forms by Professor G.S. Sehota, Harvard Advisor, at various stages of conducting the study is gratefully acknowledged.

PART - I

THE TEXTILE INDUSTRY OF BANGLADESH

1.1. Importance of Textile Industry in Bangladesh Economy

The cotton textile industry occupies an important place in the economy of Bangladesh. The industry has many special features which have enabled it to transform itself from a rich heritage of the distant past into a critical factor in the country's industrial development. To begin with, it is the sole domestic producer of yarn and the second largest supplier of cloth of the country. Its own production of cloth covers nearly 20% of the total production of cloth in Bangladesh.¹ The share of the industry in total manufacturing employment was about 22% as of 1983/84.² In terms of fixed capital investment, employment, and value added, this subsector is the second largest within the manufacturing industries sector of Bangladesh. Besides supplying one of the most important basic needs after food, the industry accounts for nearly one-third of the industrial sector's total value added contribution to GDP. Yet another notable feature of the subsector is its low capital-labour ratio and relatively high output-capital ratio compared to many other branches of manufacturing activities in the country.

More recently, the industry has also acquired a place of pre-eminence as an exporter of apparels. This is reflected in the rapid increase in foreign exchange earnings from US \$ 3.26 million in 1980/81 to 464.93 million in 1988/89, achieved by the readymade garments industry, an important component of the textile industries sector. It, therefore, seems feasible that besides catering to local demand for yarn and fabric, an expanding textile sector might contribute significantly to the economic development of Bangladesh by generating substantial employment opportunities, augmenting export earnings and facilitating linkages.

1.2. The Textile Industry: A Brief Review of its Size, Structure and Growth

The textile industry of Bangladesh consists of the following subsectors:

¹Cf. Chowdhury Nuimuddin, (May 199), P.2

²Based on estimates made from Bangladesh Bureau of Statistics(1983/84).

- Large-scale spinning and weaving mills
- Small weaving mills and specialized textiles
- Handlooms
- Textile finishing units
- Hosiery industry
- Silk industry
- Readymade garments industry and
- Miscellaneous textile items, such as tape and net making, braid and lace making etc. manufacturing units.

The latest up-date available on the textile economy of Bangladesh from the Textile Strategic Management Unit, under the Ministry of Textiles, reveals that during 1989/90, the industry had an installed capacity of 1.517 million spindles divided between 7.49 and 7.68 spindles respectively in the public and the private sector, a total of 8447 looms in the mills sector under BTMC and BTMA, 897 powerlooms with 18724 looms in the registered factory sector, about 425000 handlooms and close to 16000 powerlooms in the unorganized sector. There are also 318 hosiery units with 3032 body machines, 169 semi-mechanised dyeing and finishing units and 58 mechanised dyeing and finishing units. These figures, when compared to the corresponding figures of spindles and looms constituting the industry in the previous years indicate considerable growth and expansion (analysed in relation to the individual subsectors) taking place in the industry, commensurating government's plan to achieve self-sufficiency in the production of cloth and providing for supply of a specified quantum of cloth per capita for the entire population.² We now turn to provide a brief overview of the structural change and growth performance of the important subsectors of the textile industry.

¹Ministry of Industries, Textile Strategic Management Unit (TSMU), Basic Data On the Textile Sector, 1990 and Chowdhury, N. (1989).

²The pattern of growth achieved by the textile industry of Bangladesh under government patronage ever since Pakistani days has been analysed by several studies, of which the following are important. Cf. Chowdhury, N. (1977) and Bangladesh Project Management Institute (BPMI), 1987.

1.2.1. Textile Spinning&Weaving Mills

The average installed capacity of spindles under the spinning sector increased from 0.977 million in 1977/78 to 1.137 million in 1987/88, the percentage of increase being nearly 17 percent during the period under consideration. Out of the total average installed capacity of 1.137 million spindles in 1987/88, 0.722 million spindles were in the public sector and remaining 0.415 million spindles were in the private sector.¹ Based on 92% efficiency and 95% capacity utilization (estimated on the basis of rotation per minute (RPM) of ring spindles of individual mills, average working day per year and shifts of operation per day) the achievement of actual production as proportion of effective production capacity by the enterprises under both public and private sectors was found to range between 62-79 percent during 1975/76 through 1985-86.²

The operational performance of the spinning sector, as indicated by the situation pertaining to the public sector mills, does not seem to have improved overtime. For example, out of the average installed capacity of 721956 spindles, 527449 spindles were in operation in the public sector mills during 1987/88, registering utilization of spindle-age capacity at a rate of 73%.³ Though somewhat higher than utilization of installed spindleage capacity, production performance of the spinning mills also fell well below the target. The enterprises under the BTMC mills produced 34.54 million kgs. of yarn as against the target of 43.47 million kgs. during 1987/88, recording an achievement of 79% of

¹ However, as noted earlier, the relative share of the private sector has of late exceeded that of the public sector within the mills sector in terms of both number of mills and their installed spindleage capacity. This has been an outcome of the increased emphasis put on the private sector in the overall industrial development strategies and also in the development of the textile sector in order to allow it to assume a greater role in investment and output programmes of the sector.

² BPMI (1987) Ibid, P.34

³ According to a BTMC estimate (made available to the author on personal request) based on provisional figures, the rate of utilization of capacity was 78% for the spindles and 77% for the looms during 1989. Out of the provisionally estimated 73039 installed spindles and 3262 looms 576036 spindles and 2525 looms were operational, indicating existence of significant idle capacity in the spinning as well as the weaving mills within the public sector.

the production target. The reasons for idle spindleage capacity and consequent low level of achievement of production target are ascribed to power failures, absenteeism, incidence of machinery breakdown, shortage of spares and accessories and high wastage of rawmaterials. Whatever the reason, the shortfall in the achievement of production target has adverse implications for domestic capability in meeting the increasing requirement of yarn for apparels textiles in the country.¹

Despite steady increase in the domestic yarn production from 41.81 million Kg. in 1975/76 to 85 million Kg. in 1989-90 (Table 1.1), the total yarn output produced by both public and private sector mills fell short of the requirement (109 million Kg.) by 22% (or 24 million Kg.), a demand gap which had to be met by imports. Thus, if the mills sector has to meet the Fourth Five Year Plan (FFYP) production target of 145 million Kgs in 1995, the subsector must raise its productivity through better utilization of idle capacity through BMRE. Among various development programmes envisaged to be undertaken during the FFYP to enhance production, BMRE of the existing mills in order to raise productivity and reduce wastage, supply of skilled manpower and efficient management, increased production of blended fabrics and addition of new capacity through making fresh investments along modern lines figure most importantly. Needless to reiterate, in view of the government policy of not to encourage further expansion in the public sector, a modest BMRE programme for the 36 BTMC or public sector mills at a total cost of Tk.3328 million has been drawn up. In contrast, the BMRE programme for the 39 private sector mills has been drawn up at a cost of Tk.7720 million during the FFYP.

In so far as the product-mix of the spinning mills is concerned, yarn of different counts (varying between 24^S - 100^S) are produced by the subsector. Available estimates suggest major concentration (nearly 50 percent) to be in the production of medium count (25^S - 39^S) yarn with

¹ The earlier quoted BIDS study (Chowdhury N, May 1989) has estimated the demand for yarn to grow from 68.03 million Kgs in 1987 to 100.23 million Kgs in the year 2000. Thus, if growth in yarn output cannot be raised through increased production performance, increased demand will have to met through increase in spindleage capacity and imports.

Table 1.1

Year-wise Production of Yarn in Bangladesh, From 1975/76 through 1989/90

		(Quantity in million Kg)														
Year	1975/76	76/77	77/78	78/79	79/80	80/81	81/82	82/83	83/84	84/85	85/86	86/87	87/88	88/89	89/90	
Production	41.81	44.23	50.35	52.14	53.37	55.59	50.22	55.33	58.17	59.94	55.64	35.95	68.79	77.00	85.00	
Average Annual Growth Rate(%)	1975/76 - 1989/90 :															7%

Source : IPMI (1987) op.cit.; BTMC(1987-88) op. cit. and TSMU, op.cit, 1990.

Note : * Figures relate to production by the public sector mills only.

notable predominance being shown by 32^s and 40^s in the group. However, notable change is taking place in the product-mix in the sense that while production of coarse variety (upto 24^s) has been declining steadily since 1975/76, that of fine (40^s-45^s) and superfine counts (58^s-82^s) has been increasing since then.¹

Weaving Subsector

As of June 1982 and prior to the beginning of government's denationalization programme thereafter BTMC had 26 composite mills with 7683 installed looms under its control. By June 1986, 11 composite mills with 2863 looms were denationalized and handed over to their former Bangladeshi owners in addition to 3 other mills with 1712 installed looms being sold out to private entrepreneurs. The latest information available from BTMC indicates the installed weaving capacity under the corporation to constitute 3252 looms during 1987/88.² Reportedly, there being no addition of new capacity in the organized private mills sector, the installed weaving capacity (4575 looms) within the sector is also assumed to have remained unchanged.

As pointed out already, in terms of utilization of both loomage capacity and achievement of fabric production target, lower utilization of capacity has been a perennial problem also in the weaving sector. As of end of 1988/89, the organized mills in the public-sector is reported to have returned a total cloth production of 44.56 million metres.³ Besides underutilization of capacity, accumulation of unsold stocks arising from high cost, poor quality and adverse market situation are identified as the important factors responsible for overall poor financial position of the BTMC mills.

¹ Cf. EPMI (1987) op.cit. P.37

² BTMC (1987-88) op.cit.

³ Ibid.

The product-mix of the weaving sector covers a diverse range with grey markin, saree, poplin, dhuti, shirting, lungi and long cloth together constituting nearly 95 percent of total production. Lack of adequate information precludes any generalization on the performance of the organized private sector mills. However, some of the large-scale mills within the private sector, such as Saiham, Phoemix and Quashem Textiles etc. are doing fairly well through producing quality fabrics of diverse use. These textile units specialize in the production of non-traditional items like sniting, fabrics of draperies, household linens, nylon sari, polyester suiting etc. from 100% synthetic yarn and cotton-synthetic blended yarn. Given adequate supply/^{of} high quality yarn, protection against competition from illegal imports and other support services, these producers may be able to meet considerable part of the domestic cloth requirements and prove effective channels for substituting imports.

1.2.2. Powerlooms and Specialized Textiles

Both inadequacy and lack of precision of available data preclude any serious attempt at providing a clear fix on the size, structure, and operation of the powerlooms and specialized textiles units in Bangladesh.

The subsector is divided into two parts: the organized sector, mostly comprising the specialized powerlooms (registered as well as unregistered) and the unorganized sector comprising the ordinary (nonregistered) small powerlooms. In so far as the organized sector is concerned, the Department of Textiles estimates the total number of units to stand at 906 as of April 1988 having 21977 installed looms and an annual production capacity of 419.14 million meters of cloth per year.¹ The earlier quoted TSMU source presents a somewhat different scenario, reporting the existence of 897 weaving units in the country with an estimated 36,428 installed looms and an annual production capacity of 686.73 million meters.² Without going into

¹Department of Textiles, Powerlooms in the Textiles Industry, May, 1988, P.3

²TSMU, Basic Data on the Textiles Sector 1990.

the debate regarding the validity of the two sets of figures, evidence can be provided as to spectacular growth achieved particularly by the recognized specialized textiles weaving units in both cotton and synthetic groups. As opposed to rather slow growth recorded by the subsector during 1970s, the number of recognized specialized textile units increased from mere 82 in 1982-83 to 491 in 1985/86, registering an annual rate of growth of over 124 percent. Along with large increase in the number of production units, there was corresponding increase in the production capacity from 17.64 million metres to 26.36 million metres in the cotton group and from 36.83 million metres to 131.43 million metres in the synthetic group. As of 1985/86, total production in the two groups together is reported to have reached 127.39 million metres, recording an average capacity utilization of nearly 65 percent.¹ The subsector as a whole (taking into account both the recognized and the unorganized units) is reported to have returned a total fabric production of 400 million metres during 1989/90, indicating a capacity utilization of over 60 percent.²

High rate of growth achieved by the specialized textile weaving units, especially during the 1980s, is considered an outcome of the liberal policies adopted by the Government during the Third Five Year Plan (TFYP) period by way of putting all subsectors under the textiles industry in the free list as part of overall government policy toward attaining self-sufficiency in textiles.

Turning to the unorganized segment of the powerlooms subsector, the headway made by the industry appears to be even stronger. Starting with only 41 powerlooms during 1955/56, the number of powerloom in the unorganized sector is estimated to have reached a staggering 16000 units during 1986/87, of which 92.5% were based on synthetics and 7.5% were based on cotton.³ This phenomenal growth of the subsector

¹HPMI (1987) op.cit.

²TSMU, op.cit.

³Latif M.A., (1989), P.40

is ascribed to: (i) availability of electricity in the handloom concentration areas, (ii) liberal imports of synthetic fibres, and unauthorised exports of synthetic (Polyester) to India.¹ Of the total cloth output (78.68 million yards) estimated to be produced by the subsector during 1986/87, 89.74% consisted of non-cotton cloth and the remainder comprised cotton cloth.²

Characteristically a small-scale industry using simple technology and having relatively low capital intensity, the small powerlooms also have the advantage of being dispersely located in the countryside. While the vast as well as protected and unsaturated local market has so long been a favourable factor for rapid expansion of the industry ample scope for its further expansion can be exploited if quality improvement of the fabrics products can be guaranteed to feed the expanding readymade garments industry. This, however, calls for ensuring regular and adequate supply of better quality yarn to promote production of good quality fabrics. The implication is that the local textile mills have to be modernized to be able to supply quality yarn to feed the weaving sector, so that the latter can feed the readymade garment industry serving the export market. Additionally, the industry also needs to be provided with improved dyeing and finishing facilities which are at present lacking in the country.

Marketing being one of the major constraints facing the specialized textiles and powerloom industries, future expansion of the industry will be subject to adoption of protective policies restricting import of second hand cloth and inflow of cut pieces. Such measures are also essential for changing the consumption habits of common people by orienting them to use domestic fabrics.

¹ Ibid, P.43.

Finally, apart from the difficulties posed by imported fabrics and high dependence on imports for supply of quality yarn, the industry also suffers from working capital shortage which compels the producers to turn into price-takers in the hands of the wholesalers, who take away part of their profit margins by dictating prices. All these problems need to be solved in order to enable the industry to achieve sustained growth and development in an environment where there is a large pool of skilled and experienced weavers all over the country.

1.2.3. Handloom Industry

The unique position occupied by the handloom industry in the economy of Bangladesh can be assessed in the following context:

- it is a small-scale labour-intensive industry having dispersed locations in the rural areas of Bangladesh;
- it provides the largest part of off-farm employment in the rural areas and ranks second only after agriculture in this regard;
- it is the largest supplier of cloth in the domestic market;
- it is the largest employer of women labour force in the rural non-farm sector within the rural areas;¹
- it has tremendous export potentials.

However, despite playing a critically important role in the process of economic development of the country, data limitations pose a major handicap in measuring the industry's present size as well as in programming its future development. Different sources estimate present size of the handloom industry differently. The TSMU within the Ministry of Textiles assumes the number of handloom industry to consist of an estimated 0.53 million handlooms, producing nearly 70% of the domestic fabrics and employing about 1.5 million persons.²

1. Since nearly 60 percent of the total labour force employed by the industry in the rural areas are family workers, the latter generally tend to be women who perform the auxiliary activities (including weaving) associated with the industry.

2. TSMU, Ministry of Textiles (1990), p.3

The recently concluded BIDS study presents a different picture by assuming the industry to comprise an estimated 0.43 million handlooms in 1986/87.¹

Over the recent years, the handloom industry has achieved considerable growth in terms of both loomage capacity and productivity gains. During 1978-1987, for example, the loomage capacity grew at an annual compound rate of 2.3%.

Of the total fabrics indigenously woven in Bangladesh (796.5 million metres) during 1986/87, over 80% (663 million metres) originated from the handloom sector. Of the total fabrics consumed in Bangladesh during the same period (1164 million yards), handloom production (678 million yards) accounted for 58%.² Hence, the importance of handlooms as a supply source of fabrics for Bangladesh is quite substantial.

The handloom industry has also recorded considerable growth during 1972/73 through 1986/87 in yardage terms. The handloom yardage achieved a trend rate of growth of 3.9% which was higher than the growth rate recorded by total cloth supply during 1986/87. Contrary to expectation, this impressive growth performance of the industry is said to have occurred against a background of weak government support. Instead of government assistance the process of growth and structural adjustment taking place in the industry is said to have been led by its own efforts in terms of technological upgradation, capital widening and capital deepening, greater specialization and product diversification and development.³ An instance of technological modernization of the industry is substantiated by the fact that for Bangladesh as a whole, the proportion of CR looms (the productivity of which exceeds that of competing looms by about one-third) is reported

¹ Nuimuddin Chowdhury (1989) op.cit. P.6

² Similar contribution by the industry to domestic production of fabrics is also reported by the TSMU for the year 1989/90.

³ Nuimuddin Chowdhury (1989) op.cit. P.11

to have gone up from 35% in 1978 to the tune of 55% or so in 1986/87. Further, a significantly higher rate of growth of yardage (i.e. 3.2%) than that for loomage (2.3%) during 1978-1987 clearly demonstrates a technological change occurring through the use of more productive looms during the period under consideration. Besides modernization, another structural change occurring in the industry in the eighties is the rise in the mean establishment size from 2.2 to 5.0 looms.

The growth and structural adjustments taking place in the industry have resulted from an interaction of both market pressures and entrepreneurial dynamism. Market pressures (resulting from growth in population, incomes and infrastructural investments) have elicited an automatic response from the industry in the form of product diversification accompanied by greater specialization. As markets grew, the industry expanded its productive capacity and responded through a process of capital deepening by installation of CR looms which helped in raising productivity and profitability. The weaving industry is also reported to have improved its own dyeing and sizing methods in response to increased demand for finer variety of fabrics.

The combined results of high growth and improved productive efficiency¹ achieved by the industry are claimed to have enabled it to become competitive with comparable Indian exports of fabrics. While this may help make a start in the area of fabric exports, the handloom industry would need competent pre- and post-weaving processing facilities and a steady supply of improved designs in order to maintain quality standards and delivery schedules, especially on large orders.

In the draft FFYP, the government has attached considerable priority to the growth of the handloom industry in view of the fact that the success of the textile sector is, to a large extent, contingent upon the performance of the handloom industry. Thus, in addition to

¹ Except for polyester suiting, the handloom industry has been found to be economically more efficient than either powerlooms and mills sector in the production of every fabric by way of having higher internal rate of returns. Cf. Ibid, P.11.

emphasizing the need for ensuring greater access of the weavers to necessary inputs including good quality yarns, improved looms, working capital, facilities for dyeing and finishing, workers' training and design improvements, the planners have also clearly recognized the importance of reorientation of the BHB and introduction of weaver-based delivery of rawmaterials and marketing of finished products.

As part of the broad strategy towards strengthening of production linkages among various components of the textile industry linking of the export-oriented RMG sector to domestic textiles constitutes one of the most significant elements of the overall FFYP strategy for industrial development of the country. We now turn to analysing the present status and future expansion possibilities of the RMG industry.

PART - II

THE READYMADE GARMENTS INDUSTRY OF BANGLADESH

2.1. Evolution and Growth of Export-Oriented Readymade Garments Industry (RMG) in Bangladesh

The readymade garments industry of Bangladesh made its mark as a separate entity within the textiles sector only recently. It is essentially a product of the 1980s. Although readymade garments manufacturing for the domestic market had its beginning in the early 1960s, the export-oriented RMG industry came into prominence only since 1977.¹ As a non-traditional export industry it reached an enviable position very rapidly, growing at a phenomenal rate. Entering the export market with a small consignment exported to West Germany by the Jewel Garments in 1977, to-day garments bearing the "made in Bangladesh" label have become a reality all over the world for their competitive price and attractive quality.

Table 2.1 illustrates the pattern of growth of the RMG industry of Bangladesh for the period 1977/78-1988/89. Judged by any standard, the growth in the number of RMG enterprises has been quite impressive. The number of RMG enterprises increased from a paltry 9 units in 1977/78 to a sizeable figure of 754 in 1988/89, recording a spectacular growth of nearly 60 percent per year.² According to the BGMEA, there are 6 joint venture enterprises in Bangladesh with 4 from South Korea and 1 each from China and Singapore. In addition, there are four units in the CEPZ with 3 being under 100% US ownership and 1 being under 100% South Korean ownership.

Unprecedented growth took place during the years 1982/83 and 1984/85. While the number of RMG enterprises increased from 90 to 308 and from 308 to 632 respectively, during these years, the greatest growth spurts

¹ Available evidence suggest that the first readymade garments factory of Bangladesh was established at Dhaka in 1960; a second was established in 1962; a third and a fourth in 1967 and 1968. While a total of five domestic market-oriented RMG units are reported to have been in operation at the time of liberation of the country, this number has recently gone up appreciably and is believed to form an important segment of the domestic textile industry.

² There are, however, controversies regarding the actual number of export garment factories operating in the industry. Some estimates suggest that only between four and five hundred of these units are active. Many of the inactive ones are assumed to have gone out of business at the onslaught of quotas imposed by U.S.A. and Canada. Though the BGMEA lists around 400 factories holding quota rights for the U.S. market in the Garments Directory, the list of quota holders underrepresents the number of total units in operation since many factories work as subcontractors to the quota holders.

can be noticed to have occurred between 1982/83 and 1983/84, because in 1983/1984 alone the number of enterprises rose upon the preceeding year by a staggering 242%. Even in the year 1985 when quotas were imposed by the USA and Canada on the export of the eight most important categories of readymade garments, the number of establishments grew by a staggering 105%.¹ While the rate of growth slowed down thereafter due to imposition of quota restrictions, Bangladesh Government also put an embargo in 1986 on the expansion of garments manufacturing capacity in the country through further addition in the number of enterprises. However, capacity expansion in the new production lines was exempted from this embargo.

Table 2.1

Growth in the Number of Readymade Garments Manufacturing Enterprises, during 1977/78 - 1988/89

Year	Number of Enterprises	Additions during the year	Rate of Growth
1977/78	9	9	-
1978/79	22	13	144.44
1979/80	47	25	113.64
1980/81	69	22	46.81
1981/82	83	14	20.29
1982/83	90	7	8.43
1983/84	308	218	242.22
1984/85	632	324	105.19
1985/86	744	112	17.72
1986/87	749	5	0.67
1987/88	751	2	0.27 (Average Annual Rate
1988/89	754	3	0.40 of Growth 58.34)

Source: Survey and Statistics Section, Department of Textile

The phenomenal growth recorded by the RMG industry of Bangladesh has been an outcome of a complex of technical and marketing forces. The unprecedented growth enjoyed by the industry, especially during the mid eighties, was largely due to excessive demand for readymade garments from the US market. While the US importers of apparels were always trying to explore cheap and dependable sources of supply,

1. While growth in the number of units slowed down thereafter and remained stable during the mid-eighties, the government restriction imposed on setting up new units (after quota imposition by the US Government) was instrumental in slowing off the growth in the number of units.

considerable appreciation of the US dollar vis-a-vis the currencies of most of their trading partners accelerated US demand for apparels. This being added to the quota restrictions facing most of their traditional source countries further encouraged the US traders to search for new and alternative sources of supply. Bangladesh with her abundant cheap labour and non-quota environment had all the right ingredients to develop into the most appropriate source.

On the technical front, the production technique used in the RMG industry being relatively simple and labour-intensive involves low capital cost per work place, estimated to be at the equivalent of US \$500.¹ Also, the gestation gap being low and machinery being available within normal lead time, there was no need for investment in land and building. Further, the process of garments assembly needs access to electricity and metalled roads but not to water or sewage. As a result, moderate sized enterprises could have mushroomed in the rented premises keeping thereby the overhead expenses lower. To this was added the availability of one of cheapest source of labour in Bangladesh where the wage cost per shirt is estimated to be only US \$ 0.10, the lowest in the world.² Finally, because of low gestation gap, prospect of quick returns and liberal trade policies constituting preferential tariff structure of imported machinery, bonded warehouse facilities for duty free imports etc. commercial bank financing was available quite easily, all of which combined to make entry into the industry easy and attractive.

Production Capacity in the RMG Industry

In the absence of historical data on the number of sewing machines installed in the industry since inception,³ capacity has to be measured in terms of pieces of items. Though this involves making an implicit assumption about homogeneity of the items produced, the structure of production in the RMG industry is highly diversified and dictated by the demand structure of the export market. Thus, while measuring the capacity of the industry in terms of number of pieces this limitation has to be admitted.

¹Nuimuddin Chowdhury(May 1989) op.cit, P.44.

²Chowdhury Jalil, (1988), P.5.

³The present number is reported to be 65000 in the entire industry.

Table 2.2 shows the production capacity of the RMG industry in terms of capacity available and capacity used for the period of 1977/78 - 1987/88.

Table- 2.2

Production Capacity of the Readymade Garments Industry
(1977/78 - 1987/88)

Year	Total available capacity (million pieces)	Growth in capacity (%)	Total actual production (million pieces)	Growth in actual production (%)
1977/78	8.01	-	3.15	-
1978/79	9.01	12.48	3.94	25.08
1979/80	27.91	209.77	13.40	240.10
1980/81	43.30	55.14	23.64	76.42
1981/82	53.95	24.60	30.73	29.99
1982/83	60.02	11.25	34.62	12.66
1983/84	62.16	3.57	36.25	4.71
1984/85	354.08	<u>469.63</u>	206.85	470.62
1985/86	485.04	36.99	291.56	40.95
1986/87	489.30	0.88	255.11	-12.50
1987/88	489.90	0.0	295.50	15.83
1988/89	489.86	0.0	296.46	0.34

(Average Annual Growth Rate)

(68.69%)

(75.35%)

Source : Department of Textiles, GoB.

As expected, the trend of both potential production capacity and actual production of garments displays similar pattern of growth as that exhibited by the number of enterprises in the industry. The

greatest growth spurt in both potential and actual production capacity can be witnessed in the year 1984/85, when production capacity increased from 62.16 million to 354.08 million pieces and actual production capacity increased from 36.25 to 206.85 million pieces; the corresponding levels of growth being 469% and 470% respectively.¹ The fall in the production of readymade garments by 12.5% in the year 1986/87 is ascribed to slashing of US quota on 8 major items of export from Bangladesh.

In so far as the levels of utilization of capacity is concerned, BGMEA estimates indicate that 53% of the capacity of the industry remained unutilized during 1987/88.² Unplanned expansion of capacity in the past is held primarily responsible for underutilization of capacity in the industry.

2.2. The Readymade Garments Industry and the Bangladesh Economy

The readymade garments industry of Bangladesh, though a reality of the recent past, constitutes a significant component of the country's national economy. The direct contribution of the industry to the economy of Bangladesh is noteworthy in many respects. As can be seen from table 2.3, the industry represented 2.59 percent (assuming that all output produced by the industry are exported) of Bangladesh's GNP during 1988/89. While the industry's contribution to total industrial employment was 2.31 percent in the same year, the remarkable point is that out of over three hundred and half thousand persons employed by the industry roughly 90 percent are women.³ In a situation where women are still forbidden to take employment outside their homes in rural Bangladesh, the absorption of large number of female workers by the garments industry can be regarded as a concrete step towards increasing social mobility and enhancing social welfare of the disadvantaged section, particularly in the lower income bracket.

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1. Incidentally, 1984/85 also happens to be the year when over 500 of the present total 754 export garment units came into existence in only one year, giving a large boost to total exports. Production stabilized thereafter because of imposition of restriction on the new capacity creation in the industry.
 2. Quoted in BIDS (May 1989), p.197.
 3. The HIID/Planning Commission estimates a higher ratio of 94 percent. Cf. HIID/Planning Commission, op. cit.

Further, as the figures in Table 2.3 suggest, the RMG industry of Bangladesh appears to be a particularly significant factor in Bangladesh's foreign trade. The total value of the industry's exports in 1988/89 represented over 36 percent of the national exports in the same year and significantly counterbalanced its share(6.45%) in total national imports.

Table- 2.3

Contribution of the Readymade Garments Industry to
Bangladesh Economy

Areas of Contribution	Readymade Garments Industry	Bangladesh Economy	2 as % of 3
1	2	3	4
Output (million Tk.)	14943	576982*	2.59
Employment (000)	300.6	130.81**	2.31
Exports (million Tk.)	14943	41161	36.30
Imports(million Tk.)	7000	108480	6.45

Notes: * GNP at market price, 1987/88.

** Total Industrial Employment, 1985/86.

Source: BBS (1989); TSMU (1989).

However, the industry's contribution to the national economy becomes especially revealing when one looks at the resounding success achieved by its export growth. Indeed, as shown by the data in Table 2.4, the growth trend recorded by the readymade garments industry over the last twelve years has been unprecedented. Given that exports of readymade garments were almost negligible prior to 1980s, the rise in the export figure to about US \$ 465 million in 1988/89 is highly impressive. Thus, with an unheard of average annual growth rate of more than 200 percent over the last

Table- 2.4

Exports of Garments From Bangladesh, 1976/77-1988/89

Year	Current Bangladesh Currency (‘000’ Taka)		Current US \$ (‘000’)	
	Value	% change per year	Value	% change per year
1976-77	98	-	6.35	-
1977-78	1019	939.80	67.41	961.57
1978-79	1563	53.39	102.67	50.83
1979-80	10080	544.91	650.74	533.82
1980-81	52985	425.64	3258.89	400.80
1981-82	140142	164.49	6984.33	114.32
1982-83	255218	82.11	10725.56	53.57
1983-84	774786	203.58	31061.39	189.60
1984-85	3003854	287.70	115695.71	272.47
1985-86	3902202	29.91	130569.82	12.87
1986-87	9076698	132.60	296339.40	126.96
1987-88	13421262	47.86	429587.61	44.96
1988-89	14942823	11.34	464232.04	8.22
Average annual growth rate(%)	-	243.61	-	230.83

Source: Export Promotion Bureau (EPB). 1989/90.

Bangladesh Bank. Economic Trends, Jan. 1990.

twelve years, the share of garments exports in Bangladesh's total exports rose from mere 0.46% in 1980-81 to nearly 37 percent in 1988/89. More significantly, the RMG industry has turned into the single largest source of foreign exchange earnings, surpassing jute and jute goods exports (by 44 percent) since 1987/88¹. While the

1. Though the growth trend in the value of exports has not been static in the mid 1980s as it has been in the case of number of units (Table 2.1) and in the actual production capacity (Table 2.2), the trend of increase in the value of exports has surely been much less spectacular in the mid 1980s except for 1987/88, compared to the years preceding 1984/85.

contribution of the industry to foreign exchange earnings has certainly been tremendous. The net foreign exchange earnings ratio (believed to vary between 25-30%) returned by the industry is still relatively low because of its heavy dependence on imported fabrics and other inputs for manufacturing exportable quality garments.

It is gratifying to note, however, that ancillary industries are being set up to support the RMG sector through providing with various garment accessories, popularly called trimming materials. Recently established packaging units, gumm tape, polybag, button and thread manufacturing units are supplying large quantities of the trimming materials which used to be imported before. While gradual development of the accessories sector of the country will help import substitution, a lot more still remains to be done in this regard.

Export Market for Bangladesh Garments

The United States has been the largest importer of Bangladesh garments ever since the export garment sector got its start (Table 2.5). Even in 1985/86, when quotas were imposed by the US on imports of apparels from Bangladesh, the US accounted for nearly 82% of Bangladesh's RMG exports. Since then, however, exports to markets other than the US have been growing and US's share has been declining. Next to USA, the EEC countries have been the other major buyers, being followed by the Scandinavian countries. While the share of the rest of the world recovered from less than 1 percent in 1986/87 to over 8% in 1988/89, the industrialized Western countries still constitute the major export markets for Bangladesh garments. For example, the US and the EEC countries together have been taking roughly 90% of Bangladesh's RMG exports since 1982/83. Though USSR, Japan and the Middle Eastern countries are also major exporters of readymade garments, Bangladesh's exports to such markets is still negligible. The implication is that it is possible for Bangladesh to increase her exports to such countries if well co-ordinated efforts are made by the government in collaboration with the existing and potential garments manufacturers.

Table- 2.5

Exports of Garments From Bangladesh By Destination (1980/81 - 1988/89) (Value in thousand Tk.)

Countries	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89
U.S.A.	4045 7.63	41795 29.82	109750 43.00	452277 58.37	2414833 80.39	3186442 81.66	7107280 78.30	8469034 63.10	8331153 55.75
Canada	-	-	76 0.03	19440 2.51	136565 4.55	219411 5.62	304807 3.36	477121 3.55	322911 2.16
EEC	30115 56.84	54729 39.05	120417 47.18	243738 31.46	338396 11.27	304104 7.79	1265044 13.93	3707738 27.63	5022476 33.61
Scandinavian Countries	3322 6.27	41598 29.68	18105 7.09	34547 4.46	50617 1.69	122889 3.15	316537 3.49	724802 5.40	- -
All other Countries	15503 29.26	2020 1.45	6870 2.69	24784 3.19	63393 2.11	179356 4.59	83030 0.91	42567 0.32	1266283 8.48
Total	52985 100.00	140142 100.00	255218 100.00	774786 100.00	3003854 100.00	3902202 100.00	9076698 100.00	13421262 100.00	14942823 100.00

Source: Bangladesh Garments Manufacturers and Exporters Association (BGMEA), 1989 and Bangladesh Shilpa Bank (BSB) 1989.

In fact, Bangladesh's export performance appears to be negligible even in the industrialized western countries when her share is compared to the total categories of garments imported by these countries. For example, Bangladesh exports only 36 categories (16 quota and 20 non-quota) of garments to USA out of a total of 84 categories imported by that country. Similarly, out of 78 categories imported by the EEC countries, Bangladesh exports only 26 categories. Moreover, Bangladesh even fails to fulfil exports of the quota categories fixed by U.S.A. and Canada.¹ It is thus imperative that ample scope exists for Bangladesh to increase the volume of garments exports to the world market.

2.3 Structural Characteristics of the Export-Oriented Readymade Garments Industry of Bangladesh

2.3.1. Age of the Enterprises

As noted previously, the development of RMG industry of Bangladesh is a fairly recent phenomenon. Out of 754 enterprises constituting the industry in 1988/89, only 47 were established before 1980. While the rest came into existence after 1980, 86.7% of the total enterprises mushroomed in only three years between 1983/84 and 1985/86. On this count, overwhelming majority of the total enterprises in the industry had attained only six years of age by 1989. This youthfulness of the industry should not however be considered any disqualification in view of the fact that empirical evidence abound concerning close association between high growth and company youthfulness.²

2.3.2. Size of Enterprise

The export-oriented segment of the RMG industry consists of relatively large-sized production units. Data presented in 2.6 on the size distribution (based on annual production capacity) of

¹In addition to USA and Canada, imposition of quota on Bangladesh garments is also being contemplated by the EEC countries. However, no defined action has yet been taken in this regard.

²Cf. Bosewell, J. (1972), P.57 and Ahmed, M.U. (1976), P.330.

RMG enterprises show that more than half of the units had production capacity ranging between 600 thousand to 1200 thousand pieces. The findings reported by Muzaffar Ahmed's¹ study also provide roughly similar indication in that over 54% of the units were found by him to have annual production capacity ranging between 500 thousand to 100 thousand pieces. On the contrary, only 3.1% of the enterprises fell in the smallest size category having an yearly production capacity of less than 100 thousand pieces.

Table 2.6

Size Distribution of Enterprises of Garments Industry(1987)

Size in 000 pieces per year	No. of production Units	%
Less than 600	257	39.36
600 to 1200	359	54.98
1200 to 1800	26	3.98
1800 and more	11	1.68
Total	653	100.00

Employment data, the most commonly used indicator of enterprise size, is not available at the individual enterprise levels. However, the crude estimation of enterprise size derived through dividing the total number of employees by the total number of RMG units gives an average enterprise size of 398 persons per enterprise.² The comparable figure for the entire large and medium scale industries sector being only 150 for the year 1986/87 reconfirms the assertion

¹Ahmad Muzaffar (1988), P.3

²Almost identical average enterprise size (387 persons per enterprise) is also reported by the above study.

that the export-oriented RMG industry comprises relatively larger sized enterprises. It is to be noted however that there are wide variations in the unit sizes, some of which are small-scale operations serving the specialized and widely diverse consumer needs.¹

Enterprise Size and Efficiency

The issues that are discussed and studied in relation to firm size and attract attention of the analysts and the policy makers relate to the relationships between size and factor intensity and size and factor productivity, all of which are used as alternative measures of efficiency. The latter being an umbrella concept and having different shades of meaning.² While the analysis of size-efficiency relationships often leads to indeterminate results in case of most industries, the findings bear important implications for policies in such critical areas of development as investment allocations, employment promotion, technological progress and long-run development strategies.

While analysis of factor intensity, factor productivity, economics of scale etc. is of particular importance in labour-surplus, capital-poor country like Bangladesh, any major study has not yet been done for the RMG industry of Bangladesh. Two studies worth mentioning in this respect are the earlier quoted Ahmad (1983/84) and BER study (1987/88), both of which are based respectively on small samples of 12 and 40 enterprises only. Whatever their worth, the findings of both the studies concerning the relationship between enterprise size and efficiency have also been indeterminate. No systematic and continuous relationship has been found between firm size and efficiency (measured in terms of capital/labour intensity, capital productivity, labour productivity and total factor productivity) in either of the studies. Although different indicators of efficiency have not been

¹ The sample (of 40 firms) studied by Dhaka University Research Team had an average employment size of 41 persons per enterprise.

² For a survey of literature dealing with the subject one may see, Ahmed, M.U. (1976).

continuously related with size, there has been, generally speaking, a positive association between firm size and capital intensity.¹

In so far as the differences in the degree of success achieved by different firms are concerned, both the insiders from the industry and the BIRMEA representatives tend to ascribe inter-firm differentials in relative performance to a host of factors. The entrepreneurs who regard themselves successful in terms of achieving higher growth and operating on a profitable basis perceive the following factors to be largely responsible for their better performance:

- (a) Fuller utilization of capacity,
 - (b) Ready access to markets,
 - (c) Use of technically qualified workers,
 - (d) Maintenance of continuous and close contacts with the foreign buyers,
- and (e) Good labour-management relationships.

Interestingly, none of the entrepreneurs interviewed could perceive the critical importance of upgradation of product quality and design and product and market diversification as the important determinants of continued long-term growth.

The analysis of factor substitution (based on the use of Coenand Hickman variation of the CES production function of the form $L = b_0 W^{b_1} Y^{b_2}$ where L is labour, W is the wage rate and Y = output and b_0, b_1 and b_2 are constants) by the BER study indicated that there is considerable scope for factor substitution between labour and capital employed in the RMG industry of Bangladesh and output and wage rate are the major determinants of employment in the industry. Thus if more output can be produced, more employment may be generated particularly if better capacity utilization can be ensured through adequate and regular supply of working capital, rawmaterials and electric power.

As indicated already, in order to get a clear fix on the issue of productive efficiency, a more detailed and systematic study, based on adequately large samples of enterprises, of the factor intensities and factor productivities of the RMG industry of Bangladesh is needed for

¹ Ahmed, M.U. et. al, BER, Dhaka University (1988), PP.108-116.

its strategic character and importance in the industrial and national development of Bangladesh.

2.3.3. Location

The locational distribution of the RMG units is seen (Table 2.7) to be overwhelmingly skewed in favour of the two largest urban centres of Bangladesh. While this is reflective of further deepening of industrial concentration in the two major metropolies and their adjuncts, the reasons are not far to seek. As the two largest urban centres of the country both Dhaka and Chittagong offer the potential entrepreneurs the relatively easier access to administrative, financial and infrastructural facilities. The urban package of services including transportation by air and sea, international telecommunication links, banking facilities, rented premises, steady supply of trained workers and electric power etc. being readily and easily available in the two cities become natural attractions for the rational entrepreneurs of the RMG units.

Table 2.7

Locational Distribution of the RMG Enterprises (1988/89)

Divisions	Number of Units	% of total
Dhaka	627	83.16
Chittagong	122	16.18
Rajshahi	4	0.53
Khulna	1	0.13
Total	754	100.00

Source : Department of Textiles.

2.3.4. Output Composition

The RMG industry of Bangladesh generally produces standard apparels like men' and boys shirts, jeans pants, jeckets and trousers, women's blouses and skirts and plain dresses such as nurses uniforms. As of 1987/88, the industry's total output was found to comprise 57% basic wears (mens, womens and childrens shirts) and 28% heavy wears (pants and jackets) with fashion wears having a share of only 5.3% . This concentration of the Bangladesh industry in the "low end" instead of the high-fashion, greater unit value regime" is also

confirmed by other studies.¹ The BIDS study shows for example, that out of 171 (or about 25% out of the total of 695 units) enterprises producing only one main item, 120 enterprises manufacture only shirts. The dominance of shirt making by the Bangladesh apparel industry especially during 1984 and 1985 was explained by its easy marketability in the US market and low labour cost as well as low skill requirement.

Of the rest, 109 enterprises produce one main (shirt and another item) item and a second item; 141 produce one main (shirt and two other items) item and two other items and 274 or (39%) manufacture multiple items. The implication is that the product-mix of the Bangladesh RMG industry has tended to revolve round a relatively small number of items, defeating the goals of an early and remunerative product diversification opportunity.

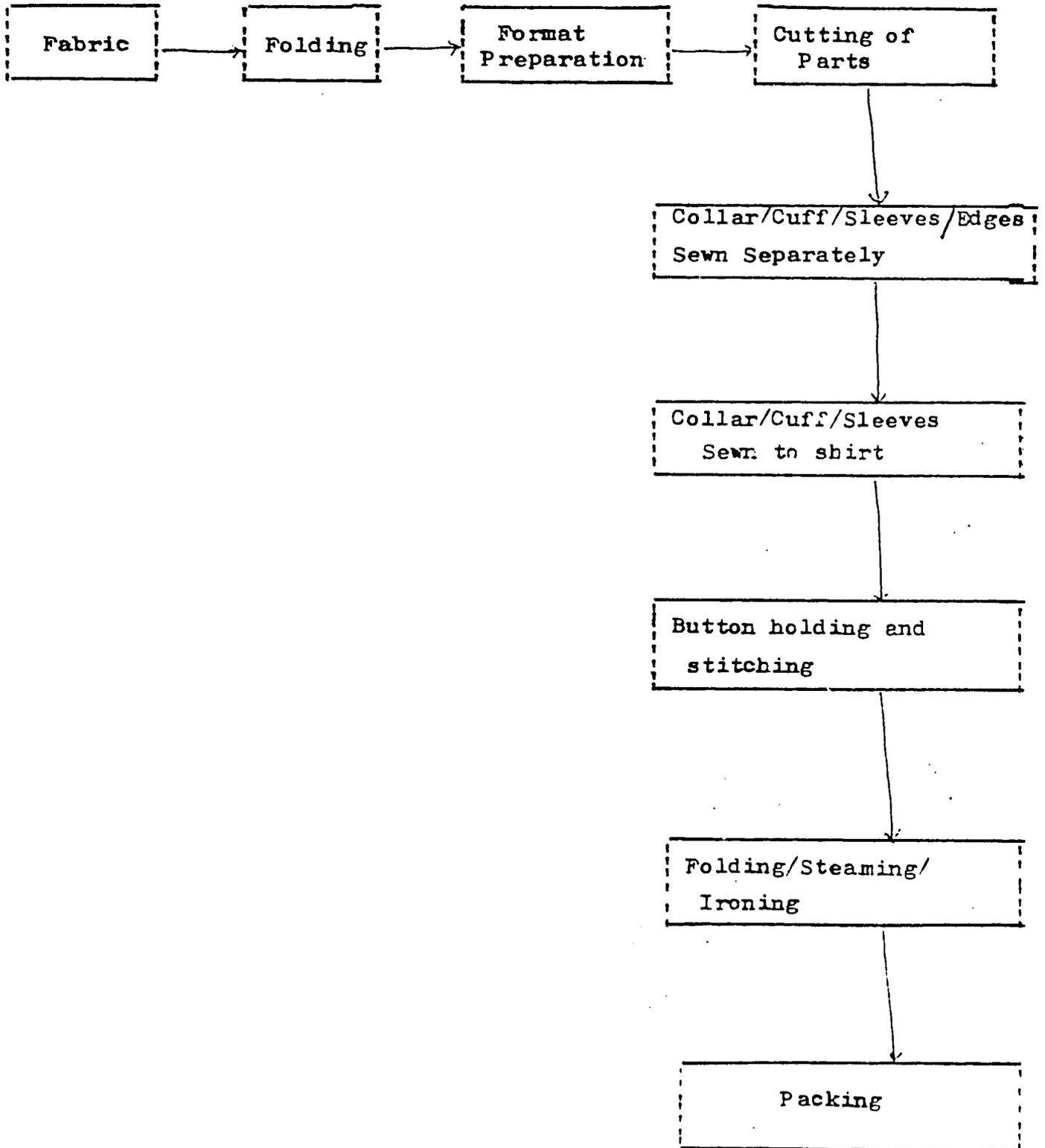
However, since about 38% of the industry's machine capacity is estimated to be equipped to produce a wide variety of products, this offers the industry the required flexibility to respond to changing market pressures. Thus, the RMG industry does not at present suffer from the lack of capability to diversify, rather it is the lack of appropriate marketing strategy which currently plagues the industry's diversification.

2.3.5. Technology

The production process used in the readymade garments industry, though divisible into several steps starting from processing of raw-materials to marketing of the finished product, is quite simple. As seen from the Chart below, making the format (pattern/design) is the most critical phase of the entire process. This, however, is often

¹BIDS (May 1989) Graham, M. (1989) and Ahmed Muzaffer (1988).

CHART- I : PROCESS OF GARMENTS MAKING



supplied by the buyer concerned. A cloth cutting electric saw is used to cut the pile of layers of fabric into various pieces as per format. These are then stacked along the production line separately and sewn. The sewing operation goes on simultaneously and completed as per design.

As far as the technique of production is concerned, this is also simple and labour-intensive in character. Indeed, judged by capital intensity (defined in terms of both capital-labour ratio and output-capital ratio) the criteria often used as an indicator of type of technology used in an industry, the readymade garments industry of Bangladesh appears to be relatively more labour-intensive (less capital-intensive) compared to many other lines of manufacturing activities in the country. Data presented in Table 2.8 suggest that on the basis of both capital-labour and output-capital ratios readymade garments industry employs more labour and generates more output per unit of capital compared to many other industries.¹ While capital investment per worker as well as per unit of output appears to be one of the lowest in the readymade garments industry, the amount varies for various reasons. One is the cost of machinery which depends on the sources of supply and terms of payment. Further, it is also seen to be contingent upon whether the enterprises premises are built up or rented. Again some of the processing operations may be performed manually (i.e. packing) rather than mechanically, allowing some degree of technological flexibility. Depending on the circumstances, investment per worker in a typical readymade garments industry is estimated to vary between US \$ 500 to 1000 only.

Finally, in addition to simple technology, low wages paid to the workers also contribute to low capital requirement per worker. Wages paid to the workers in the apparel industry are extremely low in Bangladesh. Impressionistic evidence is that wages in the industry are low even by Bangladesh standards. Except the major export garment factories, most units in the industry are believed to pay wages that

¹ A different set of estimates of O/K ratio (with K standing for both fixed & working capital) made by the HIID also indicate the RMG industry to have the highest O/K ratio compared to 28 other industry types except for handloom and jewellery industries.

are lower than the national minimum wage paid to the industrial workers. This has become possible due to avoidance of unions through employing women labour, who for cultural reasons are less union-prone and more disciplined.

Table 2.8

Capital Intensity and Capital Productivity of Readymade Garments and Selected other Industries

Industry Type	Capital Intensity (Figures in Tk.)		Capital Productivity (Figures in Tk.)		
	FA/L	TAO/L	V/FA	V/TA	Q/K
Readymade Garments	0.02	0.19	34.53	2.00	3.8117
Food Processing	0.28	5.54	15.64	0.60	-
Engineering industries	0.09	0.28	17.74	0.70	-
Agrobased industries	-	-	-	-	3.9518
Electronics	-	-	-	-	3.0062
Electrical apparatus	-	-	-	-	4.3176
Wooden Furniture	-	-	-	-	2.9816
Tanning & Leather	-	-	-	-	3.5544
Fish & sea food	-	-	-	-	1.9275
Light Mechanical Engineering	-	-	-	-	2.4100

Notes: FA = Fixed Assets; TA = Total Assets (Fixed plus working Capital)
L = Total employees; V = Value Added; Q = Gross output and
K = Fixed capital.

Source: Ahmed, M.U. et. al. (1988): Statistical Estimates made by HIID/Planning Commission, 1989.

2.4. Organization and Management of the Readymade Garments Industry

Organizational and managerial characteristics of an enterprise exert significant influence on its operational efficiency. While it is important to examine various aspects pertaining to organization and Management of the RMG industry in order to assess their influence on the functional efficiency of the industry, lack of necessary information preclude us to do so. Depending on the availability of limited information gathered primarily through talking to a small sample of respondents, we try to provide some rough ideas about selected operational characteristics of the RMG industry of Bangladesh.

2.4.1 Ownership Status

Overwhelming majority of the RMG units are owned by the Bangladeshi entrepreneurs. Information on the number of joint-venture units is inadequate as well as conflicting. The latest BGMEA information indicates joint-venture and completely foreign owned units to comprise 6 and 4 respectively, while other sources quote joint-venture ownership to constitute 15 units.

Among the domestically owned enterprises, individual ownership is believed to be most dominant (above 50%) with private limited companies and partnerships comprising respectively the next important ownership categories.

Another important dimension of ownership pattern which deserves to be specially mentioned is the dynamism of the entrepreneurs who own these export garments enterprises in Bangladesh. Not only that the owners of the export garment factories are new generation entrepreneurs possessing relatively higher educational qualifications and training, they are, in essence, the pioneers and the initiators of the process of development in an outward-oriented direction. Side by side with liberal trade policies and incentives introduced and offered by the

government, the entrepreneurs displayed a vision for the country's development, actively collaborated with the foreign entrepreneurs, mobilized domestic resources and helped transmit the entrepreneurial drive effectively to other firms and industries.

2.4.2. Subcontracting Practices

A dominant feature of the industries characterized by divisible production operations (i.e. textiles, electronics, automobiles etc.) is the practice of subcontracting,¹ based primarily on the principle of specialization in skills and technology enjoyed by the firms practising it.

Though Desh Garments, the first successful export garment manufacturing firm of Bangladesh, started as a subcontractor for Daewoo Industries of Korea in 1979 it is difficult to ascertain the degree to which the practice has spread among other Bangladesh firms since then. The BER study, the only source of information available on the subject found nearly 30 percent of the sample firms to have maintained subcontracting relationships with other firms.² Further, the incidence of subcontracting tended to increase with increase in the size of firms. This higher incidence of subcontracting among the relatively large firms is explained by the fact that production in the export garment industry of Bangladesh is dependent on orders placed either by the foreign merchants or by the domestic retailers and wholesalers.

Broadly, three categories of subcontracting practices are identified in the export garment industry of Bangladesh. First and most important, overwhelming proportion of the industry's production takes place under international subcontracting arrangements where the foreign buyers place orders with the Bangladeshi producers and also supply

¹ Subcontracting is generally defined as a contractual relationship between two firms one of which (called the "parent firm") places an order with the other firm (called the subcontractor) for the manufacture of parts and components to be incorporated into the product which the parent firm sales. For further details on the definition of subcontracting, one may see, UNIDO (1974).

² Ahmed M.U. et. al. (1988), Chapter 2.

them with designs and packing instructions. While ownership, management and technical supervision are in most cases claimed to be entirely Bangladeshi with considerable foreign participation in the case of the joint-venture units, the driving force behind the activity is the foreign buyers who play critically important role as suppliers of product design and marketing agents. A contrary view is that many of export garment manufacturing units in Bangladesh are still 'captive' subcontractors of foreign firms where the Bangladesh unit is under the effective managerial control of the foreign firm, even though the Bangladeshi unit would nominally be controlled by the Bangladeshi nationals.¹ The dominant view prevailing in the industry is that the Bangladeshi producers are gradually coming out of this mold and some of them have even started selling directly to the foreign buyers. These later category firms are, however, believed to constitute a tiny minority, constituting at most 10% of the exporters who can produce and market export quality garments with little or no assistance from the external agents.

The second category of subcontracting linkage takes place when some of the large export garments manufacturers receive more orders from their foreign customers or from the BGMEA through quota allocations than they can supply. They then enter into contract with other domestic manufacturers to undertake part of this production on their behalf. In this case also the parent normally provides the supplier with raw materials and product designs. While this allows many of the domestic subcontracting firms to manufacture indirectly for the export market and utilize their production capacity better, the parent firms giving out contract to them often complain about unsatisfactory quality and irregular delivery. The subcontracting relationship between the parties concerned thus tends to be intermittent and irregular.

¹ Quoted from Graham (1989), op. cit.

The third type of subcontracting relationship takes place between some of the large (i.e. Pearsons) and small domestic manufacturers, the latter working as subcontractors of the former. In this case also the type of subcontracting is "capacity oriented" in view of the fact that the parent firms engage the subcontracting firms only when their internal capacity is inadequate to supply the entire order which they receive from the retailers and/or the wholesalers.

Since subcontracting is mutually beneficial to both the parties concerned, organized efforts need to be made, particularly towards raising productive efficiency of the supplying firms so that they can obtain sufficient orders from the parent firms and develop lasting relationships with them, based on their specialized technological capabilities and not merely as off-takers of extra loads of the parent firms.

2.4.3. Management Structure

With respect to management characteristics, impressionistic evidence gathered through personal visits to selected enterprises is that most of the units in the RMG industry are essentially "one-man-shows," where one key person (usually the "owner-manager") in each unit makes most important management decisions, supported by a small number of aides.

The existence of a personalized as opposed to participatory management style is also substantiated by the BER study of 40 firms. While greater specialization of management function, based on division of management functions, and a deepening of the levels of managerial hierarchy are expected to occur with increase in the size of firms, no such trend could be observed in the BER sample. Though the managers in most of surveyed units were qualified hired employees as opposed to the family members or relatives in the case of the typical owner-managed, family-based, enterprises, and also were entrusted with

various management functions, the common belief is that important decisions might still be taken by the owners themselves. However, the large units within the export garment industry generally appeared to have been oriented towards adopting relatively modern management practices both by hiring qualified managers and also by delegating managerial responsibilities.

Finally, in terms of account keeping and inventory management (two vital indicators of good management) also most of the sample units in the BRE study appeared to perform these management functions well indicating practice of modern management methods.

2.5. Requirement of Fabrics and the Potentials for Establishing Backward Linkages With the Local Textile Mills

At present, the apparel exporting firms in Bangladesh meet their requirements for fabrics and other accessories (i.e. buttons, zippers, interlinings etc.) through imports from abroad against back-to-back letter of credit (L/C) as quality fabrics and other accessories are not currently available in the country. In this process, while nearly 75% of the total export earnings is spent on imports critics argue that the RMG industry of Bangladesh besides being at the mercy of the foreign supplier to a large extent is also basically an exporter of labour. While obviously, therefore, Bangladesh can substantially enhance her foreign exchange earnings from RMG exports even at the existing level of exports if fabrics and accessories could be supplied from the domestic sources. With this end in view, the Textile Policy, 1989, has envisaged that by 1995, the RMG industry should meet 50% of its total fabric requirements from the domestic market.

The imported fabrics enter Bangladesh via the bonded warehouse scheme under which the firm must obtain back-to-back L/C. That is, the firm must have in hand a confirmed order for exporting a given

output; a bank (outside Bangladesh) representing the client to whom the order is destined then issues a letter of credit, against which the exporting firm can draw payment when the product is shipped. The exporting firm then uses this letter of credit as collateral for obtaining a letter of credit to be used to finance the imports of needed fabrics. The imported inputs enter Bangladesh "under bond" i.e. they enter duty free, but a bond is executed which is forfeitable if product containing the imported inputs is not shipped out of Bangladesh within a specified period of time.

It is to be noted in this connection that the present practice of back-to-back L/C involves various types of import bottlenecks (i.e. delays involved in obtaining the rawmaterials due to shipment problems and consequent expiry of L/C validity and cancellation of export orders) which often affect the production schedules and result in contract cancellation, making the manufacturers vulnerable to incur heavy financial losses for reasons beyond their own control. These difficulties strengthen the rationale for urgently establishing fabric-producing capacity in the country. This latter step requires estimation of the import requirement (or potential fabric production capacity) of the RMG industry.

2.5.1. Import Requirement of the RMG Industry

In order to estimate the total fabric requirement of the country's export garment manufacturing industry, the Bangladesh Shilpa Bank (BSB) undertook a survey of 133 RMG units in 1988, out of which data on 73 units could be collected and processed. The study estimated the per dozen fabric requirement of the sample units to be roughly 18.23 meters in 1988 through dividing total imports by total production of these units, all of which were found to meet 100% of their fabric requirements through imports during 1988. On this basis, the total fabric requirement for 1988 was estimated to be roughly 278 million meters. Assuming that all other export garment manufactory units of Bangladesh would be dependent on imported fabrics to the similar extent and also of the same composition as the 73 units surveyed and that Bangladesh would be able to increase her garments exports by

at least 10%¹ per annum during the 1990s, the projected fabric requirement of the RMG industry stands as follows:

Table 2.9

Projected Fabric Requirement of the RMG Industry, 1989-1995

Year	Type of Fabrics (in million metre)			Total
	Cotton	Blended	Synthetic	
1989	155	125	25	305
1990	171	138	28	337
1991	188	152	31	371
1992	206	167	34	407
1993	256	248	96	600
1994	320	300	130	750
1995	400	367	183	950

Note : The composition of the imported fabrics by types was assumed to be the following: Cotton 51% Blended 41% and Synthetic 8%

According to the earlier quoted BIDS study, only about 5-6 million yards (i.e. less than 5%) of fabrics were supplied by the indigenous weavers—mainly large-scale mills — to the country's RMG industry.² Hence, significant scope exists for raising the local content in the fabric supply to the RMG industry. In other words,

¹ed
The project/increase of exports at the rate of 10% per annum seems to be rather conservative in view of the fact that the units surveyed by the BSB achieved an annual growth rate of 43% of their exports between 1985/86 and 1987/88. To that extent, the projected requirement for imported fabrics might be underestimated. An even more conservative estimate of the industry's fabric requirement is provided by the BIDS study, working it out at 133 million yards for the year 1986/87, based on the analysis of a sample 109 RMG units.

²The BSB estimates put this capacity to vary between 2.5% to 3% of the current requirement of the RMG industry.

fostering efficient backward linkage with the domestic textiles mills, involving indigenous sourcing of fabrics and other materials comes out as as the most important suggestion for the country's textile policy. We now turn to briefly explore the existing facilities and future expansions requirements to feed the growing needs of the RMG industry.

2.5.2. Existing Facilities To Feed the RMG Industry

Evidence on the domestic capability of manufacturing quality fabrics is conflicting. According to the Export Promotion Bureau, there are at present a total 870 power looms, specialized cotton weaving and specialized synthetic weaving units with 17,035 looms which produce 189.05 million meters of fabrics annually.¹ The BSB study reports on the contrary, the existence of 971 textile weaving units (in both public & private sector) in the country with a total of 27,385 looms having an attainable production capacity of about 470 million metres of fabrics per annum.² Out of these 971 textile units only 8 units with a production capacity of about 36 million metres of fabrics are reported to be capable of producing fabrics of import-substitute quality. There are also some textile finishing units (12 processing cotton fabrics and 7 processing synthetic and blended synthetic fabrics) which can process export quality fabrics by importing grey fabrics. But none of these units have computerised system of colour matching and quality control to ensure proper colour shading and gain international acceptability. And with respect to quality control issue, the problem most commonly mentioned by the garment manufacturers interviewed with respect to locally produced fabrics was one of shading of fabrics. Shading occurs when the intensity or shade of a colour varies along the length of the fabric. Another problem frequently mentioned by most garment manufacturers interviewed

¹ EPB, Batexpo 90

² BSB, (1989) P.8

was that of shrinkage of the fabric which occurs both in length and width. Among other problems affecting production of quality fabrics by the domestic manufacturers, shortage of quality cotton and blended yarns,¹ high price, failure to meet delivery schedules etc., are important.

From the garments exporters' point of view use of domestically produced fabric could be attractive only if their use would reduce lead times between order and delivery of the fabric and if the fabric would meet the international quality standards. As noted already, the quantum of apparel exports from Bangladesh is dependent not only on product quality but also on the exporters' ability to meet delivery schedules, and a major problem confronting the Bangladeshi exporters is long lead times associated with sourcing of fabric. But the local fabric manufacturers are considered by the garments exporters to be unable to meet both delivery schedules and quality standards.

Not only that the present total capacity of the textile industry in Bangladesh is inadequate to meet the needs of the country, even the textile mills producing low quality output have a backlog of orders. It is thus little wonder that there are problems in meeting short delivery times associated with the needs of the apparel industry. Given the "sellers market" condition in Bangladesh for the highly protected textile industry, the textile mills tend to gear up for long production runs of standard finished products. But the needs of the apparel industry often being for shorter runs of more specialized fabrics cannot be met by the Bangladeshi producers.

Further, as noted by Monte Graham,² manufacture of differentiated finished textile products involving relatively shorter production runs requires "flexible management" capabilities, implying existence of

¹The problem of non-availability of quality yarn is expected to reduce significantly with the commissioning of the modern mills already sanctioned by the BSB and modernization of the existing spinning mills through the on-going BMRE programmes under 2nd World Bank Textile BMR Credit Programme.

²Monte Graham (1989), p.19

cophisticated management information and control systems which are generally lacking in the Bangladesh textiles mills sector. While this lack is partly one of not having the necessary hard technology (i.e. computers and computer networks) it is also due to a lack of requisite managerial and technical capabilities.

The implication is thus that even if the physical capacity of the Bangladesh textile industry can be increased in terms of adding more spindles, looms, and printing and dyeing machines, it cannot be guaranteed that the industry could satisfactorily meet the delivery requirements and quality standards of the apparel exporters without significant upgradation of technical skills and managerial capabilities.

Based on the projected fabric requirement of the RMG industry (Table 2.6), the BSB study has suggested development of the following sub-sectorwise physical capacities in textile industry in order to meet the entire demand for fabrics in 1992 through local production:

Sectors where new capacity is to be created	Physical capacity to be created	Expected Production
a) Spinning	0.57 million spindles	44 million Kgs.
b) Weaving	2,302 rapier and 550 airjet looms	397 million metres.
c) Finishing	-	397 million metres

The same study also suggested establishment of 22 composite textile mills (based on 25000 spindles each) to meet the fabric requirements of the apparel exporters of Bangladesh in 1992.

2.5.3. Government Expansion Plans for the Textiles Sector

The Textile Policy announced by the Government in March 1989, had emphatically stressed the importance of the textile sector as the vehicle for industrial growth in view of its overriding place in the economy as a source of industrial output, employment and foreign exchange earnings. Commensurating this, the draft FFYP aims to achieve two basic goals:

- (a) attainment of self-sufficiency in textiles, and
- (b) increase of value-addition to textile exports.

In so far as the development of the domestic market related segment of the textile industry is concerned, the following major programmes of action are envisaged to be taken during the FFYP:

- (a) Expansion of the production capacity through setting up new spinning and weaving facilities involving an investment outlay of Tk. 1572.00 million.
- (b) Enhancement of production in the existing spinning, weaving and hosiery units through undertaking BMRE programmes worth Tk. 11653.00 million. The modernizing efforts are also planned to be matched by undertaking training and research programmes for increasing supply of trained managerial and administrative personnel.

The major FFYP development programmes relating to the export market segment of the industry include the following:

- (a) Keeping in view the establishment of close linkages between the RMG industry and the domestic textiles industry, the Government has adopted top priority towards enhancing domestic fabric production capacity both through building new capacities and modernizing the existing facilities.

- (b) The Government contemplates to set up 17 composite mills at a total investment cost of Tk. 24000 million. Each of such mills will comprise 25000 spindles and 240 looms, and balanced dyeing and finishing facilities, and produce on average 27.5 million metres of fabrics per annum. This additional capacity build-up is designed to enhance current domestic fabric supply capability from 10 million metres to 475 million metres per annum.
- (c) While development and improvement of the existing dyeing/printing/finishing facilities will be pursued under BMRE programmes on a priority basis, the finishing industry will be encouraged to work as a subcontractor of the local fabric industry for catering to the needs of the RMG industry.

While the expansion as well as the modernization plans of the Government seem to be broadly in line with the requirements of a growing export garment industry identified and suggested by analysts, and the exporters themselves, some of the experts believe that because of lack of managerial and technical capabilities, establishment of modern finishing mills as opposed to composite mills might be the ideal places to start for Bangladesh. Preliminary investigations suggest, however, that building of modern finishing facilities is highly capital intensive. More serious research is thus needed to find out the viable alternative for Bangladesh.

2.6. PROBLEMS, POLICIES AND RECOMMENDATIONS

The abundant supply of cheap labour force, readily available technical know-how involved in the manufacture of readymade garments, liberal government incentives, and above all, a non-quota environment provided Bangladesh with all the right ingredients to emerge as a successful garment exporting country. While the industry's growth potential still looks promising with bright prospects of product diversification, new market penetration and upgrading to high-value fashion items, performing these tasks appear to be difficult due to obstacles posed by various constraints to future growth.

As noted already, the quotas imposed on exports of garments from Bangladesh to the U.S.A. and Canada along with the possibility of quotas on exports to the EEC countries limit the ability of the export garment industry to increase further its output in terms of physical volume. Many apparel exporting countries have been able to capitalize on quotas by means of unit value of their exports. The NICs, for example, have enhanced their collective average unit value from 100 in 1985 to an astonishing 339 in 1987. In contrast, Bangladesh has not done much in this regard except spearheading an export drive through volume expansion in simple garments and slight product diversification into non-quota apparels and territorial diversification towards the EEC and the Scandinavian countries.

However, in order to move up market from the current "low end" of the apparel market and hence capture higher unit value per item exported and to forge an efficient diversified export base, the industry will have to adopt a number of corrective measures. In addition to raising investment in the production of high-value-fashion content apparels, product quality has to be improved and production has to be performed under tight delivery schedules. These in turn will require the following: upgradation of garments-making skills in technical and managerial terms, better transportation to and from the major markets for output and for locations where fabric is sourced, faster customs clearance times, establishment of close working relations with the foreign buyers and development of a minimum capacity to source finished fabric from within the domestic market.

The problems associated with the system of back-to-back L/C operated under the bonded warehouse scheme (as opposed to Duty-Drawback scheme) needs to be solved through streamlining the administration of

the scheme with a view to making the structure of export incentives more neutral in favour of exports. As noted already, the system is frequently delay prone. Immediate steps, apart from faster customs clearance of exports and imports made by the garments exporters on a priority basis, should be taken to investigate into the causes of unnecessary delay in order to reduce the existing time-gap involved in the receipt of imported fabrics and shipment of the finished goods. More importantly, the bonded warehouse programme has to be expanded to allow for duty free importation of grey fabrics and the terms of importation have to be relaxed significantly.

The bonded warehouse scheme while deemed necessary to prevent imported fabric from entering into the local market for textile products, there is always a danger of "leakage" of fabrics out of the bonded warehouse and into the local market. Given the quantity (as well as of high quality) of fabric that is imported under the bond, the prevalence of side payments and the imbalance between domestic demand and supply of textile products (and keeping in mind that most domestic production of such products is of low quality) it seems impossible to prevent "leakage". The sale of the imported fabric in the domestic market is not the only reason for leakage, the fabric also commands price premiums in neighbouring India and it is claimed by informed circles that a substantial amount of smuggling of fabric from Bangladesh to India occurs. In fact, some of the textile mill owners contend that bulk of the profits earned by the apparel sector arising through such "leakage" makes the garment producers reluctant to use locally-produced fabrics. The implication is thus that if locally produced ^{fabrics} were to be substituted for imported fabric, opportunities for profitable smuggling have to be reduced or stopped. Among other things, the present system of inspection and accounting procedure for imported fabrics under the bonded warehouse scheme has to be simplified and made more effective to control "leakages."

As emphasized already, establishment of domestic capacity for export-quality production of fabric and dyeing, printing and finishing of grey cloth has to be given priority with a view to reducing dependence on imported fabrics. However, the ability to substitute locally produced fabric for imported fabric though a necessary condition for increasing the proportion of value added of local origin, it is not an altogether easy job. Besides having to become cost competitive with the imported fabrics, many other criteria (i.e. meeting lead time delivery schedule and quality standards) have to be met as well.

Indeed, fostering backward linkage involving indigenous sourcing of fabrics as well as accessories is a difficult task and its success contingent upon formulation of an efficient long-run strategy. However, several actions may be quickly taken on this score. First, given the elaborate technological and marketing requirements of effective backward integration via domestic production and processing of fabrics, joint-venture with suitable multinational companies may be one potential solution. As noted earlier, this may help obviate the present shortage of technical and managerial skills and help mobilize huge capital resources that are required for establishing domestic fabric production and finishing facilities. Second, to help and encourage the existing powerloom units to get into action, adequate measures need to be taken to upgrade their worker skills, production technology and management capabilities in order to enable these units to cope with the exacting requirements of technology and management as indicated above.

Finally, at each stage in the process of fostering the backward linkage, particularly through setting up the proposed composite mills, whether in large mills or in the factory sector, it would be necessary to allow access to imported materials (i.e. high-performance looms and accessories etc.) either duty free or at moderate rates of duty to keep the production cost sufficiently low and competitive in the world market until such time when the concerned units have achieved technological efficiency of the international standards. Again, the fabrics sold by these units to the RMG industry may be treated as indirect exports making the producers eligible for both XPE and tax reliefs.

Given high protection already being enjoyed by the overall textile industry of Bangladesh, provision for further fiscal incentives as proposed above may not sound desirable and may be countered by the argument that instead of spoon-feeding the industry further, it should be made to operate in a free market condition and stand on its own feet. In the light of higher profits being earned by the export garments manufacturers at present, the producers may be encouraged to further

improve their productive efficiency with a view to sustaining their market share and profitability gradually in the more competitive environment. Further, in an environment where investible resources are critically scarce, payment of subsidies and incentives should also be contingent upon estimation of relative returns to be accrued from such payments being made to different competing units of economic activities.

Formidable problems affecting successful future expansion of the industry are also identified with respect to quota allocation, control and monitoring systems. The BIDS study¹, based on a sample of 109 enterprises, finds the present quota allocation and monitoring methods used by the EPB to be highly centralized and without adequate flexibility in matters of transfer, exchange and surrender of quotas. There was also no reward system in-built to provide incentives to those allottees with 100% performance or who moved to higher unit value products or developed new products.

Although some important changes were introduced subsequently towards making it more efficient and dynamic, the policy in general still seems to discourage efficient companies to develop new products and enter into new markets, because the performance quota holders are not assured of securing 100% quota for performance of the previous year.

The quota allocated to each enterprise is found to be too small to meet the minimum export order and hence falls below the size of order required for economic production. Obviously, the size of the minimum export quota needs to be enhanced to enable the exporter to produce on an economical scale.

While Bangladesh must diversify her products and markets into non-quota categories and non-quota markets, achieving such diversification will require formulation of appropriate policies and adoption of relevant strategies to implement such policies. To that end, the following steps seem highly desirable.

Since market penetration for non-quota categories and into non-quota countries (i.e. EEC, Japan, Australia and New Zealand) requires innovative efforts and involves certain degree of risks, the government may consider making provision for incentives that reduce private costs of undertaking market visits and product upgradation. A higher proportion, than currently available, of FoB receipts may be paid in foreign currency at official exchange rate to finance foreign travel by the exporters. While frequent foreign travelling may still be regarded an important instrument for penetrating into new markets by the exporters, the proposed travel subsidies should not constitute a component of the regular cash benefits received by them in other forms. Instead, the exporters may be encouraged to generate such funds by themselves on a cooperative basis for developing common service facilities like market promotion, research, design improvement, etc.

Upgradation of the dyeing and printing facilities especially in the areas where there are clusters of powerlooms, must receive top priority in order to augment domestic availability of fabrics with distinctive styles, designs, colours and shades to match the demand of the export garment manufacturers as far as possible. The establishment of an industrial enterprise and design centre and that of fabric banks proposed in the BIDS study towards ensuring easy and speedy availability of fabrics of international quality standards at competitive price from the domestic suppliers merit serious consideration. This will help reduce export-order turnaround time, an essential precondition to be met towards boosting up exports in the non-quota EEC markets.

The Government and the BGMEA may also together undertake a mid-term plan to raise technological, managerial and garments-manufacturing skills required for product diversification and product upgradation. Setting up training institutes to systematically impart garments-making skills to workers seems to be a desirable step for moving towards production of higher-value garments production.

It is believed by many quarters that Bangladesh has not yet fully explored and exploited export potentials in the field of knitted garments. Making rapid progress in this field may constitute an integral component of future expansion plans of the textile economy of the country. Thus, while changing the basis of the RMB industry from lighter and low-fashion items towards heavier and more stylish and expensive garments, the fabric economy also needs to make a transition towards knitting as distinct from weaving-garments in order to ensure sustained long-term development of the garments industry. To give a fillip to production of knitted fabrics, training facilities for knitting have to be stressed and organized.

Turning to the other policy issues applicable to the RMG industry, the following remarks may be made.

The export garment manufacturers as well as the BGMEA representatives (looking after all legitimate interests of the export garment sector through keeping liason with the concerned government establishments and monitoring problems of the sector) interviewed by this author seemed happy with the overall framework of policies and incentives applying to the industry except suggesting some changes in the system of financial incentives system made available to the exporters through back-to-back L/C operations and the XPB scheme.

Broadly, three types of financial incentives are offered to the export garment manufacturers:

- (a) Export Performance Benefit at the rate of 70% of the FOB value at the Dollar to Taka ratio of Tk. 0.58.

- (b) Cash incentives at the rate of 10% on value addition in non-quota items in quota countries and all items in non-quota countries.
- (c) Export Performance Benefit at the rate of 100% for using locally manufactured fabrics and 15% cash benefit.

Under the XPL scheme replaced by the XPB scheme after 1985, the exporters used to get about Tk. 4.50 per dollar of export. Though the XPB entitlement still prevails at 70%, the actual benefit to the exporter is now reported to have reduced to 0.59 paisa in place of Tk. 4.50 per dollar which an exporter used to receive before. The exports feel that this needs to be rationalized.

Under the back-to-back L/C operation system, the exporters feel that they loose heavily while converting the Taka amounts kept by the bank in their margin account into equivalent foreign exchange at the time of paying their import bills as this conversion rate is higher than the rate at which the export bills are negotiated. The suggestion is that a system of keeping the export proceeds in a foreign exchange account for payment of import bills might help minimise losses on this account.

Sometimes, the export bills cannot be realized before maturity of the import bills when the banks create a forced PAD loan at WES rate to pay these bills. The exporters feel that Bangladesh Bank should create a special fund to assist the exporters in paying their import bills at official rates in such circumstances on the condition that the banks officials are satisfied that the relevant export proceeds will be realized.

A final complain voiced by the representatives of the BGMEA on behalf of the exporters relates to difficult procedures involved in implementation of the various policies which are bureaucratic and time-consuming. Policies formulated at the top echelons of administration are not at times carried and communicated to the lower echelons of administration.

Further, lack of proper coordination between various policy making bodies also prohibits smooth implementation of policies. Lack of coordination between the Ministry of Commerce and the Ministry of Finance is mentioned as the glaring example of bureaucratic red-tapism and lack of cooperation between the two agencies. Another example of coordination problems is provided by the fact that the Bangladesh Bank has unilaterally raised the L/C holding charge from 25 to 50 paisa per dollar ignoring the request of the Ministry of Commerce for not doing so.

Finally, the offer of 10% cash incentive made admissible to all export items in the non-quota countries by the Ministry of Commerce, though envisaged to be effective since July 1989, Bangladesh Bank was reported to have opposed its implementation (till late March) on grounds of complicated procedures involved in its administration.

All the complaints voiced by the manufacturers and their representatives in the export garment industry are of administrative origin and can be solved quite expeditiously simply through streamlining administrative procedures in terms of promoting inter-agency cooperation and coordination. And this deserves immediate attention in the interest of helping an industry which has been the most "bright spot" in the economy of a poor country like Bangladesh.

Last but not of least importance is the fact that since all the studies carried so far on the RMG industry have been based on relatively small samples, many questions pertinent to formulating appropriate policies for fostering future growth of the industry still remain unanswered. For example, no one knows what exactly is the total size of the RMG industry? What is the size of an optimum unit? What is the rate of attrition of the firms in the industry? How many firms in the industry are engaged in subcontracting arrangements in what direction and at what benefits and costs to each other? Thus a comprehensive study of the entire industry is needed to answer these questions with a view to examining its problems and exploring its full potentials for growth.

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