Export Wing, Ministry of Commerce
The People's Republic of Bangladesh

The Study on Potential Sub-Sector Growth for Export Diversification in the People's Republic of Bangladesh

FINAL REPORT

March 2009

JAPAN INTERNATIONAL COOPERATION AGENCY

UNICO INTERNATIONAL CORPORATION

PREFACE

In response to a request from the Government of the People's Republic of Bangladesh, the Government of Japan decided to conduct a study on "Potential Sub-Sector Growth for Export Diversification" and entrusted to the study to the Japan International Cooperation Agency (JICA).

JICA selected and dispatched a study team headed by Mr. Shozo Inakazu of UNICO International Corporation between February, 2007 and January, 2009.

The team held discussions with the officials concerned of the Government of the People's Republic of Bangladesh and conducted field surveys at the study area. Upon returning to Japan, the team conducted further studies and prepared this final report.

I hope that this report will contribute to the promotion of Export Diversification of the People's Republic of Bangladesh and to the enhancement of friendly relationship between two countries.

Finally, I wish to express my sincere appreciation to the officials concerned of the Government of the People's Republic of Bangladesh for their close cooperation extended to the study.

March 2009

Seiichi Nagatsuka,
Vice-President
Japan International Cooperation Agency

March 2009

Mr. Seiichi Nagatsuka
Vice President
Japan International Cooperation Agency

Letter of Transmittal

Dear Mr. Nagatsuka,

I would like to hereby submit this Final Report upon completion of "The Study on Potential Sub-sector Growth for Export Diversification in the People's Republic of Bangladesh (hereinafter referred to as "Study")." This report consists of 1) national economy and trade promotion policy of Bangladesh, 2) proposals for trans-sector export promotion plan, 3) selection of the promising sub-sectors, 4) implementation of the Pilot Projects for the promising sub-sectors, and 5) proposals for action programs for the export promotion of the promising sub-sectors.

There has been strong recognition in Bangladesh that the country needs to diversify its export products by reducing its structural dependency on Ready Made Garments (RMGs), whose export value accounts for 75% or more of the total export value of the country. This Study selected the two promising sub-sectors for the export diversification of Bangladesh, namely, the jute products sub-sector, a Bangladesh's traditional export item, and the computer software sub-sector to which the government now attaches a high value as the new potential industry. The Study conducted a pilot project for each of these two sub-sectors. Besides, the Study proposes the concrete action programs for export promotion of the two sub-sectors, while it also makes some proposals for trans-sector export promotion plan.

The Study conducted a host of interview surveys with a variety of ministries, policy implementation agencies, research institutes, universities, and private companies in order to make the proposed programs as relevant, effective and realistic as possible. It is heartily hoped that the outcome of the Study including the action programs will greatly contribute to industrial development and export promotion of Bangladesh.

Lastly, but not least, I, on behalf of the Study team, would like to express my sincere gratitude to your Agency, the Ministry of Foreign Affairs, the Ministry of Economy, Trade and Industry,

and the Embassy of Japan in the People's Republic of Bangladesh for valuable advices and devoted supports that have been rendered to us over the course of the Study. I also wish to covey my cordial appreciation to the counterpart organizations for the Study (the Ministry of Commerce and the Export Promotion Bureau of the Government of Bangladesh), members of the Coordination Committee for the Study, implementation partners of the Pilot Projects (the National Productivity Organisation and the Bangladesh Association of Software and Information Services), and the private enterprises that participated in the Pilot Projects, for their profound cooperation extended for the implementation of the Study.

I remain yours faithfully,

Shozo Inakazu
Team Leader
The Study on Potential Sub-Sector Growth for Export Diversification in the People's Republic of Bangladesh
Japan International Cooperation Agency
UNICO International Corporation

Abbreviations

	Abbreviation	:	English	Japanese
A	AABEA	:	American Association of Bangladeshi Engineers and Architects	在米バングラデシュ人技術者・建築家協会
	ADB	:	Asian Development Bank	アジア開発銀行
	ADP	:	Annual Development Programme	年間開発計画
	AIUB	:	American International University - Bangladesh	アメリカン国際大学（バングラデシュ）
	API	:	Active Pharmaceutical Ingredients	医療原薬
	APO	:	Asian Productivity Organization	アジア生産性機構
	ASOCIO	:	Asian-Oceanian Computer Industry Organization	アジア・オセアニア・コンピューティング産業機構
	ATDP	:	Agro-based Industries and Technology Development Project	農産業・技術開発プロジェクト
B	B2B	:	Business to Business	企業間取引
	BAA	:	Bangladesh Agro-processors' Association	バングラデシュ農産品加工業者協会
	BAAMA	:	Bangladesh Automobiles Assemblers and Manufacturers Association	バングラデシュ自動車組立・製造業協会
	BAB	:	Bangladesh Accreditation Board	バングラデシュ認定局
	BADC	:	Bangladesh Agriculture Development Corporation	バングラデシュ農業開発公社
	BAPI	:	Bangladesh Association of Pharmaceutical Industry	バングラデシュ製薬業協会
	BASIS	:	Bangladesh Association of Software and Information Services	バングラデシュ・ソフトウェア・情報サービス協会
	BB	:	Bangladesh Bank	バングラデシュ銀行（中央銀行）
	BBS	:	Bangladesh Bureau of Statistics	バングラデシュ統計局
	BCC	:	Bangladesh Computer Council	バングラデシュ・コンピューター評議会
	BCS	:	Bangladesh Computer Samity	バングラデシュ・コンピューター協会
	BCSIR	:	Bangladesh Council of Science and Industrial Research	バングラデシュ科学工業研究評議会
	BDS	:	Business Development Service	ビジネス開発サービス
	BDT	:	Bangladesh Taka	バングラデシュの通貨単位（タカ）
	BDXTP	:	Bangladesh Export Diversification Project	（世界銀行）バングラデシュ輸出多角化プロジェクト
	BEIOA	:	Bangladesh Engineering Industry Owners' Association	バングラデシュ・エンジニアリング産業オーナー協会
	BEMA	:	Bangladesh Electronics Manufacturers Association	バングラデシュ電子機器製造業協会
	BEPZA	:	Bangladesh Export Processing Zone Authority	バングラデシュ輸出加工区庁
	BFFEA	:	Bangladesh Frozen Foods Exporters Association	バングラデシュ冷凍食品輸出業協会
	BFTI	:	Bangladesh Foreign Trade Institute	バングラデシュ海外貿易研究所
	BGMEA	:	Bangladesh Garment Manufacturers and Exporters Association	バングラデシュ衣料品製造業・輸出業者協会
	BHB	:	Bangladesh Handloom Board	バングラデシュ手織り業者委員会
	BIBC	:	Bangladesh ICT Business Center	バングラデシュICTビジネス・センター
	BICF	:	Bangladesh Investment Climate Fund	バングラデシュ投資環境ファンド
	BIK Japan	:	Bangladesh IT Kumiai Japan	バングラデシュIT組合
	BITAC	:	Bangladesh Industrial Technical Assistance Centre	バングラデシュ工業技術支援センター

Abbreviation	:	English	Japanese
BJA	:	Bangladesh Jute Association	バングラデシュ・ジュート協会
BJEA	:	Bangladesh Jute Exporters Association	バングラデシュ・ジュート輸出業者協会
BJGA	:	Bangladesh Jute Goods Association	バングラデシュ・ジュート製品協会
BJMA	:	Bangladesh Jute Mills Association	バングラデシュ・ジュート工場協会
BJMC	:	Bangladesh Jute Mills Corporation	バングラデシュ･ジュート工場公社
BJRI	:	Bangladesh Jute Research Institute	バングラデシュ･ジュート研究所
BJSA	:	Bangladesh Jute Spinners Association	バングラデシュ・ジュート紡績企業協会
BKMEA	:	Bangladesh Knitwear Manufacturers and Exporters Association	バングラデシュ・ニットウェア製造業・輸出業者協会
BOI	:	Board of Investment	（バングラデシュ） 投資庁
BPATC	:	Bangladesh Public Administration Training Centre	バングラデシュ行政訓練センター
BPC	:	Business Promotion Council	（バングラデシュ） ビジネス振興評議会
BPO	:	Business Process Outsourcing	ビジネス･プロセス･アウトソーシング
BRICs	:	Brazil, Russia, India and China	ブラジル、ロシア、インド、および中国
BSIC	:	Bangladesh Standard Industrial Classification	バングラデシュ標準産業分類
BSRS	:	Bangladesh Shilpa Rin Sangstha	バングラデシュ産業信用銀行
BSTI	:	Bangladesh Standards and Testing Institution	バングラデシュ標準規格・検査機関
BUET	:	Bangladesh University of Engineering and Technology	バングラデシュ工科大学
C/C	:	Coordination Committee	コーディネーションコミティー
C/P	:	Counterpart	カウンターパート
C CAGR	:	Compound Annual Growth Rate	年平均成長率
CAO	:	Chief Adviser's Office	（バングラデシュ） 首相府
CBC	:	Carpet Backing Cloth	絨毯裏地
CCCI	:	Chittagong Chamber of Commerce and Industry	チッタゴン商工会議所
CIDA	:	Canadian International Development Agency	カナダ国際開発庁
CIF	:	Cost, Insurance and Freight	運賃保険料込み条件
CMMI	:	Capability Maturity Model Integration	能力成熟度モデル統合
CNG	:	Compressed Natural Gas	圧縮天然ガス
CPD	:	Centre for Policy Dialogue	政策対話センター
CRM	:	Customer Relationship Management	顧客関係管理
CSE	:	Computer Science and Engineering	コンピューター理工学（科学･工学）
CSR	:	Corporate Social Responsibility	企業の社会的責任
CUET	:	Chittagong University of Engineering and Technology	チッタンゴン工科大学
D DAC	:	Development Assistance Committee	（OECD）開発援助委員会
DAE	:	Department of Agriculture Extension	（バングラデシュ）農業改良普及庁
DANIDA	:	Danish International Development Assistance	デンマーク国際開発援助

Abbreviation	:	English	Japanese
	DCCI	: Dhaka Chamber of Commerce and Industry	ダッカ商工会議所
	DF/R	: Draft Final Report	ドラフトファイナル・レポート
	DFID	: United Kingdom Department for International Development	英国国際開発省
	DM	: Direct Mail	ダイレクトメール
	DPDT	: Department of Patents, Designs and Trademarks	(バングラデシュ) 特許・デザイン・商標庁
	DPSG	: Development Partners Support Group	開発パートナーズ支援グループ
	DTP	: Desktop Publishing	デスクトップ・パブリッシング
	DUET	: Dhaka University of Engineering and Technology	ダッカ工科大学
E	E&E	: Electric and Electronics Products	電気・電子製品
	EDF	: Export Development Fund	輸出開発ファンド
	EEF	: Equity and Entrepreneurship Fund	起業家エクイティ基金
	EMS	: Effective Export Market Size	有効輸出市場規模
	EPB	: Export Promotion Bureau	(バングラデシュ) 輸出振興庁
	EPF	: Export Promotion Fund	輸出振興ファンド
	EPZ	: Export Processing Zone	輸出加工区
	ESPD	: Export Sector Diversification Program	輸出多様化のための金融プログラムの新規導入プログラム
	EU	: European Union	欧州連合
	F/R	: Final Report	ファイナル・レポート
F	FAO	: Food and Agriculture Organization of the United Nations	国際連合食糧農業機関
	FBCCI	: Federation of Bangladesh Chambers of Commerce and Industry	バングラデシュ商工会議所連盟
	FDI	: Foreign Direct Investment	外国直接投資
	FIFAS	: Foreign Investment Advisory Service	外国投資諮問サービス
G	GBP	: Great Britain Pound	英国ポンド
	GDP	: Gross Domestic Product	国内総生産
	GIS	: Geographic Information System	地図情報システム
	GSP	: Generalized System of Preference	一般特恵関税制度
	GTZ	: German Technical Corporation	ドイツ技術協力公社
H	HS code	: Harmonized Commodity Description and Coding System	HSコード
	HYV	: High Yield Variety	高収量品種
	IC/R	: Inception Report	インセプション・レポート
I	IBPC	: ICT Business Promotion Council	(バングラデシュ) ICTビジネス振興評議会
	ICB	: Investment Corporation of Bangladesh	バングラデシュ投資社
	ICT	: Information and Communication Technology	情報通信技術
	IDCOL	: Infrastructure Development Company Limited	インフラ開発社
	IE	: Industrial Engineering	生産管理工学

Abbreviation	:	English	Japanese
IJSG	:	International Jute Study Group	国際ジュート研究グループ
IMF	:	International Monetary Fund	国際通貨基金
IPA	:	Information Technology Promotion Agency	(日本)情報処理推進機構
IPO	:	Initial Public Offering	新規株式公開
IPSAEP	:	ICT Professional Skills Assessment and Enhancement Program	ICT専門家技術評価および向上プログラム
ISP	:	Internet Service Provider	インターネット・サービス・プロバイダ
ISPAB	:	Internet Service Providers Association of Bangladesh	バングラデシュ・インターネット・サービス・プロバイダ協会
IT	:	Information Technology	情報技術
IT/R	:	Interim Report	インテリム・レポート
ITC	:	International Trade Centre	国際貿易センター
ITES	:	IT Enabled Service	IT対応サービス
ITPEC	:	IT Professionals Examination Council	ITプロフェッショナル試験評議会
ITSS	:	IT Skill Standard	ITスキル標準
J JBIC	:	Japan Bank for International Cooperation	日本国際協力銀行
JDPC	:	Jute Diversification Promotion Centre	ジュート多様化促進センター
JETRO	:	Japan External Trade Organization	日本貿易振興機構
JICA	:	Japan International Cooperation Agency	国際協力機構
JLPT	:	Japanese-Language Proficiency Test	日本語能力試験
JOBS	:	Job Opportunities and Business Support Project	雇用機会・ビジネス支援プロジェクト
JSAC	:	Jute Sector Adjustment Credit	ジュート・セクター調整融資
JSRP		Jute Sector Reform Program	ジュート・セクター改革プログラム
K KfW	:	Kreditanstalt fur Wiederaufbau	ドイツ復興金融公庫
KUET	:	Khulna University of Engineering and Technology	クルナ工科大学
L L/C	:	Letter of Credit	信用状
LCG	:	Local Consultative Group	現地調整グループ
LDC	:	Least Developed Country	後発開発途上国
LEI	:	Light Engineering Industry	軽工業(品)
LEIC	:	Local Enterprise Investment Centre	ローカル企業投資センター
LNG	:	Liquid Natural Gas	液化天然ガス
M M/M	:	Minutes of Meeting	ミニッツオブミーティング
MARCOM	:	Market Communication	マーケットコミュニケーション
MDF	:	Market Development Forum	市場開発フォーラム
MDG	:	Millennium Development Goal	ミレニアム開発目標
MIDAS	:	Micro Industries Development Assistance and Services	小規模工業開発支援・サービス
MOA	:	Ministry of Agriculture	(バングラデシュ)農業省

Abbreviation	:	English	Japanese
	MOC	: Ministry of Commerce	(バングラデシュ) 商業省
	MOF	: Ministry of Finance	(バングラデシュ) 財務省
	MOFA	: Ministry of Foreign Affairs	(バングラデシュ) 外務省
	MOI	: Ministry of Industries	(バングラデシュ) 工業省
	MOPEM	: Ministry of Power, Energy and Mineral Resources	(バングラデシュ) 電力・エネルギー・鉱物資源省
	MOSICT	: Ministry of Science and Information & Communication Technology	(バングラデシュ) 科学・情報通信技術省
	MOTJ	: Ministry of Textile and Jute	(バングラデシュ) 繊維・ジュート省
N	NASCIB	: National Association of Small & Cottage Industries of Bangladesh	バングラデシュ零細・家内工業全国協会
	NBR	: National Board of Revenue	(バングラデシュ) 歳入庁
	NGO	: Non-governmental Organization	非政府組織、民間非営利団体
	NORAD	: Norwegian Agency for Development Cooperation	ノルウェー開発協力庁
	NPL	: Non Performing Loan	銀行不良債権
	NPO	: National Productivity Organisation	国家生産性本部
	NRB	: Non-Resident Bangladeshi	非居住バングラデシュ人
O	ODA-TF	: Official Development Assistance – Task Force	現地ODAタスクフォース
	ODC	: Offshore Development Center	オフショア開発センター
	OJT	: On-the-Job Training	オージェイティー
	OOP	: Object Oriented Programming	オブジェクト指向型プログラミング
	OS	: Operating System	オペレーティング・システム
	OTOP	: One Tambon One Product	(タイ) 一村一品運動
P	PC	: Privatization Commission	民営化委員会
	PCM	: Project Cycle Management	プロジェクト・サイクル・マネジメント
	PDM	: Project Design Matrix	プロジェクト・デザイン・マトリクス
	PFI	: Participating Financial Institutions	参加金融機関
	PMC	: Production Management Consultant	生産管理コンサルタント
	POC	: Proof of Concept	概念実証
	POS	: Point of Sales	店舗販売時点情報管理
	PP, Pilot P	: Pilot Project	パイロットプロジェクト
	PR/R	: Progress Report	プログレス・レポート
	PRICE	: Poverty Reduction by Increasing Competitiveness of Enterprise	企業競争力強化による貧困削減
	PROSPER	: Promotion of Sector Program on Entrepreneurs	企業家に対するセクター・プログラム新興
	PRSP	: Poverty Reduction Strategy Paper	貧困削減戦略文書
	PSDSP	: Private Sector Development Support Project	民間セクター開発支援プロジェクト
Q	QCD	: Quality, Cost, Delivery	品質、価格、納期

Abbreviation		:	English	Japanese
R	RMC	:	Registered Management Consultant	登録経営コンサルタント
	RMG	:	Ready Made Garment	既製服
	RUET	:	Rajshahi University of Engineering and Technology	ラッシャヒ工科大学
S	S/W	:	Scope of Work	実施細則
	SAFTA	:	South Asia Free Trade Area	南アジア自由貿易地域
	SE	:	System Engineer	システム・エンジニア
	SEDF	:	South Asia Enterprise Development Facility	南アジア企業開発ファシリティ
	SI	:	System Integrator	システム・インテグレーター
	SICT	:	Support to ICT Task Force	ICTタスクフォース・サポート
	SIDA	:	Swedish International Cooperation Agency	スウェーデン国際協力庁
	SME	:	Small and Medium-sized Enterprise	中小企業
	SMESDP	:	Small & Medium Enterprises Sector Development Program	中小企業開発プログラム
	SOE	:	State Owned Enterprise	国営企業
	SWOT	:	Strengths, Weaknesses, Opportunities, Threats	強み、弱み、機会、脅威
T	T/A	:	Technical Assistance	技術協力
	ToT	:	Training of Trainer	トレーナー向けトレーニング
	TQM	:	Total Quality Management	総合的品質管理
	TSC	:	Trade Specialization Coefficient	貿易特化係数
U	UGC	:	University Grants Commission of Bangladesh	(バングラデシュ)大学助成委員会
	UN	:	United Nations	国際連合
	UNCTAD	:	United Nations Conference on Trade and Development	国連貿易開発会議
	UNDP	:	United Nations Development Programme	国連開発計画
	UPS	:	Uninterruptible Power Supply System	無停電電源装置
	USAID	:	United States Agency for International Development	米国国際開発庁
V	VAT	:	Value-Added Tax	付加価値税
W	W/G	:	Working Group	ワーキンググループ
	W/S	:	Workshop	ワークショップ
	WITSA	:	World Information Technology and Services Alliance	世界情報サービス産業機構
	WTO	:	World Trade Organization	世界貿易機関
	WTO/TRIP	:	Agreement on Trade-Related Aspects of Intellectual Property Rights	知的所有権の貿易関連の側面に関する協定

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Chapter 1 Introduction

Chapter 1 Introduction

1.1 Background

This is the Final Report for the Study on Potential Sub-sector Growth for Export Diversification in the People's Republic of Bangladesh (hereinafter referred to as "Study").

Currently, garments industry including woven garments and knitwear shares about 75% of export earnings in Bangladesh. However, the Multi Fiber Arrangement expired on January 1, 2005, which is a quota on the amount that developing countries can export their textile and clothing products to developed countries. Therefore, export competition in the world markets of the garments industry has been intensified in recent years. Under this circumstance, the Bangladeshi government had recognized needs to grow the new export products that had export-competitiveness and capability of making up for the expected reduction in export of garments industry.

Having faced these situations, the Bangladeshi government requested technical assistance or Study to the Japanese government in formulating the master plan for its export diversification as well as identifying the sub-sectors which have potential to come after the garments sub-sector in terms of export competitiveness. In response to this request, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched its Project Formulation Study team to Bangladesh from February 2006 to March 2006 during which the Study team examined and discussed framework of the technical assistance and target sub-sectors for the current Study. In consequence, the Scope of Work (S/W) on the current Study was exchanged on November 28, 2006 between the JICA and the Economic Relations Division, Ministry of Finance of the Bangladeshi government. The current Study embarked on in February 2007 based upon the S/W mentioned above and its First Field Survey commenced on February 16, 2007. The Study carried out a total of eight Field Surveys and it was completed by submitting the current Final Report in March 2009.

1.2 Objectives

(1) Overall Goal

A master plan on the sub-sector growth for the export diversification, which will be formulated in this Study, will be adopted as a policy of the Bangladeshi government.

(2) Project Purpose

1) A master plan on the sub-sector growth for export diversification will be developed.

1-1) Action programs for the promising target sub-sectors will be implemented by initiative of the Ministry of Commerce and related industries.

1-2) Substances of a mid-/long-term trans-sector export promotion plan will be reflected in the Private Sector Development Support Project (PSDSP).

(3) Output

1-1) Sub-sectors that have potentials to grow for export diversification of Bangladesh will be selected.

1-2) Problems and challenges of the selected sub-sectors for industrial development and export promotion will be indentified.

1-3) Possible solutions for the problems of the selected sub-sectors and model enterprises will be found out through implementation of the Pilot Projects.

1-4) Action programs for the selected sub-sectors for promotion of export competitiveness and solutions for the identified problems will be developed.

2-1) Problems and challenges that Bangladesh faces for export promotion, trade/investment promotion, and industrial development will be comprehended.

2-2) A mid-/long-term trans-sector plan to solve the problems for export promotion, trade/investment promotion, and industrial development of Bangladesh will be developed.

3) Problem-solving technologies will be transferred to the counterpart staff members and working group members through implementation of the Pilot Projects and development of a master plan.

1.3 Target Sub-sectors

The Bangladeshi government, in its Export Policy, designates the export promotion priority sectors for the diversification of its export products. When the current Study began, the Export Policy 2003-2006 was still effective, while the Export Policy 2006-2009 was effectuated in December 2007. Table 1-1 shows the export promotion priority sectors in both the Export Policy 2003-2006 and the Export Policy 2006-2009. Note that fiscal year in Bangladesh starts in July in current year and ends in June in the next year.

The JICA Project Formulation Study Team, which conducted the field survey from February 2006 to March 2006, provisionally selected six sub-sectors to be targeted in the

current Study by referring partly to the export promotion priority sectors in the Export Policy 2003-2006. These selected six sub-sectors are as follows:

(1) Food Processing;
(2) Jute Products;
(3) Pharmaceutical Products;
(4) Computer Software;
(5) Metalworking and Machining; and
(6) Electric and Electronics Products.

During the Second Field Survey, the current JICA Study Team and Ministry of Commerce agreed to select the two promising sub-sectors, namely jute products and computer software, out of those six sub-sectors as the target sub-sectors for the current Study. After that, the JICA Study Team proposed one Pilot Project for each of the selected two promising sub-sectors to which the counterpart agreed for implementation. Titles of these two Pilot Projects are shown below. Note that the details of implementation of the Pilot Projects are reported in the "Pilot Project Completion Report," a supplementary volume of the present Final Report.

(1) Jute Products Sub-sector: "Production Process Improvement (KAIZEN) Project; and
(2) Computer Software Sub-sector: "Project for Establishing the Institutional Mechanism for Export Marketing of Software and ITES Industry in Bangladesh (Sample Market: Japan)".

Table 1-1 Priority Sectors for Export Promotion (Ministry of Commerce)

Export Policy 2003-2006	Export Policy 2006-2009
Highest Priority Sectors The highest priority sector will refer to the products that have high export potentials but, for different reasons, the potentials could not be used and necessary support could promote their exports. The following products will be listed as highest priori (1) Software & ICT products (2) Agro-products and agro-processing products (3) Light engineering products (including auto-parts & bicycles) (4) Lether products (5) High priced readymade garments	**Highest Priority Sectors** Highest Priority Sectors will refer to those product sectors which have special export potentials, but such potentiality could not be utilized properly due to certain constraints, and more success is attainable if adequate support is rendered to them. Fo (1) Agro-products and agro-processing products (2) Light engineering products (including auto-parts and bicycles) (3) Footwear and leather products (4) Pharmaceutical products (5) Software and ICT products (6) Home textile
Special Development Sectors The products which have export potentials but do not have a strong production, supply and export base will be included in the list of special development sectors. The following products will be listed as special development sectors. (1) Pharmaceutical products (2) Cosmetics and toiletries (3) Luggage and fashion goods (4) Electronic products (5) C.R. Coil (6) Cards and calendars (7) Stationery products (8) Silk cloths (9) Handicrafts (10) Herbal medicines and medicinal plants	**Special Development Sectors** Product sectors which have export potentials but whose production, supply and export base are not well organized will be included in special development sectors so as to strengthen their export base. The following product sectors will be included in the (1) Finished leather production (2) Frozen fish production and processing (3) Handicraft products (4) Electronic products (5) Fresh flower and foliage (6) Jute products (7) Hand-woven textiles from hill areas (pahari taat bostro) (8) Uncut diamond (9) Herbal medicine and medicinal plants.

Source: Export Policy 2003-2006 Ministry of Commerce, Government of the People's Republic of Bangladesh, December 2003
Export Policy 2006-2009 Ministry of Commerce, Government of the People's Republic of Bangladesh, December 2007

1.4 Scope of Study

This Study was conducted in three phases as shown below.

(1) Phase 1: Selection of the two promising sub-sectors and design of the Pilot Projects
   1) Positioning of the Study in industrial promotion policies of Bangladesh and the analysis of the current status of the entire industrial sector in the country
   2) Analysis and evaluation of export competitiveness of six target sub-sectors.
   3) Selection of two promising sub-sectors
   4) Identification and analysis of obstacles and challenges related to industrial promotion and export promotion for the two promising sub-sectors
   5) Formulation of the framework of the Pilot Projects for the two promising sub-sectors

(2) Phase 2: Implementation of the Pilot Projects
   1) Holding of seminars presenting details of the Pilot Projects
   2) Selection of model enterprises that are to participate in the Pilot Projects
   3) Implementation of the Pilot Projects for the two promising sub-sectors
   4) Evaluation of progress and outcome of the Pilot Projects
   5) Holding of seminars where results of the Pilot Projects are reported and shared
   6) Research and analysis on obstacles and challenges faced by the two promising sub-sectors and all the industrial sectors (trans-sector) in relation to industrial promotion and export promotion.

(3) Phase 3: Formulation of action programs and a master plan
   1) Formulation of action programs that target export promotion of the two promising sub-sectors
   2) Formulation of medium- and long-term plans to address trans-sector issues in connection with the export promotion.
   3) Approval of the proposed contents of the master plan
   4) Holding of the seminars in which approved contents of the master plan are shared amongst stakeholders

1.5 Target Area

Whole area of Bangladesh

1.6 Schedule Completed

Schedule of the Field Surveys for the current Study is shown in (1) below. Work schedule of the whole Study is also shown in Figure 1-1. In addition, the Reports that had been submitted over the course of the Study are presented in (2) below (including the current Final Report).

(1) Schedule of Field Surveys

1) First Field Survey (Phase 1) : February 16, 2007 to March 3, 2007
2) Second Field Survey (Phase 1) : May 18, 2007 to July 11, 2007
3) Third Field Survey (Phase 2) : September 21, 2007 to November 10, 2007
4) Fourth Field Survey (Phase 2) : January 11, 2008 to February 9, 2008
5) Fifth Field Survey (Phase 2) : May 2, 2008 to May 31, 2008
6) Sixth Field Survey (Phase 2) : August 1, 2008 to August 30, 2008
7) Seventh Field Survey (Phase 3) : October 17, 2008 to November 15, 2008
8) Eighth Field Survey (Phase 3) : January 17, 2009 to January 31, 2009

(2) Schedule of Report Submission

1) Inception Report : Middle of February 2007
2) Progress Report (1) : Beginning of March 2007
3) Progress Report (2) : End of October 2007
4) Interim Report : Beginning of March 2008
5) Progress Report (3) : End of September 2008
6) Draft Final Report : Middle of December 2008
7) Final Report : Beginning of March 2009
8) Pilot Project Completion Report : Beginning of March 2009

1.7 Implementation System in Bangladesh

(1) Counterpart

The official counterpart of this Study in Bangladesh was the Ministry of Commerce. The Joint Secretary (Export) of the same Ministry was a responsible authority of the counterpart. In the meantime, the Export Promotion Bureau (EPB) under the Ministry of Commerce actually performed counterpart tasks on a daily basis and the EPB worked closely with the JICA Study Team.

(2) Coordination Committee

The Japanese and Bangladeshi stakeholders in this Study organized a Coordination Committee. This Committee acted as a supervisory organization which decided on and approved of the important issues in connection with the Study implementation. Members of the Coordination Committee are as follows:

1) Chairman: Joint Secretary (Export), Ministry of Commerce;
2) Secretariat: Deputy Chief (Planning), Export Wing, Ministry of Commerce;
3) Export Promotion Bureau;
4) Federation of Bangladesh Chambers of Commerce and Industry;
5) JICA Study Team Leader;
6) Deputy Resident Representative, JICA Bangladesh; and
7) Representative, Japan External Trade Organization (JETRO) Dhaka.

(3) Counterpart in Pilot Project Implementation

For the Pilot Project in jute products sub-sector, the National Productivity Organisation (NPO) worked as the counterpart which may also be called the working group. For the Pilot Project in the computer software sub-sector, the Bangladesh Association of Software and Information Services (BASIS) undertook this counterpart position.

1.8 Study Team

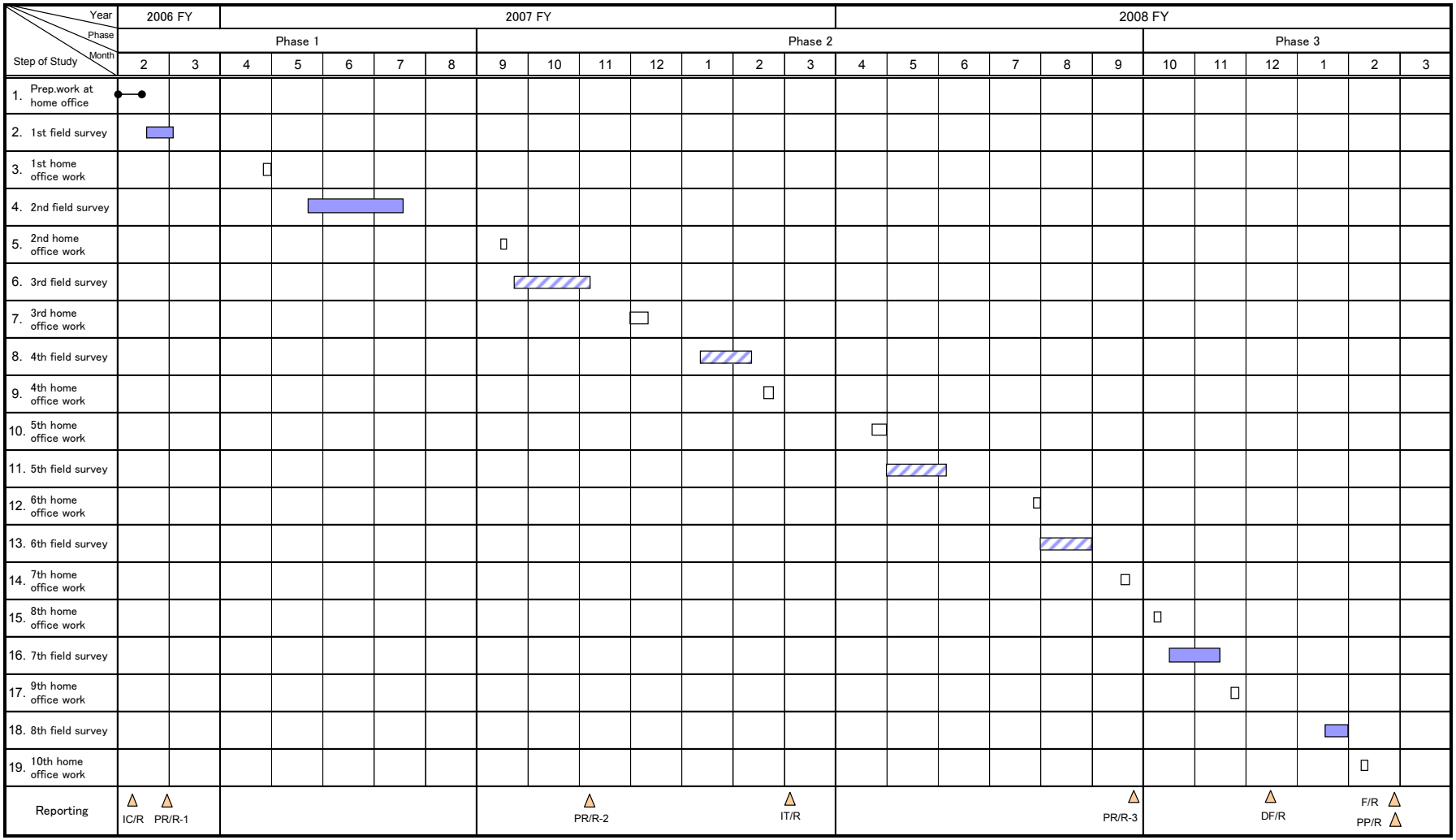
Table 1-2 shows the JICA Study Team members who had been dispatched to Bangladesh for the Field Surveys. Cells with the dark back indicate the Field Surveys in which the respective members were dispatched to Bangladesh.

Table 1-2 Members of JICA Study Team for Field Surveys

Name	Title	1st	2nd	3rd	4th	5th	6th	7th	8th
Shozo INAKAZU	Team Leader/ Promotion System Planning (UNICO)	■	■				■	■	■
Yasuo TAKEUCHI	Sub-Leader/ Distribution/Market Analysis	■	■	■	■	■		■	■
Yuji KUROKAWA	Industrial Structure Analysis (UNICO)	■	■					■	■
Nobushige FUKASE	Quality/ Production Management (UNICO)		■						
Yasuo UESUGI	Quality/ Production Management (Jute Pilot Project) (UNICO)			■	■	■	■		
Naoya NISHIGAKI	Human Resource Development (Jute Pilot Project) (JDS)		■	■	■	■	■	■	■
Mamoru YASUI	Distribution/ Market Analysis (2) (Software Pilot Project) (JDS)			■	■	■	■	■	■
Keisuke SUGIYAMA	Product Development/ Marketing (Software Pilot Project) (UNICO)		■		■	■	■		
Hirofumi YAMAUCHI	Product Development/ Marketing (Software Pilot Project) (UNICO)			■					
Keisuke SUGIYAMA	Coordinator of the Team (Additional Post) (UNICO)	■		■				■	■
Miwako OIKAWA	Coordinator of the Team (UNICO)			■					

*UNICO: UNICO International Corporation

JDS: Japan Development Service Co., Ltd



Remarks: Prep. Work at Home Office; Field Survey; Home Office Work; Reporting

IC/R: Inception Report、PR/R: Progress Report、IT/R: Interim Report、PP/R: Pilot Project Completion Report、DF/R: Draft Final Report、F/R: Final Report

Figure 1-1 Work Schedule

Chapter 2 National Economy and Trade Promotion Policy

Chapter 2 National Economy and Trade Promotion Policy

This chapter reviews current states of the Bangladesh's national economy and its trade promotion policies. Note that the base data/information used in this chapter were initially derived from the survey that was conducted from February 2007 to July 2007 (in the First Field Survey and the Second Field Survey). The JICA Study Team then updated, as much as possible, such base data/information during the Eighth Field Survey that was carried out in January 2009.

2.1 Overview of National Economy

2.1.1 GDP and Industrial Structure

Table 2.1-1 shows the country's GDP trend during the past 15 years. Bangladesh achieved around 4.5-6.5% GDP growth over the past decade. The pace of growth slowed down from 5.2% in the 1990s to 5.0% in the early 2000s on an annual simple average. It then picked up and remains at over 6% after 2003/4. The country's population increased by 24 million in the past 15 years, from 118 million to 142 million. GDP per capita rose from US$ 288 to US$ 554 during the same period, but Bangladesh is still one of the least developed countries in the world.

Meanwhile, industrial structure of Bangladesh has been undergoing substantial changes. The primary sector, both agriculture and fisheries, has declined in relative position. Its percentage share in the whole economy decreased by 6.4%, from 24.8% in 1993/4 to 18.4% in 2007/8. Instead, the secondary sector increased the share by 4.1% and the tertiary sector did by 2.4% during the same period. More specifically, agriculture decreased its share by 5.1% and fisheries by 1.3%, whereas manufacturing increased the share by 2.6%, wholesaling and retailing by 2.3%, transportation and communication by 0.7%, social and personal service by 0.4%, and education by 0.5%. Electricity, gas and water in the secondary sector reduced its share by 0.5%. In the tertiary sector, hotel and restaurant, financial intermediary, and government and defense have not undergone substantial changes in their shares, whereas real estate and business shrank by 1.9%.

In face of the world financial crisis that occurred in 2008, the new Bangladesh government announced its current viewpoints on the state of its economy as follows:

1) Bangladesh achieved the GDP growth of 6.2% in 2007/8 despite the huge price hike of imported goods and food shortage due to the catastrophic flood; and

2) Export earnings, receipts from overseas remittance, and foreign direct investment inflow had been increasing up till October 2008. It is expected that the GDP would grow by 6.5% (3.8-4.0% for the agriculture sector, 7.4-7.9% for the manufacturing sector and 6.7-6.9% for the service sector) in 2008/9, while inflation rate would decline from the current level of 9.9% to 8.5%. Even if there were unexpected economic slowdown, the country would be able to achieve the GDP growth of 6.0% at lowest in 2008/9.

Various statistics in Bangladesh are published and provided by the Bangladesh Bureau of Statistics (BBS) and the Bangladesh Bank (BB). Some of them are made available via the internet. While official statistics covering various industries and fields are seemingly published by ministries, their accessibility needs to be confirmed on a case-by-case basis. The BBS publishes a wide variety of statistics including population, agricultural production, industrial production, external trade, GDP, and consumer prices. However, they mainly provide annual data, with much less monthly data, and industrial production data generally lack reliability. On the other hand, the BB publishes monthly economic data, such as international balance of payments, consumer prices, international commodity prices, national income, international transfer, stock prices, interest rates, and foreign exchange rates, in addition to financial statistics including money supply and deposits. It also publishes reports on statistics and economic analysis, which are used as the latest sources of economic information.

Table 2.1-1 Yearly Changes in Bangladesh's GDP Composition

(Nominal, %, BDT10 million, US$)

	Primary industry			Secondary industry					Tertiary industry										GDP		GDP per capita	Population
	Agriculture	Fisheries	Total(%)	Mining	Manufac-turing	Electricity /gas/ water	Construc-tion	Total(%)	Wholesa-ling/retail	Hotel/ restaurant	Transpor-tation/ communi-cation	Finance/ interme-diary	Real estate/ business	Govern-ment/ defense	Education	Health/ welfare	Social/ personal service	Total(%)	Real growth rate	Nominal (BDT a hundred thousand)	GDP (US$)	(One million)
1993-94	19.9	4.9	24.8	1.0	14.8	1.6	6.1	23.5	12.1	0.6	9.4	1.5	8.9	2.5	2.1	2.3	8.9	48.3	-	135,412	288	118
1994-95	20.3	5.0	25.3	1.0	14.7	1.5	6.4	23.6	12.4	0.6	8.9	1.5	8.6	2.4	2.0	2.2	8.6	47.2	4.9	152,518	316	120
1995-96	19.5	5.1	24.6	1.0	14.8	1.4	6.6	23.8	12.4	0.6	8.7	1.5	9.1	2.4	2.0	2.2	8.6	47.5	4.6	166,324	334	122
1996-97	19.4	5.3	24.7	1.0	15.0	1.4	6.7	24.1	12.3	0.6	8.7	1.5	9.0	2.5	2.0	2.2	8.5	47.3	5.4	180,701	340	124
1997-98	19.1	5.4	24.5	1.0	15.6	1.3	6.9	24.8	12.4	0.6	8.6	1.5	9.8	2.5	2.1	2.2	8.5	48.2	5.2	200,177	348	127
1998-99	19.6	5.7	25.3	0.9	14.9	1.3	7.1	24.2	12.4	0.6	8.4	1.5	8.9	2.5	2.2	2.2	8.4	47.1	4.9	219,697	357	128
1999-00	18.9	5.8	24.7	1.0	14.7	1.3	7.4	24.4	12.3	0.6	8.2	1.5	8.9	2.6	2.3	2.3	8.6	47.3	5.9	237,086	363	130
2000-01	18.0	5.3	23.3	1.0	15.1	1.3	7.6	25.0	12.8	0.6	8.3	1.5	8.8	2.6	2.3	2.3	8.6	47.8	5.3	253,546	362	130
2001-02	16.8	5.1	21.9	1.1	15.3	1.3	7.7	25.4	12.9	0.6	8.7	1.5	8.8	2.6	2.3	2.2	8.7	48.3	4.4	273,201	361	132
2002-03	16.2	4.7	20.9	1.1	15.2	1.3	7.7	25.3	13.0	0.7	9.3	1.6	8.5	2.6	2.4	2.2	8.9	49.2	5.3	300,580	389	133
2003-04	15.7	4.4	20.1	1.1	15.5	1.3	7.6	25.5	13.3	0.7	10.4	1.6	8.3	2.6	2.4	2.2	9.0	50.5	6.3	332,973	418	135
2004-05	15.2	4.2	19.4	1.1	15.9	1.3	7.8	26.1	13.6	0.7	10.3	1.6	8.0	2.6	2.4	2.2	9.1	50.5	6.0	370,707	441	137
2005-06	14.8	3.9	18.7	1.1	16.5	1.3	8.1	27.0	13.7	0.7	10.4	1.6	7.7	2.6	2.4	2.2	9.2	50.5	6.6	416,155	456	139
2006-07	14.5	3.7	18.2	1.1	17.3	1.2	7.9	27.5	14.1	0.7	10.4	1.6	7.5	2.7	2.4	2.1	9.3	50.8	6.5	451,362	482	141
2007-08	14.8	3.6	18.4	1.1	17.4	1.1	8.0	27.6	14.4	0.7	10.1	1.7	7.0	2.7	2.6	2.2	9.3	50.7		541,919	554	1.42

Note: The fiscal year starts on July 1 and ends on June 30 in the following year. Import tariff revenue (4%) should be added to total output by all the industries in order to attain 100%.

Source: Bangladesh Bank,"Economic Trends November 2008"

2.1.2 Inflation, Interest Rate, Government Finance

As seen in Table 2.1-2, consumer prices have been rising over the past 12 years (1996/7 – 2007/8), with significant fluctuation in the range between 1.9% and 9.9%. Inflation rate based upon the consumer price index hiked to 9.9% in 2007/8 with the rate for agricultural product being as high as 12.3%.

Value of Bangladesh Taka (BDT) has been depreciating against the US dollar by 71.5% over the past 15 years. Bangladesh had maintained fixed exchange rate system (pegged to major currency basket with intervention currency being US dollar) until May 2003, whereby the Bangladesh Bank exercised full control on currency exchange rates. In fact, the Bangladesh Bank devaluated the BDT against foreign currencies for around 130 times from 1972 to 2002, during which the fixed exchange rate system was maintained. Depreciation of BDT against US dollar continued after Bangladesh had adopted floating exchange rate system in the end of May 2003. Value of BDT was depreciated against the US dollar by around 16.5% from 2003/4 to 2007/8. In the meantime, money supply grew by nearly 18% per annum for the recent 4 years from 2004/5 to 2007/8.

Interest rates on commercial bank deposits remained at 8.5 – 9.5% in 1997 – 2002 and dropped to the 5.5-7.5% level afterwards. On the other hand, lending rates have continuously been staying in the range between 10.5% and 13%, e.g., 12.6% in 2007/8. The ratio of non-performing loan (NPL) is at 23% for government banks, in comparison to 6% for private banks, and privatization of government banks is underway. There are two stock exchanges in Bangladesh; one is in Dhaka and the other is in Chittagong. The former is larger than the latter in terms of market capitalization.

Table 2.1-2 Inflation, Finance and Foreign Exchange Rate Trends

	Consumer price inflation rate (1995-96=100, %)			Wholesale price inflation rate (1967-70~100, %)		Rate of increase in money supply (%)		Commercial bank		Exchange rate (BDT/US$)
		Agricultural product	Non-food	Agricultural product	Non-food	M1	M2	Bank deposit 3-6 months	Lending rate	
1993-94										40.0
1994-95						18.0	16.0			40.2
1995-96				7.0	4.8	9.7	8.2			40.8
1996-97	4.0			0.3	1.3	4.9	10.8			42.7
1997-98	8.7	10.5	6.0	5.6	4.0	4.8	10.4	8.9	13.0	45.5
1998-99	7.1	9.3	3.9	8.4	2.3	8.6	12.8	9.5	12.6	48.1
1999-00	2.8	2.7	3.1	-0.1	-3.0	15.3	18.6	8.6	13.0	50.3
2000-01	1.9	1.4	3.0	-2.4	2.4	12.4	17.0	8.9	12.6	54.0
2001-02	2.8	1.6	4.6	0.4	-0.1	8.1	13.1	9.1	13.0	57.4
2002-03	4.4	3.5	5.7	6.2	3.1	10.7	15.6	7.5	12.2	57.9
2003-04	5.8	6.9	4.4	3.7	3.5	14.0	13.8	6.4	11.2	58.9
2004-05	6.5	9.0	4.3	3.3	3.7	16.5	16.8	5.5	10.5	61.4
2005-06	7.2	7.8	6.4	7.0	13.8	21.3	19.5	5.8	11.1	67.2
2006-07	7.2	8.1	5.8	..	..	17.6	17.1	6.5	12.3	69.1
2007-08	9.9	12.3	6.3	..	..	19.3	17.6	7.2	12.6	68.6

Note: 1 The fiscal year starts on July 1 and ends on June 30 in the following year. Figures for consumer price, wholesale price and money supply are change over the last year, while exchange rates are annual average.

2 M1 = cash + checking account + deposit at the central bank. M2 = M1 + Fixed deposit

Source: Bangladesh Bank,"Economic TrendsNovember 2008"

Under the inflation trend, government revenue has been growing steadily. As shown in Table 2.1-3, government's tax revenue amounted to the value of 8.7% of GDP of the country in 2007/8. The income tax revenue of the government in 2007/8 was 5.9 times bigger than that of a decade ago, while the VAT increased by 3.8 times, luxury tax by 3.4 times and import duty by 2.1 times over the same period. In 2007/8, the tax revenue was constituted by VAT of 37.2%, income tax of 24.5%, import duty of 20.4%, and luxury tax of 16.5%. Meanwhile, government expenditures have been growing faster than revenue to result in continued fiscal deficits.

2.1.3 International Balance of Payments

Table 2.1-4 presents the international balance of payments of Bangladesh in the past 12 years. First of all, the country's trade balance is persistently in deficit, which has been increasing on a nominal basis. It amounted to BDT 357.18 billion in 2007/8, accounting for 36.4% of the country's exports. Similarly, services balance is also in chronic deficit partly due to the fact that marine transportation is carried out by foreign ships. In addition, payment for investment profits such as interest and dividend income has been on a wide rise since 2003, which is coming closer to the level of service deficits.

In the area of transfer balance, inflow of foreign aid funds declined from the peak level in the late 1990s to half the level in the 2000s. Instead, remittance by overseas workers is on the rapid rise in equivalence to 60.3% of exports in 2007/08, thus contributing greatly to the

improvement of the international balance of payment. In fact, the current account balance of payments turned from persistent deficits in the late 1990s to the surplus trend in the 2000s.

The capital account continues to produce excess in receipts for short-term capital to reflect expansion of external trade, while the receipt of long-term capital in the form of direct investment has been on the rapid rise since the beginning of the 2000s. On the other hand, the receipt for securities investment emerges recently, albeit the amount is still small. As a result, the country's foreign currency reserve has been increasing since 2000 and amount to about US$ 6,149 million at the end of 2007/8.

Table 2.1-3 Government Revenue

(BDT10 million)

	Other tax revenues								Non-tax revenues			
	Import tariff	Excise duty	Income tax	VAT		Luxury tax		Total	Land	Forest	Postal	Registration
				Domestic	Import	Domestic	Import					
1993-94	2,984	158	1,705	1,033	1,713	1,182	70	8,996	91	-	87	114
1994-95	2,677	178	1,492	1,248	2,215	1,344	188	10,523	207	32	100	118
1995-96	3,773	183	1,533	1,305	2,555	1,464	359	11,370	443	-	90	126
1996-97	4,013	303	1,665	1,551	2,788	1,619	452	12,503	164	52	108	131
1997-98	4,539	215	1,954	1,668	2,901	1,716	566	13,749	226	41	112	131
1998-99	4,739	223	2,361	1,813	3,047	1,710	767	14,869	120	42	98	168
1999-00	4,254	261	2,605	2,108	3,064	1,790	947	15,122	57	72	106	180
2000-01	5,101	275	3,501	2,701	3,680	2,114	1,255	18,774	123	68	112	192
2001-02	5,395	293	3,789	3,229	3,758	2,276	1,332	20,224	97	69	126	202
2002-03	6,679	318	4,236	3,660	4,121	3,139	1,271	23,654	149	77	116	262
2003-04	7,088	159	4,707	4,316	4,398	3,546	1,686	26,193	142	86	107	333
2004-05	7,913	144	5,577	5,111	5,347	3,703	1,853	29,905	182	96	128	367
2005-06	7,825	161	7,142	6,472	5,886	4,666	1,563	33,987	172	100	119	384
2006-07	8,154	184	8,721	7,421	6,311	4,846	1,197	37,219	166	62	121	446
2007-08	9,619	213	11,580	9,090	8,474	6,016	1,753	47,201	---	---	---	---

Note: The fiscal year starts on July 1 and ends on June 30 in the following year.
Source: Bangladesh Bank,"Economic Trends November 2008"

Table 2.1-4 International Balance of Payments

(BDT10 million) (US$1 million)

	Trade balance			Services balance			Transfer balance			Current account	Capital account					Increase/ decrease in foreign currency reserve	Error/ omission	Foreign currency reserve (mil.US$, the end of a term)
	Export	Import		Service	Investment profit		Gover-nment	Private			Short-term	Direct investment	Securities investment	Other investment				
1993-94																		
1994-95																		3,070
1995-96																		2,039
1996-97	18,836	27,436	-8,600	-2,462	-459	-2,921	1,606	7,563	9,168	-2,353	1,547	71	-565	-825	228	-1,433	692	1,719
1997-98	23,467	30,784	-7,317	-2,590	-454	-3,044	1,214	7,973	9,187	-1,173	1,380	1,133	14	-866	1,661	110	-379	1,739
1998-99	25,546	34,708	-9,162	-2,844	-653	-3,497	1,258	9,508	10,766	-1,893	1,672	952	-27	-3,474	-877	-973	1,797	1,523
1999-00	28,870	38,091	-9,221	-3,219	-1,112	-4,331	2,233	11,234	13,467	-86	1,422	983	0	-2,290	115	364	334	1,602
2000-01	34,905	45,495	-10,590	-4,923	-1,426	-6,349	1,171	11,434	12,605	-4,334	1,550	941	-2	-524	1,965	-1,593	777	1,307
2001-02	34,038	44,206	-10,169	-2,866	-1,835	-4,701	419	15,849	16,267	1,398	2,354	372	-32	-429	2,265	1,553	-2,110	1,583
2002-03	37,587	51,173	-13,586	-4,013	-1,146	-5,159	470	19,417	19,887	1,143	2,481	532	6	572	3,591	5,118	385	2,470
2003-04	45,535	57,817	-12,282	-4,382	-2,317	-6,699	285	21,706	21,991	3,010	1,374	2,269	32	-3,701	-26	1,444	-1,534	2,705
2004-05	53,961	72,945	-18,984	-4,980	-4,942	-9,922	220	26,330	26,551	-2,355	1,001	4,758	0	1,489	7,248	1,901	-2,992	2,930
2005-06	67,944	82,260	-14,316	-6,580	-5,044	-11,624	223	35,641	35,864	4,790	1,623	4,528	241	-3,708	2,684	3,580	-3,894	3,484
2006-07	83,205	107,202	-23,997	-8,726	-6,010	-14,736	667	44,608	45,274	6,542	3,381	5,247	727	-369	8,986	10,893	-4,635	5,077
2007-08	98,124	133,842	-35,718	-9,950	-7,256	-17,206	311	59,256	59,567	6,644	2,272	5,439	540	-5,342	2,905	7,315	-2,414	6,149

Note: The fiscal year starts on July 1 and ends on June 30 in the following year.

Source: Bangladesh Bank,"Economic Trends November 2008"

2.2 Trade Structure

2.2.1 Export Items

The country's exports are reviewed with reference to Table 2.2-1. Note that the table is used for the analytical purpose though the total value of exports in the table is different from that in Table 2.1-4. Looking at export items and their trend, exports of ready-made garments (RMG) including knit products and knitwear grew tenfold in the past 15 years and represent 66.2% of the total export value in 2007/8. Notably, RMG exports are on the rise, especially knit products, despite the anticipation that they decline due to the termination of the Multi Fiber Arrangement (MFA). This seems to reflect the fact that manufacturers of RMG products have established their position in export markets by establishing competitiveness on the basis of low labor cost. GTZ has recognized this trend and has shifted its target sub-sectors to RMG production, instead of leather, silk and jute products. International organizations are refocusing on RMG manufacturers in Bangladesh. In addition, there are some cases in which textile mills are beginning to be relocated from China to Bangladesh.

The similar move is seen in the areas of fish and shrimps/prawns, jute and jute products, and leather. Exports of both fish and shrimps/prawns, and leather grew by 3.84 times between 1993-4 and 2007-8, while those of raw jute increased by 4 times and jute products by 2 times, yet lower than the growth rates of RMG products. Further, tea – a traditional export item – is in the declining trend in a long run, although its export value increased sharply in 2007/8. Fertilizer exports are not stable, whereas exports of petroleum products after refinement such as naphtha, kerosene and coal tar are on the steady rise, albeit the value is small.

Overall, the country's export is realized with small member of items, which is vulnerable in a future prospect. This indicates the need for diversification efforts. Strong growth of exports in "others" category, such as shoes, metalworking products, ceramic products, software, pharmaceutical products and processed food products, among others, suggests some prospects for emergence of promising items (Refer also to Table 3.2-1).

2.2.2 Export Market

Table 2.2-2 shows the recent trend in the country's exports to major destinations (top ten countries in 2007-8) between 2003-4 and 2007-8. Although Japan is actually placed at 14th, it is put in the table for reference. In 2003-4, the USA was the largest export partner (25.9% of total), followed by EU countries. Exports to "other countries" accounted for 11.3% only. In 2007-8, exports to the USA maintained the first position, while its share slightly fell to 25.4%. EU countries still held sizable share in total. Exports to the countries other than USA and EU

increased the share from 17.8% in 20003-4 to 21.2% in 2007-8. Thus, the country's export markets are getting diversified.

Table 2.2-1 Bangladesh's Export

(FOB price, BDT10 million)

	Raw jute	Jute product	Tea	Leather	Shrimp/ prawn	RMG (incl. Knit)	Petroleum products	Fertilizer	Other	Export Total (Incl. EPZ)
1993-94	256	956	175	632	1,013	5,646	35	178	907	9,799
1994-95	256	1,365	130	876	1,321	7,438	50	311	1,382	13,130
1995-96	294	1,240	115	897	1,311	8,195	49	12	1,744	13,857
1996-97	538	1,330	150	898	1,397	9,893	41	5	2,312	16,564
1997-98	484	1,328	207	810	1,491	12,627	10	58	3,388	20,393
1998-99	270	1,168	150	767	1,483	12,976	15	59	3,963	20,851
1999-00	370	1,131	86	760	1,813	15,724	57	-	4,982	24,923
2000-01	402	1,274	119	1,364	2,036	20,265	56	6	6,897	32,419
2001-02	379	1,398	91	1,309	1,689	19,270	65	-	6,733	30,934
2002-03	401	1,272	77	1,229	1,859	20,852	136	-	7,416	33,242
2003-04	454	1,271	95	1,441	2,284	26,189	152	-	8,695	40,581
2004-05	564	1,677	94	1,608	2,576	33,333	194	82	10,707	50,835
2005-06	860	2,159	80	1,981	2,951	40,529	316	-	13,792	62,608
2006-07	977	2,602	42	2,290	3,702	51,891	324	271	16,838	78,918
2007-08	1,075	2,555	107	2,425	3,893	57,090	759	227	18,112	86,283

Note: The year concerned July 1 - Next year June 30.

Source: Bangladesh Bank,"Economic Trends November 2008"

Table 2.2-2 Recent Export Trend by Destination (2003/4 – 2007/8) (Top Ten Countries in 2007/8)

(Unit: US$ million)

	2003-04		2004-05	2005-06	2006-07	2007-08	
	Value of export	Percentage share	Value of export	Value of export	Value of export	Value of export	Percentage share
USA	1,971.6	25.9%	2,418.7	3,039.8	3,441.0	3,590.6	25.4%
Canada	284.7	3.7%	335.3	407.0	457.2	532.9	3.8%
India	89.3	1.2%	143.7	242.2	289.4	358.1	2.5%
EU	4,279.7	56.3%	4,621.6	5,502.9	6,400.9	7,549.2	53.5%
(Germany)	1,298.6	17.1%	1,351.1	1,763.4	1,955.4	2,174.8	15.4%
(UK)	898.7	11.8%	944.2	1,053.7	1,173.9	1,374.0	9.7%
(France)	553.5	7.3%	625.5	678.9	731.8	953.1	6.8%
(Netherlands)	290.5	3.8%	290.9	327.2	459.0	653.9	4.6%
(Italy)	316.3	4.2%	369.8	427.9	516.0	579.2	4.1%
(Belgium)	326.7	4.3%	327.8	359.3	435.8	488.4	3.5%
(EU others)	595.4	7.8%	712.3	892.5	1,129.0	1,325.8	9.4%
Japan	118.3	1.6%	122.5	138.5	147.5	172.6	1.2%
Others	859.4	11.3%	1,012.7	1,195.8	1,441.9	1,907.4	13.5%
Total	7,603.0	100.00%	8,654.5	10,526.2	12,177.9	14,110.8	100.0%

Note: 1.The above years mean the fiscal year between July 1 of each year and June 30 of the subsequent year.
2.Countries in parenthesis are member countries of EU.

Source: Bangladesh Bank, "Annual Report 2007-08," EPB, "Export Statistics and Export Receipt"

As for the relationship with the Japanese textile market, RMG products made in Bangladesh have faced difficulty in market acceptance due to quality problems, while the Bangladesh government and industry focused on the USA and Europe, rather than Japan. However, in September 2008, one of the largest apparel retail companies in Japan called "UNIQLO" (a part of share-holding company "First Retailing Co. Ltd") established the procurement office in Dhaka by which it will transfer some of its procurement base from China to Bangladesh. According to the local newspaper, the company plans to make RMG imports of as much as US$ 600 million per annum from Bangladesh. If this was to be materialized, then Japan would become the fourth or fifth largest countries in terms of value of export from Bangladesh.

2.2.3 Import Items

Table 2.2-3 shows the import structure of Bangladesh, in which semi-finished and finished products accounted for 50.4% of the total in 2007-8. Capital goods (machinery) and semi-finished textile products (excluding dye and cotton) represent 15.3% and 17.4% (30.5% if dye and cotton are included) of the semi-finished and finished product imports, respectively, as led by RMG production in EPZs. Main import items in the "raw material and fuel" category, which hold a share of 29.3% of total import value, are petroleum products, iron and steel, and chemical fertilizer.

The country's trade structure is characterized by significant export of RMG production by imported materials and import of agriculture products, despite the fact that Bangladesh is considered to be an agricultural country. The RMG-oriented trade structure is translated that external trade is not deeply linked to the national economy as it only brings income by consignment business from a viewpoint of industrial linkage. As for agricultural products, the country imports edible oil, wheat, rice, beans and sugar, which accounted for a combined share of 16.1% of total import. On the other hand, the country's agricultural exports are limited to tea and miscellaneous items, which is small in value and on the decline.

Table 2.2-3 Bangladesh's Imports

(CIF price, BDT10 million)

	Food									Raw material/fuel							
	Rice	Wheat	Milk/dairy products	Spice	Seed for oil pressing	Edible oil	Beans	Sugar	Sub-total	Ash	Chemical fertilizer	Crude oil	Petroleum products	Iron and steel	Dye	Cotton	Subtotal
1993-94	40	564	148	88	160	468	112	52	1,632	44	540	464	672	520	144	288	2,672
1994-95	884	1,029	165	64	322	884	36	129	3,513	48	571	711	828	828	201	543	3,730
1995-96	1,462	931	217	94	364	731	98	25	3,922	102	396	678	1,184	1,315	225	756	4,656
1996-97	119	666	226	43	265	922	231	209	2,681	141	641	743	1,456	1,866	265	833	5,945
1997-98	1,123	555	205	45	423	982	200	132	3,665	159	491	636	1,341	1,778	300	941	5,646
1998-99	3,268	154	269	130	481	1,379	341	202	6,224	183	577	567	1,298	1,658	317	1,120	5,720
1999-00	579	1,338	302	90	453	1,288	569	151	4,770	297	705	1,167	2,043	1,977	357	1,394	7,940
2000-01	925	955	333	78	347	1,175	464	250	4,527	572	698	1,471	3,055	2,502	488	1,941	10,727
2001-02	87	983	339	72	412	1,439	505	135	3,972	862	615	1,391	2,764	2,372	503	1,794	10,301
2002-03	1,220	1,145	353	185	369	2,110	840	601	6,823	834	630	1,545	3,588	2,634	500	2,274	12,005
2003-04	842	1,690	359	177	434	2,773	707	647	7,629	821	882	1,484	4,536	2,826	644	3,436	14,629
2004-05	1,627	1,915	532	254	526	2,698	974	1,355	9,881	1,050	2,035	2,157	7,735	4,193	814	4,096	22,080
2005-06	787	2,012	489	212	607	3,174	1,094	837	9,212	1,413	2,262	4,080	9,437	6,590	997	4,987	29,766
2006-07	1,234	2,774	572	525	736	4,022	1,356	2,034	13,253	1,656	2,370	3,607	11,807	6,805	1,113	5,920	33,278
2007-08	5,993	3,681	943	550	932	6,905	2,242	2,718	23,964	2,380	4,330	4,767	14,116	8,091	1,492	8,317	43,493

	Semi-finished and finished products								
	Medical	Plastics /rubber	Spun yarn	Rayon yarn	Fiber product	Others	Machinery	Sub-total	Import total
1993-94	60	451	672	124	3,364	6,695	520	11,886	16,190
1994-95	64	596	805	161	4,121	9,047	796	15,590	22,833
1995-96	82	759	1,209	176	4,260	11,198	1,221	18,905	27,483
1996-97	95	775	1,687	192	4,689	11,957	1,422	20,817	29,443
1997-98	123	929	1,486	218	5,746	13,950	1,293	23,745	33,056
1998-99	139	917	1,360	187	5,330	15,942	1,411	25,286	37,230
1999-00	135	1,159	1,509	216	5,801	17,624	1,579	28,023	40,733
2000-01	179	1,411	1,739	212	6,968	20,181	2,599	33,289	48,543
2001-02	224	1,435	1,622	226	6,102	20,060	3,184	32,853	47,126
2002-03	258	1,627	1,561	239	6,406	21,785	3,172	35,048	53,876
2003-04	267	2,161	1,900	339	7,627	23,013	4,298	39,605	61,863
2004-05	253	2,934	2,414	461	9,646	23,209	6,876	45,793	77,754
2005-06	336	3,516	3,367	507	11,598	26,566	10,365	56,255	99,130
2006-07	338	4,440	4,023	671	13,064	31,210	13,332	67,078	118,478
2007-08	426	5,542	4,739	756	12,984	38,926	11,440	74,813	148,370

Note: The fiscal year starts on July 1 and ends on June 30 in the following year.

Source: Bangladesh Bank,"Economic Trends November 2008"

2.3 Trade Promotion Policy and Institutions

2.3.1 Export Policy

(1) Export environment for Bangladesh

Bangladesh receives the following favorable treatments from its trade partners.

1) EU exempts tariff on all products from LDCs (excepting rice, sugar and banana) without quota.
2) Canada follows the same practice since 2003.
3) Australia and New Zealand exempts tariff.
4) Japan exempts tariff under GSP (Generalized System of Preference).
5) China, India, Pakistan, Russia, South Korea and Thailand impose concessionary tariffs only.

Despite these favorable treatments, the country has not increased exports as expected, partly due to the insufficient production capability and partly due to quality problems. For further export promotion, the Bangladesh government has established the Export Promotion Bureau (EPB) as a division attached to the Ministry of Commerce, which has 270 staff members in the headquarters and 30 at four district offices and conducts the following activities.

1) Compilation of export statistics and provision of information on export markets for exporters
2) Issuance of certificates for the country of origin and GSP-compliance certificates and provide credit to software industry
3) Sponsoring of overseas trade fair for Bangladesh products
4) Trade consultation and advice for export-oriented companies
5) Support for resolution of conflicts with buyers in importing countries
6) Analysis of export items and markets as well as analysis of export policy under the WTO framework

A special privilege is given to pharmaceutical production. Under the WTO/TRIPS (Agreement on Trade Aspect of Intellectual Property Rights), Bangladesh is granted of a privilege to use foreign patents with free of charge. The country uses the privilege to produce APIs (Active Pharmaceutical Ingredients) and exports them to LDCs. However, this privilege will expire in 2016, after which the country is required to pay royalty for use of foreign patents.

On the other hand, "Import Policy 2006 – 2009" which has purposes of a) technology imports, b) imports for export industries and c) gradual lift of finished products along WTO's regime was published in October 2007, accompanying a registration of importers, under which a renewal fee is required.

(2) Export Policy by the Ministry of Commerce

The Ministry of Commerce prepares an export plan (Export Policy) every three years, in the following steps. First of all, the EPB conducts intensive surveys of related industries in March and April and develops a draft plan through internal discussion. The draft plan is then submitted to the MOC in June (the end of the fiscal year). After internal review, the MOC refers the draft plan to the National Export Council for approval. Upon the MOC's approval, it is submitted to the Advisory Committee attended by all ministers (generally 34 – 40 members, but only nine members for the latest plan because of the provisional government). After approval by the Committee, the plan is announced in July when the new fiscal year starts. However, the announcement of the latest plan was delayed because the provisional government (caretaker government) was established in January 2007 after the tumbling of the term-end government in the summer of 2006[1]. Then, "Export Policy 2006 – 2009" was effectuated in December 2007.

Table 2.3-1 lists the Highest Priority Sectors and the Special Development Sectors designated in the recent two Export Policies and incentives offered. The Highest Priority Sectors mean industries that are selected for export promotion on account of high potential. The latest Export Policy designates the six Highest Priority Sectors and the nine Special Development Sectors. Of all the Highest Priority Sectors, three industries – agro-products and agro-processing products, light engineering products (meaning light engineering products led by metalworking products, not textile products), and software and ICT products – remain unchanged from the previous Policy. For other industries, pharmaceutical products (previously designated as Special Development Sector) have replaced leather products (now designated under the Special Development Sector) and home textile products have substituted for high priced readymade garments for the Highest Priority Sectors in Export Policy 2006-9.

[1] New government: Administrative term of the government in power is 5 years in Bangladesh. After completion of the term, the parliamentary election is supposed to be implemented within three months under the authority of the provisional government called "caretaker government." However, the election did not take place as scheduled this time due to turmoil between the political parties. The new caretaker government came into power in January 2007, after which the parliamentary election was held in December 2008 and new government was formed in January 2009 with the President nominated by the new parliament.

The Special Development Sectors are placed next to the Highest Priority Sectors and are considered to have high export potential but to require the improvement of production, supply and export capabilities. The latest Export Policy designates nine industries, in place of ten in the previous Policy, which have also been substantially replaced. Only two industries – handicraft products, and herbal medicine and medical plants – are remained in the list. C.R. coil, card and calendar, stationery products, cosmetics and toiletries, and luggage and fashion goods, were replaced by frozen fish production and processing, jute products, fresh flowers and foliage, hand woven textile from hill areas, and uncut diamond. Basically, previously selected industries represent those that wanted to export their products, while newly selected ones have been selected on the basis of viability for actual export. Note that it is unclear as to what qualifications have been adopted to replace/exchange the industries in/between the both priority sectors (Refer also to 3.1.3 (2)).

Industries designated as those priority sectors are eligible to various incentives: 1) low interest rate loan; 2) income tax return; 3) subsidy for user charge of infrastructure facilities; 4) export finance; 5) discount for air transport charge; 6) reimbursement of customs duty; 7) subsidies relating to infrastructure-related usage fee; 8) marketing support; and 9) support for foreign direct investment. Refer to the section 1.3 of the current Report for the list of priority sectors, and to the section 3.1 for the details of the incentives available to the industries designated as these priority sectors.

Table 2.3-1 Industries Designated for Export Promotion in Export Policy 2006-2009

	Designated industries	Incentives
Highest priority sectors	a. Agro-products and agro-processing products b. Light engineering products (including auto-parts and bicycles) c. Footwear and leather products d. Pharmaceutical products e. Software and ICT products f. Home textile	a. Project loans with reduced interest rates on a priority basis b. Income tax exemptions c. Subsidies which are compatible with WTO Agreement on Agriculture, and WTO Agreement on Subsidies and Countervailing Measures d. Possible financial benefits or subsidies for utility services such as electricity, water and gas, provided that they are compatible with WTO Agreement on Agriculture, and WTO Agreement on Subsidies and Countervailing Measures e. Export loans with soft terms and lesser interest rates f. Reduced air travel fares g. Duty draw back/bond facilities h. Privileges for the establishment of backward linkage industries including infrastructural development so as to reduce production cost i. Expansion of institutional and technical facilities to improve and control product quality j. Assistance in production and marketing k. Assistance in foreign market search l. Taking necessary initiatives to attract foreign investments
Special priority sectors	a. Finished leather production b. Frozen fish production and processing c. Handicraft products d. Electronic products e. Fresh flower and foliage f. Jute products g. Hand-woven textiles from hill areas (pahari taat bostro) h. Uncut diamond i. Herbal medicine and medicinal plants	a. Project loans with general interest rates on a priority basis b. Consideration for export loans with soft terms and lesser interest rates c. Subsidies which are compatible with WTO Agreement on Agriculture, and WTO Agreement on Subsidies and Countervailing Measures d. Reduced air fare for shipment of products e. Duty draw back/bond facilities f. Privileges for the establishment of backward linkage industries including infrastructural development so as to reduce production cost g. Expansion of technical facilities to improve product quality h. Assistance in product marketing i. Assistance in foreign market search j. Possible financial benefits for utility services such as electricity, water and gas k. Taking necessary initiatives to attract foreign investments (FDI)

(Note) Designated industries and incentives under the previous export policy (2003 – 2006) are summarized below.

	Designated industries	Incentives
Highest priority sectors	a. Software and ICT products b. Agricultural products and processed foods c. Light industry products (including automotive parts and bicycles) d. Leather products e. High-grade garment	a. Low interest rate loans with priority b. Income tax exemption c. Financial assistance including cash supply d. Export finance under favorable conditions e. Transportation with cost burden f. Tax return/bonded area g. Infrastructure support for reduction of production cost h. Expansion of technical support system and facilities relating to quality development and inspection i. Product marketing support j. Overseas market development support k. Support for foreign investment
Special priority sectors	a. Medical supplies b. Cosmetics/toilet products c. Bags and fashion products d. Electrical products e. C.R. coils f. Cards and calendars g. Stationary h. Silk products i. Handicraft j. Herbal medicines	a. Normal rate loans with priority b. Consideration of low interest rate export finance c. Financial benefits including cash supply d. Reduction of air fare and freight charge e. Income tax return f. Priority installation and supply of electricity, gas and communication service for reduction of production cost g. Technical support for quality improvement of products h. Product marketing support i. Overseas market development support j. Support for foreign investment promotion

Source: Ministry of Commerce, "Export Policy 2006 – 2009," December 2007

(3) Export finance and foreign exchange control by the central bank

The Bangladesh Bank (BB) controls the country's financial system and the foreign exchange system through daily transaction dealing with commercial banks to trade the Taka against foreign currencies. As for export finance, the Bank maintains a foreign exchange control system by providing three indicators for exporters. Under the foreign exchange transaction guideline announced in December 1966, exporters are allowed to hold 40% of foreign currency earning from product export, 7.5% for exports including larger volume of import parts and materials, and 5% for service export. Exporters are required to sell the rest to the BB. They are expected to use foreign currency holding for overseas travel and purchase of raw materials and machinery, among others.

In Bangladesh, there are 56 commercial banks, all of which provide export finance. Of total, there are four national banks (Sonali, Janata, Agrani, and Rupali), and Rupali is in the process of privatization. The non-performing loan (NPL) ratio is persistently at 14.0% in June 2006, and national commercial banks (NCBs) contribute to this greatly with 26.2%. The BB operates the following three export finance schemes for export promotion.

1) Export Development Fund (EDF)

This is the revolving fund operated since 1989. In 2007, the fund amounted to US$ 100 million. It provides foreign currency loans, via commercial banks, for exporters to import raw materials and parts for an export contract that they have concluded. The repayment period is one year or less. The maximum amount of loan is US$ 1 million per company, covering up to 70% of the value of the export contract. The interest rate is LIBOR + 1.0%, e.g., 6% in 2007. The BB is considering increasing this line of credit volume.

2) Local currency loan (Packing Credit)

This scheme provides a low interest rate (7%) loan for exporters. No limit of credit is set and loan is executed via a commercial bank. It provides a great advantage for exporters who usually have to pay a 12% or higher interest rate for commercial loans.

3) Equity and Entrepreneurship Fund (EEF)

This is applicable to food processing/agro-based sector and IT sector (Refer to 7.1 of the current Report for details).

(4) Export promotion at Export Processing Zone (EPZ)

1) Current operation of companies in the EPZ

The EPZ is a special area established for export promotion with privileges. In particular, companies that process and export products within the EPZ are entitled to enjoy various privileges, regardless of whether local or foreign ownership. In 2001, Bangladesh Export Processing Zone Authority (BEPZA) was established by transferring a function of the Ministry of Industries (MOI) to the Prime Minister's Office and is in charge of EPZ operation and management, including the approval of tenant companies. At present, there are eight EPZs in Bangladesh as follows, for which infrastructure facilities have been constructed. Companies that operate in the EPZs are divided into three types, namely type A (100% foreign capital), type B (foreign/local joint venture), and type C (100% local capital).

Table 2.3-2 EPZs in Bangladesh

Place	Scale
a. Chittagong	(184ha, 428 lots)
b. Dhaka	(144ha, 388 lots)
c. Mongla	(186ha, 162 lots)
d. Comila	(104ha, 208 lots)
e. Ishuardi	(124ha, 166 lots)
f. Uttara	(93ha, 200 lots)
g. Adamjee	(118ha, 200 lots)
h. Karnaphuli	(90ha, 211 lots)

Source: BEPZA

As of the end of December 2008, 292 companies operated in the EPZs and employed 230,000 people (of which 60% is female). Chittagong accommodates the largest number of companies (143), followed by Dhaka (96), Comila (22), and Mongla (9). Breakdown of tenant companies by country of origin is shown below. Local companies and Korean companies account for 25% and 22% of the total respectively, whereas there is relatively the small number of companies from the USA, Europe, and Southeast Asia (e.g., Singapore and Thailand) despite close export relationship with Bangladesh. The EPZs in Chittagong and Dhaka are fully occupied.

Table 2.3-3 Country-wise number of companies operating in EPZs

Country	Number of the Company	Investment (US$ one million)	Number of the employees
a. Bangladesh	73	288	51,292
b. Korea	63	356	64,571
c. China and Hong Kong	37	180	31,299
d. Japan	24	170	6,287
e. Taiwan	14	65	6,798
f. India	13	11	2,005
g. USA.	12	51	11,857
h. UK	10	30	12,552
Total (8 countries/regions)	246	1,151	186,661

Source: BEPZA

By industry type, textile and garment industries account for 66%, totaling 193 factories, which are divided into 69 garment, 40 garment accessories, 33 textile, 30 knit, 16 towel, and 5 tent establishments. As for other industries, there are 16 electrical/electronics factories, 13 in plastics, 11 in metals, 13 in footwear and leather, and 8 in processing of agricultural products.

2) Incentives provided by the EPZs

Companies operating in the EPZs receive the investment guarantee which prohibits nationalization and takeover of the establishments in the EPZs. Companies in the EPZs can enjoy the following incentives.

- Ten-year tax holiday, tariff exemption for imports of machinery and raw materials, no duty for products, exemption of dividend tax, tax exemption for imported vehicles (up to 2/3 of the total value), and other tax incentives by accelerated depreciation etc.
- Holding of foreign currency by non-residents, borrowing from foreign sources, and overseas transfer of profits
- Provision of services to support customs clearance, such as bonded facilities, the opening of the letter of credit, etc.
- Infrastructure development (roads, communication, accessibility to airports and ports, emergency power generation systems, and utilities including gas and water)
- Other services such as issuance of work permits, recreational facilities, and daycare centers and other service facilities for female workers etc.

BEPZA is responsible for the issuance of permissions and approvals for tenant companies and operation and management of the EPZs, including labor relations within each EPZ. BEPZA sets minimum wages, working hours, holidays, and other working conditions according to type of work, all of which are applicable only in EPZs. This seems to reflect the fact that a large number of labor disputes occur in textile companies, many of which operate outside the EPZs due to the delay in wage payment, especially at subcontractors.

For the actual export procedures, the certificate of origin and the certificate of compliance with GSP are required to gain the various privileges. These certificates are not issued by the BEPZA, but by the EPB.

2.3.2 Import Policy

The Bangladesh government's Import Policy is summarized below. Generally, it is oriented to liberalization after the participation in the WTO.

(1) Import policy

The "Import Policy 2003 – 2006" announced on March 13, 2004 represents significant modification to set forth minimum required protection in line with the WTO agreement (import restriction was imposed on 58 items in the 4 digit classification of the HS code). The "Import Policy 2006-2009" was announced in October 2007 in which the number of import-restricted items was reduced to 26 in 4 digit classification of HS code. The followings are based on "Import Policy 2006-2009".

Table 2.3-4 List of Import Banned Products

Classification	HS Code No.	Import ban	Importable conditions
Food	12.07, 12.11, 13.02	poppy seeds、opium	
	23.07	wine lees	
	25.01	common saltexcept tablesalt	
	29.29, 29.30	sodium cyclamate	
Opetroleum products, synthtic fiber	27.10, 27.11, 27.13	furnace oil, LPG	Bangladesh Petroleum Corporation can import under the Bangladesh Petroleum Act, 1974.
	56.08	fishing net with meshes of 4.5 centimeter or less	Importable with the prior permission from the director general of Fishery Dep.
	63.05	polypropylene bag	
Trasport vehicle	84.08, 87.01～87.04	two engines with three wheeler vehicles (Tempo, rickshaw)	
		old viehicls more than four years of microbus, minibus, truck	Old viehicles from the country of its origin and old taxi 1250-2000cc within three years are importable.
	87.08	used parts	Bumper, door, power stearing, brake drum etc. are importable under the permission of registered with BOI and Joint stock company.
	87.11	Above 150cc motor cycle and more than three years old	
Medical equipment and hygiene	38.08	insecticideds of heptachlore, WP, DDT, bidrin	
	90.18	glass syringe	
Fire arms and ammunition	93.02、93.03～93.06		Amunition for sports, hunting etc can be importable under the prior permission of Ministry of Home Affairs.Others are importable by Ministry of Defence.

Source: Ministry of Commerce "Import Policy Order 2006-2009" October 2007

Based on Table 2.3-4, the Import Policy is generalized as follows. Note that exports and imports by EPZ companies are separately regulated. First of all, Bangladesh bans imports of hogs and pork for religious reasons, and fire arms, ammunition and LPG for national security reasons. Insecticides, polyethylene bags, glass syringe are banned for environmental and sanitary reasons. Used cars (over 4 years old) are also banned, although the import can be made if the importer gains permits from the BOI and other vehicle registration offices. Finally, imports of fishnets are also possible under the special permit from regulatory agencies.

From the standpoint of industrial policy, the current Import Policy suggests a significant decline in protectionism, in that industrial protection for agricultural products (e.g., eggs and eggplants), polyester-based synthetic fibers, light engineering/metalworking (partial restriction on used car imports), pharmaceuticals medicines and radio equipment has been done away with, while the industrial protection remains only with equipment/parts industry, syringe industry and fishery cooperatives. Meanwhile, the previous policy and practice remain in documentary requirements relating to import procedures, such as indication of country of origin, import price, financing, regulation of carried goods, permission for shipped L/C, banking procedure, HS code number, and registration system. As the country has joined the WTO, indiscriminate liberalization (by 2016) is required to mandate discussion on import liberalization steps including reduction in import tariffs.

(2) Import-related taxes

Tariff has previously served as a primary means of protecting domestic industries, which is now much less significant. At the same time, it constitutes a major revenue source for the Bangladesh government (Refer to Table 2.1-3). The country imposes the following four types of taxes on imported goods.

1) Import tariff
   a. 0% - Machinery and other capital goods
   b. 5% - Raw materials
   c. 12% - Intermediate goods and parts
   d. 25% - Finished goods

2) VAT
   - 15% on all goods

3) Luxury tax
   a. 15% - Fresh vegetables and fruits
   b. 25% - Paper, salt, perfumes, dried fish, shrimps/prawns
   c. 65% - Sugar, chocolate, cookies
   d. 100% - Malt beer (non-alcohol), raisons, watermelon
   e. 350% - Cigarette, wine

4) Development tax
   A uniform 4% tax is levied on all imports to finance infrastructure development.

2.4 Investment Promotion Policy and Infrastructure Development

2.4.1 BOI's Investment Policy

The BOI (Board of Investment) was established in December 1989 by transferring a function of the MOI to the Prime Minister's Office. Its workforce decreased from around 600 at the start to 300 at present because it did not make new recruitment. The BOI grants various tax incentives upon registration after application.

The BOI's investment policy as of 2008 is described below (Refer to Table 2.4-1). Note that the current incentive system is subject to minor modifications each year. While the currently available incentives are designed to encourage investment by export-oriented companies for a limited period of time, the BOI expects to induce foreign direct investment including infrastructure projects.

1) Income tax exemption for four years: Covering textile, chemical, iron and steel, agricultural chemical, machinery, computer, and infrastructure industries.
2) Accelerated depreciation: This is applied to production plants and machinery. As it allows quick depreciation for three years, 50% in the first year (varying with type of machine), 30% in the second year, and 20% in the third year, it produces a significant tax reduction effect. Apart from this accelerated depreciation, the depreciation period usually varies by variety of fixed assets.
3) Reimbursement of import duties and exemption of VAT: Assembled machinery is fully exempted. As most machines are imported in Bangladesh, this incentive provides significant benefits.
4) For export-oriented industries with export ratio of over 80%, various privileges are offered, including bonded warehouse, loan, foreign currency holding, and sample exports.
5) Other incentives: Prevention of double taxation, permission for overseas fund transfer, tax exemption for interest on foreign loans and income of expatriate engineers, and citizenship for non-residents.

Table 2.4-1 BOI's Investment Promotion Policy

	Incentives	Eligibility	Remarks
1	Tax Holiday	Income tax exemption Textile, pharmaceutical product, melamine, plastics, ceramics, sanitary products, iron and steel products, fertilizer, agricultural chemical, computer, three-star or higher grade hotels, petrochemical, basic chemical, agricultural machinery, shipbuilding, boiler/compressor, textile machinery, infrastructure (port and harbor facilities, container terminals, LNG/CNG terminals, gas pipelines, flyover, water purification plans and pipelines, waste treatment plants)	Up to the end of June 2008; four years for Dhaka and Chittagong; six years for Khulna, Sylhet, Barisal, Rashahi, and three Hill Track areas in Chittagong
2	Accelerated depreciation	Plant and machinery - 50% for the first year - 30% for the second year - 20% for the third year	It is reviewed annually. For FY2006/7, the depreciation rate in the first year is 25% for machinery and 10% for factory. In the case of restructuring, 47% for vehicles, 20% for machinery, 10% for furniture, 20% for factory, and 10% for commercial building.
3	Exemption or reduction of import tariff and VAT	Import of machinery - 100% for export purpose - 10% for parts - 5% for others - 10% or less of CIF for parts	7.5% of import tariff is deposited as bank guarantee and will be refunded after installation. VAT is exempted.
4	Export promotion	For export-oriented industries - Import tariff on machinery and parts - Bonded house - Loan up to 90% - Foreign currency holding - Income tax exemption for cottage industry in relation to exports, and others for rebate - Tax exemption on imported raw materials only if production is made for export purposes - Tax-exempt sample exports are limited as designated by government. - Export finance is guaranteed. - From the EPZ, 10% can be exported by paying domestic tax. - EPZ companies can sell 20% of products within the country. - Further incentives are provided for a company that is designated by government as the highest priority industry.	Company that exports 80% or more of production.
5	Other	- Prevention of double taxation - Royalty, and revenues relating to know-how and technical support are remitted if the company is registered with BOI. - Foreign companies can transfer capital, profit and dividend to their home countries. - Foreign companies can recover invested funds under resolution. - Foreign companies can be established regardless of ownership, i.e., 100% foreign capital or joint venture of local capital. - Exemption of interest tax on foreign loans, income tax on foreign engineers (three years), and income tax on power companies (15 years) - Incentives for non residents (visa, civil right, residency)	

Source: Bangladesh Board of Investment. "Bangladesh Investment Handbook," September 2007

2.4.2 Foreign Direct Investment Attraction Policy

According to the international balance of payments shown in Table 2.1-4, FDI has been rapidly increasing since 2003/4 and maintaining the upward trend. Sector-wise, telecommunications and infrastructure (energy and electricity) receive larger FDI than manufacturing and trade and commercial sectors do (Table 2.4-2).

In the telecommunications sector, cellular phones are rapidly becoming pervasive in the country. Cellular phone ownership in Bangladesh grew by 140% in 2006 and strong growth is expected to continue in the ensuing few years. In comparison to around one million fixed telephones, the number of cellular phone ownership reached 22 million at the end of 2006, indicating aggressive investment in the industry. A trend is now seen for increasing investment in various industrial fields in Bangladesh. Meanwhile, in face of growing concerns over negative impacts on the domestic economy by the world financial crisis since the third quarters of the year 2008, the Bangladesh Bank announced its economic observation in January 2009 that the FDI inflow to the country has still been increasing along with the export earnings and receipts from the overseas remittance.

Table 2.4-2 Foreign Direct Investment by Sector

Broad Sectors	2004 (Mill.US$)	2005 (Mill.US$)	2006 (Mill.US$)	Component 2006 (%)
Energy & Power	124.0	208.3	208.2	26.3%
Manufacturing	139.4	219.4	104.9	13.2%
Trade & Commerce	66.6	130.5	130.2	16.4%
Telecommunication	127.5	278.8	346.5	43.7%
Other Services & Misc	2.8	8.4	2.7	0.3%
Total	460.3	845.4	792.5	100%

Source: Enterprise Survey, Bangladesh Bank

Several examples of foreign direct investment in Bangladesh are described below. Notably, Bangladesh is endowed with coal deposits of high quality in the northern part of the country and large natural gas reserves in a province adjacent to Myanmar. In addition, the country has recently discovered natural gas reserves in its offing as well. The Tata group of India and the Non-Resident Indian conglomerate, the Mittal group, are now conducting study for investments in the iron and steel industry. Besides, the companies including the Conoco Phillips (USA) and Asian Energy (UK) have already secured mine concessions for the natural gas reserves in the offing for which they have been performing the investment study.

In addition, Red Bird Co. of China submitted an application for a US$ 1 billion investment project to BEPZA in May 2007. Under the investment plan, the company would have manufactured jute products (new product, not traditional products) in an EPZ by using high quality materials that are cultivated in contract farms in the northwest region of the country. However, the Bangladesh government turned down the application after all.

2.4.3 Infrastructure Development and Government Finance

After the setting of the Millennium Development Goals (MDGs) (as discussed in detail in 2.5.1), the Bangladesh government has announced the Poverty Reduction Strategy Paper (PRSP), under which government finance is tightly controlled under assistance and advice of the IMF and the World Bank.

Government revenue in 2008/09 is expected to increase by 16.6% to Bangladesh TK (BDT) 757.3 billion from the final figure of BDT 649.3 billion for the previous year. On the other hand, revenue expenditure in the same year amounted to BDT 667.6 billion (BDT 569.9 billion in 2007/2008), a 17.1% increase, and capital expenditure including the donor fund called Annual Development Programme (ADP) was to the tune of BDT 256 billion (BDT 225 billion in 2007/2008), a 13.8% increase. The total expenditure including other expenses increased by 6.7% to BDT 999.6 billion (BDT 936.1 billion in 2007/2008), resulting in a BDT 242.3 billion fiscal deficit, or 4.0% of the GDP of the country (5.4% in 2007/8). The capital expenditure accounts for 29.5% of the total expenditure of the country

The ratio of 49% of the capital expenditure is funded by foreign donors, including the World Bank, IFC, ADB, DFID, JICA, UNDP, USAID and GTZ, among others. Major portions are spent on education, rural development, and infrastructure.

2.5 Support and Role of Donor Organizations

2.5.1 Achievement of MDG and Bangladesh's Development Budget

The United Nations announced "Millennium Development Goals Report 2007" in July 2007. The Millennium Development Goals (MDGs) established eight development goals to improve health, education, women's status and other basic conditions and sets forth specific targets such as reduction of the proportion of people living on less than a dollar a day by half, by 2015. Population suffering extreme poverty over the world decreased to 980 million in comparison to 1,250 million in 1990. Significant progress has been made in Asia. According to the ADB, the proportion of population in East Asia living on less than a dollar a day declined dramatically from 33% in 1990 to 9.9% in 2004, thanks to remarkable economic growth in China and Viet Nam. In particular, the poverty ratio in Southeast Asia fell from 20.8% to 6.8% during the same period. In contrast, it is still high at around 30% in South Asia (including the Gulf States), albeit the proportion of women working in non-farming sectors increased from 13% to 18%. Women receiving antenatal care remain slightly over one-third.

In Sub-Saharan African countries, the proportion of population suffering extreme poverty is still very high, although it improved from 46.8% to 41.1% between 1990 and 2004. Eight major industrialized nations have agreed to set the target of allocating 0.7% of their national income to the achievement of the MDGs (0.33% at present) and have declared the doubling of assistance to Africa by 2010 at the 2005 Gleneagles Summit.

Bangladesh, one of the poorest countries and having 140 million population, received the ODA grant totaling BDT 117.9 billion in 2000/1, according to the Bangladesh Bank, which declined to BDT 6.7 billion in 2006/7 and further to BDT 3.1 Billion in 2007/8. Meanwhile, the proportion of population living on less than a dollar a day in the country improved from 49% in 1990 to 40% by 9% in 2004. In comparison to India, the poverty ratio is higher but the improvement is greater.

2.5.2 Activities of Donor Organizations in Bangladesh

After the 9/11 in 2001, the United States and major European countries have increased financial aids by 2-3 times to LDCs under recognition that poverty is a spawning ground for terrorism. However, aid organizations were not able to keep up with it because their staffing did not increase and implementation of aid projects was delayed. At the same time, LDCs faced difficulty in dealing with increased projects because of capacity shortage and staff restraint. As a result, it was agreed to manage similar projects implemented by different

organizations under the leadership of one organization, as seen from the Table 2.5-2 which indicates that some donor organizations participate in the same project.[2]

Activities of donors expanded rapidly in Bangladesh after the 1990s, because of a relatively stable political condition and abundance of development needs in the highly populated, low-income country. As summarized in Table 2.5-1, foreign aids are generally concentrated in the following three areas:

1) Governance;
2) Social development (human resource and healthcare); and
3) Private sector development.

Foreign aids consist of loan and grant. For Bangladesh, the World Bank, ADB, and JBIC (merged with JICA in October 2008) provide loans, while other donor organizations (e.g., USAID, EU, DFID, GTZ, JICA, CIDA, SIDA, and NORAD) provide grants. JICA, after having merged with JBIC, is providing both loans and grants. While IFC mainly extends loans to private sectors in relatively developed countries, it also provides the technical assistance (TA) for private sector in Bangladesh. As for the big aid by credit, the World Bank lends a total of US$ 130 million and ADB US$ 45 million. On the other hand, grant-based technical assistance has been growing in size with longer implementation periods.

As seen in Table 2.5-2, South Asia Enterprise Development Facility (SEDF) provides grants totaling US$ 38 million over five years, and DFID's "PROSPER" of the US$ 80 million over eight years. DFID, CIDA etc. grant to "KATALYST" increased from US$ 22 million (four years from September 2002 to August 2007) in the previous 1st round to US$ 43 million (five years from 2007 - 2012) in the present 2nd round, which are close to the size and period of loan-based development projects. USAID implemented two major projects between 1995 and 2005, amounting to US$ 300 million and US$ 80 million respectively, but the ongoing PRICE project (which started in February 2008) has scaled down to US$ 16.5 million, and big projects of aid activities are taken over by loan-based projects of the World Bank and ADB.

[2] Meanwhile, the "Swisscontact" has unique operation in aid programs. It was initiated by Swiss Development Corporation, the national agency responsible for foreign assistance. Unlike large countries, it does not maintain local offices throughout the world and entrusts works relating a specific project to specialized local consultants, who then work at office of other leading organization by rental that serves as the leading agency.

Table 2.5-1 Priority Sectors by Donor Organizations in Bangladesh

As of July 2007

Donor organization	Economic development					Trade diversification			Social development									Other industrial development		
	Democracy/ human right	Population	Governance	Economic development	Infrastructure	Private sector development (including SME promotion)	Trade promotin/ diversification	Informa-tion & communi-cation technology (ICT)	Poverty reduction	Job creation/ income growth	Rural development	HR development (education and training)	Public health	Water supply	Environment	Food security	Disaster/ crisis management	Finance (including MF)	Tourism	Service
SEDF		○					○			○	○	○	○			○				
UNDP			○					○	○			○			○		○			
World Bank			○	○	○				○											○
ADB			○	○	○	○			○			○	○	○				○		○
USAID	○		○			○						○	○			○	○			
DFID			○		○	○				○		○	○	○	○			○		
GTZ		○	○			○							○		○					
JAPAN			○	○	○	○	○	○	○		○	○	○		○		○		○	
CIDA			○			○						○	○							
Netherlands		○	○		○							○	○	○						
NORAD	○		○			○						○								
SDC	○		○			○				○					○		○			
SIDA	○		○	○						○		○	○							
DANIDA					○	○					○		○	○						
EU	○		○	○		○	○					○	○		○	○				
Australia			○									○	○			○		○		

Source: World Bank "Country Assistance Strategy 2006-2009", ADB "Country Strategy and Program 2006-2010", EC "Country Strategy Paper 2002-2006", Japan "Country-based Aid Plan, May 2006"
USAID "Strategic Statement FY 2006-2010", DFID "Country Assistance Plan 2003-2006", CIDA"Country Development Programming Framework 2003-2008"
Web sites of relevant organizations

Table 2-5-2 Projects Implemented by Donor Organizations in the Area of Private Sector Development

Project name	Donor organizatior	Implementation body	C/P	Period and value	Subject Sub-sector	Contents/purpose	Competing relations with the JICA project
1. International organizations							
South Asia Enterprise Development Facility (SEDF)	IFC EC DFID NORAD CIDA Netherlands government	IFC		October 2002 – December 2008 (Phase 1: $38 million)	Four sub-sectors (ready-made clothes, agri-business, IT/software, light industry Three sub-sectors Agrobusiness, engineering, textile	An organization headquartered in Bangladesh and responsible for local support with a limited period, with the mission to promote SMEs in Northeast India, Bhutan, Nepal, and Sri Lanka. The final goal is to reduce poverty through job creation and SME promotion.	IT/software
E-Development	UNDP	UNDP	Prime Minister Office	January 2005 – 2009	Among nine projects, E-Development provides support in the following areas. 1) Reinforcement of ICT within Prime Minister's Office 2) Information project at Prime Minister's Office 3) ICT task force support 4) E-Center projec	UNDP occupies half of IDB Bhaban's 19-story building and retains around 300 staff members (mostly locally hired) to provide support in the areas of government capacity building, e-development, poverty, energy, disaster, and human resource development. As UNDP does not have enough funds, it obtains funds from other donor organizations by proposing specific projects.	
Bangladesh Quality Support Programme (BQSP)	EU UNCTAD/WTO NORAD	ITC	MOI Ministry of Fisheries and Livestock Ministry of Textile and Jute MOC	2006-2009 about $14.5 million	Three sub-sectors Textile, fisheries, plant cultivation Four sub-sectors (processing of agricultural products, ICT, light industry, and herbal medicine)	To improve quality standards and quality management to meet standards in the U.S. and the EU, for export promotion and diversification; to establish quality standards, quality management and compliance evaluation systems, certification and accreditation systems, and accreditation organizations; and to improve inspection and tracing capability of the Fisheries Agency and the private sector in the fisheries industry. As for support relating to export diversification, improvement of packaging technology and quality standard is targeted. Also, improvement of skills to apply the value chain approach is critical for improvement of competitiveness. Support activities include educational activities, technical training, and support for the establishment of the packaging technology resource center, as well as quality improvement, packaging technology, supply management, and export planning for individual companies.	ICT
Private Sector Development Support Project (PSDSP)	World bank DFID CIDA Japanese gavernment	World Bank	BOI	Planning stage (under discussion with the Bangladesh government) Approximately $130 million	Infrastructure covering the private sector as a whole	It concerns with development between Dhaka and Comilla, and finalization is underway by June 2008. 1) Expansion of Comilla's EPZ (104ha + 60ha) 2) API Park 20km east of Dhaka 3) An industrial park for RMG 4) Construction of IT park near the Dhaka airport and Radoma bridge west of Dhaka	JICA's feasibility study is underway for the PADMA bridge
Bangladesh Investment Climate Fund (BICF)	EC DFID IFC	IFC		8 years between January 2007 and December 2014 $25 million (60% by credit and 40% by grant)	1) Regulation and policy 2) Service industry 3) Government's capacity building	Originally, it formed part of the World Bank's PSDSP. It was separated on January 1, 2007 as policy element. It is closely associated with universities, think tanks, and research institutes. Within the BOI, Better Business Unit was established to supervise reforms of investment management. Skill training for government employees relating to private sector development is conducted. Conducted parallel to PSDSP.	Japan considers this as a parallel project to the present study.
Small and Medium Enterprise Sector Development Program (SMESDP)	ADB	ADB	Bangladesh Bank MOI	3 years between September 2005 and December 2008 Credit: $45 million Grant: $50 million Phase 2 will start in 2009	1) Establishment of SME Division within MOI - $15 million 2) Medium- and long-term loans for companies - $30 million 3) SME database - $5 million	Program loan: Support for formulation of SME promotion policy and development framework, and the establishment of SME promotion support organizations and system Project loan: Two-step loan for SMEs (all SMEs) Technical support loan: Program support for development of SME database and portal site (grant)	
2. Bilateral							
Poverty Reduction by Increasing Competitiveness of Enterprises (PRICE)	USAID	USAID		2008-2013 $16.5 million	1) Marine products 2) Highlands vegetables 3) Leather goods	In 1982 – 1993, Micro Industries Development Assistance and Service (MIDAS) was carried out for 12 years at the cost of BDT300 million. Then, Agro-based Industries &Technology Development (ATDP) was implemented in 1995 – 2005 at the cost of $300 million, for job creation by providing training in the areas of agro-business management, supply chain management, and ICT. Then, in 1997 – 2005, JOb Opportunity & Business Promotion (JOBS) was conducted for promotion of SMEs, new ventures and business. As for PRICE, an amount of money is reduced to 1/10	
Promotion of Sector Program of Enterpreneur (PROSPER)	DFID Swiss Canada	DFID		8 years between June 2007 and May 2014 $80 million	Micro finance through the central bank and PKSF (a group of NGOs)	The loan is extended to the central bank at 1% and then to end users at 18% through credit bodies. While each loan is small in amount ($30 per case), the total amount is huge, $80 million. This money will be gifted finally in 2014.	
KATALYST	DFID SDC SIDA Swiss CIDA (scheduled in Phase 2)	GTZ	MOC	September 2002 – August 2007 (Phase 1 - $22 million) 2007 – 2012 (Phase 2 - $43 million) (when CIDA participates)	16 sub-sectors and 30 markets Industries: plastics, furniture, agricultural machinery and equipment, and processing of agricultural products Agriculture: fresh water fisheries, shrimp/prawn, vegetables, corn, poultry, horticulture Service: accounting, marketing, quality control, media, health care, ICT	To foster a business service market by taking a systematic market development approach for sub-sectors where low income people are working; 9 for value chain and 7 for PR services; both free basis and free of charge; to support sub-sectors in the industrial sector on a cluster basis and through export diversification; and to provide support for agricultural areas in Phase 2.	While ICT is part of processing of agricultural products (export industry), it targets the improvement of access to infrastructure information and ICT by poor people, not export.
PROGRESS	GTZ	GTZ	MOC	Started in 1994 2003 – 2006 ($16 million in Phase 1) 2007 – 2009 (Phase 2)	3 sub-sectors Leather, silk, and jute products RMG	To designate silk, leather and jute as industries to absorb surplus labor from RMG industries upon completion of MFA; to compile a report by using value chain and BDS market development approaches; RMG is designated for Phase 2 because it is active after completion of MFA. For improvement of the investment climate, support is provided for product design and development, technical training, and the corporate information sharing system.	It was completed by publishing a value chain report on jute products in 2007, in 1st round.
3. Other							
Local Enterprise Investment Centre (LEIC)	CIDA	Industrial Development Leasing Company of Bangladesh (IDLC)		2004 – 2010 Approx. $9.8 million	Private sector as a whole	The primary objective is to revitalize the private sector. Financial support covers business ties up between local SMEs and large enterprises or foreign companies, technical training, pollution control measures, and introduction of latest technology.	Based on the hearing from DFID, LEIC selects sub-sectors to be covered by the SME survey.
Bangladesh Trade Support Programme	EC	EC	MOC	2003 – 2008 Approx. $11 million	Support for capacity building of trade-related government and private organizations as well as human resource development, and support for MOI, Foreign Trade Institute, Ministry of Maritime Transport, and Tariff Commission.	Its primary objective is to improve capacity of trade-related organizations and has no direct relations.	1 sub-sector Shrimp/prawn
Shrimp Quality Support Project (SQSP)	USAID	World Fish Centre		Jan to Nov 2006	1 sub-sector Shrimp/prawn	To aim for qualitative and quantitative expansion of shrimp/prawn exports by cost reduction and profitability improvement.	Already completed for food processing (export promotion).

Source: Information on international organizations and bilateral projects was obtained by the study team through visits, and information on other projects was obtained from Web sites of relevant organizations.

2.5.3 Projects by Donors in the Area of Private Sector Development

The World Bank recommended privatization of state enterprises in 1971 when Bangladesh became independent of Pakistan. In the meantime, DFID took initiative in formulating the PSDSP (Private Sector Development Support Project) in an attempt to create the basis of promoting private sector development in the country. The project was later joined by Japan, Canada and the World Bank and then was undertaken as the World Bank project. It is primarily designed to simplify the administrative procedures and laws/regulations in relation to business activities, establish the industrial zone, and conduct human resource development activities for government agencies that facilitate the better business environment. The project has been divided into the two components. In the first component, DFID and EU established the Bangladesh Investment Climate Fund (BICF) in January 2007 as an 8-year project under the IFC by making an investment of US$ 25 million. BICF is now hiring the local consulting companies which are devising guidelines for policy making and actions. On the other hand, the second component of the PSDSP is the infrastructure-related project where the new industrial zone is planned to be created.

The second component of the PSDSP calls for expansion of an EPZ in Comila, located between Dhaka and Chittagong, to construct two industrial parks (for API and RMG) on the west side of Dhaka at an estimated cost of US$ 130 million. The government will acquire land and donor organizations will construct infrastructure to support the parks, while the BOI is a coordinating agency. In fact, the scheme is associated with the Hi-tech Park planned by the Ministry of Science and ICT and the PADMA bridge construction project (under feasibility study) led by the Japanese government. The World Bank also implements infrastructure development projects including electricity and water as well as education and healthcare projects. As the most favorable conditions are applied to Bangladesh in relation to loans by international organizations, the World Bank extends IDA credits at zero interest rate with an annual fee of 0.45%.

ADB has extended a 5-year disbursement loan, entitled “Small & Medium Enterprises Sector Development Program (SMESDP)”, to the tune of US$ 50 million in 2005. Breakdown of the loan components is shown below:

a. Project loan to establish a new division within the MOI, which is responsible for reorganization of related branches (Program loan: US$ 15 million)
b. One to five year term loans for private companies, managed by the central bank and executed by commercial banks (Project loan: US$ 30 million)
c. Technical assistance relating to SME database development and environmental monitoring (TA loan: US$ 5 million)

Note that this program completed the disbursement in 3 years, which was shorter in period than expected (5 years). Therefore, ADB is now planning to continue the program as the Phase 2 from 2009.

ADB also conducts other assistance activities relating to infrastructure development. The implementation team originally borrowed an office space of the MOI's division, SME Cell, since September 2005. In August 2007, it moved to a nearby building to have its own office and established SME Foundation.

Europe has lagged behind international organizations and the USA in private sector development field in Bangladesh, but it is active in foreign assistance in Bangladesh in recent years. As for international organizations, International Trade Centre (ITC) under UNCTAD/WTO carries out two projects. One is called the National Quality Management System, under which the Bangladesh Accreditation Board (BAB) is established within the Bangladesh Standard and Testing Institute (BSTI) of the MOI for the purpose of providing support relating to the procurement of international standard metrology equipment, and hygienic control of garments and fisheries. Another project is designed to promote export diversification, which was conducted by establishing a temporary office within the EPB under the MOC. It was implemented under the theme of "Global Value Chain Initiative" that aims to disseminate management practice over the world by introducing success stories that cover 60 sectors in 24 countries. The project generally lasts four to five months and that in Bangladesh was completed in January 2008. The report was prepared by local consultants based upon the two workshops using the participatory method (The first workshop was held for two days to discuss about the market and value chain issues. The second workshop was held after necessary study was conducted to reflect the results of the first workshop). In Bangladesh, this project covered the following areas.

- Agro processed products
- Horticulture
- Packing
- Light engineering
- ICT-based services
- Herbal medicine

The EU is currently a major supporter for the South Asia Enterprise Development Facility (SEDF) under management of the IFC. The SEDF, headquartered in Bangladesh, is a program to lead development support activities in Northeast India, Bhutan and Nepal besides Bangladesh.

It was established in October 2002 with the fund amounting to US$ 40 million and completed its program activities in Phase 1 in December 2008. The Phase 2 of the program is expected to start in January 2009.

2.5.4 Bilateral Aid Projects in the Area of Private Sector Development

(1) USAID

USAID has implemented large projects prior to private initiatives and is now gradually scaling down its aid activities. MIDAS (Micro Industries Development Assistance and Services) provided microfinance by using BDT 300 million for the twelve-year period between 1982 and 1993. As 16 years passed the termination of the project, the consultant company renamed to MIDAS to sustain the activities by granted refinancing fund. It purchased land and a building and conducts business to sell survey reports and the World Bank publications, while operating a microfinance bank as subsidiary.

Then, Agro-based Industries & Technology Development Project (ATDP) was conducted in two phases between 1995 and 2005 by investing US$ 300 million over the ten-year period. Also, Job Opportunity & Business Support (JOBS) was conducted by spending US$ 180 million over the eight-year period between 1997 and 2005, in order to implement three projects (SME, micro enterprises, and business promotion policy). After completion of JOBS, the consultant that implemented the project now operates a NGO using that name. At present, Poverty Reduction by Increasing Competitiveness of Enterprise (PRICE) embarked on in February 2008 with the total fund of US$ 16.5 million to be spend for five years (US$ 11.5 million is foreign currency based and the rest is domestic currency equivalent to US$ 5 million to be collected from the recovery of the project). This fund amount indicates a significant decrease in project size in comparison with those implemented in the past.

(2) DFID

Department for International Development (DFID) of the United Kingdom (former suzerain state) as well as GTZ of Germany have been active by big amount of grant aid. DFID's aid budget has recently increased rapidly and supplies sizable funds to SEDF (GBP 5 million for 5 years), BICF (GBP 20 million for 7 years), and KATALYST II (GBP 21 million for 5 years), while it is supposed to extend GBP 15 million to PSDSP. DFID also established its own project entitled "Promotion of Sector Program on Entrepreneurs (PROSPER)" in June 2007 by disbursing GBP 40 million (US$ 80 million) over seven years. It is joined by other donors of Switzerland and Canada. It primarily provides microfinance for rural farmers and

urban low income people (up to US$ 30 per loan), and the financing and refinancing fund are managed by the PKSF, a group of NGOs, under the supervision of the central bank. It will be monitored for seven years. The interest rate for end borrowers is 12% (in comparison to market rates of 12 – 15%).

(3) GTZ

GTZ published a report on analysis of value chains for three sub-sectors (leather, silk and jute) on the basis of research and study conducted by a private consulting firm in 2006 (Phase 1). GTZ's head office examined five candidate industries (the above three plus handicraft and RMG) for the credit program from KfW and finally selected RMG as a target for the Phase 2. The Phase 2 is now under implementation. GTZ also leads the KATALYST under which supporting measures for 16 sub-sectors were provided for 5 years between September 2002 and August 2007 as the Phase 1. These 16 sub-sectors included industrial products such as plastic and furniture, agricultural/fishery products including shrimp, vegetables and corn, and services such as accounting and marketing. The Phase 2 of the KATALYST has been implemented since September 2007 targeting the same 16 sub-sectors and will complete in August 2012.

2.6 Other Key Policies

2.6.1 Participation in the WTO and Privatization

Bangladesh is a member nation of the WTO. As it is classified as one of the least developed countries, it is granted of many reservations for trade liberalization. As these reservations will be removed in the foreseeable future, efforts should be made to eliminate trade barriers. At present, there are various exports assistance programs, including direct subsidy by the MOC (under export plans), tax incentives by the BOI and the EPZ (e.g., tariff, income tax, and VAT), and export finance by the central bank. In relation to the WTO's rule, these privileges are expected to be scaled down gradually.

When the country became independent of Pakistan in 1971, its industries were nationalized. In 1993, privatization was started by establishing the Privatization Commission under the Prime Minister's Office. In 2000, the Privatization Act was enacted and the actual privatization process was commenced in various industries. State enterprises exist in wood, food, textile, silk, jute, chemical, steel, metal, banking, and service industries. Among them, the textile industry has the largest number of privatized companies. In the jute industry, 22 state enterprises are operated under their parent company, Bangladesh Jute Mills Corporation (BJMC), of which three factories have been selected for privatization.

2.6.2 Education and Technological Development

The literacy rate of people in Bangladesh over seven years old is 63.1% in urban areas and 45.3% in rural areas in 2002. The country's educational level is very low in comparison to other Asian countries. The educational system consists of primary schools (five years), secondary schools (five years), higher secondary schools (two years), and universities (four years). The enrollment rate in 2001 was 86.6% for primary schools, 19.2% for secondary schools, and 30.1% at higher secondary and university level. Nationwide, in 2002, there are 78,363 primary schools, 16,562 secondary schools, 2,634 higher secondary schools, and 98 vocational schools (13 for national medical care, 12 for private medical care, 4 for agriculture, 4 for industry, 59 for law and economy, and 6 for preparatory). Thus, the number of vocational schools is extremely small. Note that there are 7,820 religious educational institutes, called Madrasah (traditional boarding schools taught in Arabic), which accommodate students at secondary and post secondary school levels.

There are 17 national universities and 41 private universities. In addition, there are other higher educational institutes specialized in specific fields, namely 13 teachers colleges, 27 polytechnics, 64 vocational training institutes, and 44 nurses' schools. In Bangladesh, the

vocational training is under the jurisdiction of the Ministry of Education, not the Ministry of Labor and Employment. In addition, the MOI's Bangladesh Industry Technical Association Centre (BITAC) offers training courses to teach metalworking techniques, and the MOC's Bangladesh Foreign Trade Institute conducts a training program on foreign trade practice.

Bangladesh Council of Science and Industrial Research (BCSIR) under the Ministry of Science and ICT carries out research projects on product development for eight areas including agriculture, food, and medicine. The annual budget is BDT 360 million. The International Jute Study Group (IJSG) - a sole international organization in the filed - has been conducting activities under assistance of UNCTAD since 1984. It provides information on jute all over the world. Bangladesh Jute Research Institute (BJRI) under the Ministry of Agriculture (MOA) conducts research and study relating to product development, preservation of seeds, and cultivation of jute. Finally, the Jute Diversification Promotion Centre (JDPC) under the Ministry of Textile and Jute (MOTJ) develops and promotes new jute products.

2.6.3 Activities of Trade Associations and Finance

As shown in Table 2.6-1, there are a fairly large number of trade associations in Bangladesh, which effectively function as contact for mediation with government for interest group. For instance, they are active in making requests for tax reforms, finance or in relation to selection of priority industries. Trade associations are considered to be the place for political and economic activities and presidents of member companies voluntarily work as executive officers. As a result of their activities, a large number of tax incentives are offered for industries, as well as subsidy. On the other hand, trade associations in the country cannot afford to hire full-time employees and are not capable of collecting or providing latest information and data on monthly production and exports. Their activities are limited to the maintenance of the list of member companies and distribution of source materials.

Table 2.6-1 Trade Associations in Bangladesh in Six Sub-sectors

(as of June 2007)

Industry		Name of trade association	Representatives	Telephone	Fax
Chamber of commerce and industry	Chamber of commerce and industry	Federation of Bangladesh Chambers of Commerce and Industry (FBCCI)	Mr. Mir Nasir Hossain	955-1233	717-6030
		Dhaka Chaimber of Commerce and Industry (DCCI)	Mr. Hossain Khaled	955-2562	956-0830
Six industries	Food processing	Bangladesh Agro-Processors' Association (BAA)	Mr. K. Muzammel Hug	814-4536	814-4536
		Bangladesh Fruits, Vegitables and Allied Products Exporter's Association	Mr. S.M.Jahangir Hossian	956-0506	716-2674
	Jute products	Bnagladesh Jute Goods Association	Mr. K.S.Alam Babul	955-9338	956-5712
	Pharmaceuti-cals	Bangladesh Association of Pharmaceuticals Industries (BAPI)	Mr. S.M. Mohammad	988-9731	881-6767
	Software	Bangladesh Association of Software and Information Services (BASIS)	Mr. Sarwar Alam	815-1196	815-1197
	Light engineering products	Bangladesh Engineering Industry Owner Association (BEIOA)	Mr. Abdur Razzaque	717-3403	711-9011
	Electrical/ electronics products	Bangladesh Elecrical Merchandise manufacture's Association (BEMNA)	Mr. Sultan A. Bhuiyan	952-2126	
RMG	Textile products	Bangladesh Garment manufatures and Exporters Association (BGMEA)	Mr. S.M.Shafiuzzaman	811-5751	811-3951
		Bangladesh knitwear Manufactures & Exporters Association (BKMEA)	Mr. MD.Fazlul Hoque	761-1295	763-0609

Source: Record by the JICA Study Team

Chapter 3 Proposals for Trans-sector Export Promotion Plan

Chapter 3 Proposals for Trans-sector Export Promotion Plan

This chapter contains policy proposals relating to export promotion for all industrial sub-sectors in Bangladesh. The chapter is divided into three sections. Section 3.1 enumerates and reports the results of field surveys concerning the implementation status of the current Export Policy 2006-2009. Section 3.2 then evaluates effectiveness of Export Policy 2006 – 2009, which forms the basis of the country's export promotion policy. Finally, Section 3.3 recommends in a comprehensive way the key issues to promote export diversification of Bangladesh.

3.1 Outlines of Export Policy and EPB as Implementation Body

In this section 3.1, study results that form the basis of the proposals are compiled. In 3.1.1, Export Policy 2006 – 2009 (English version) is outlined, followed by the EPB's organization and roles in 3.1.2. Finally, the implementation status of export incentives specified in Export Policy 2006 – 2009 is reviewed and analyzed in 3.1.3. Note that the upcoming Export Policy 2009 – 2012 was in the process of formulation when the current Report was being prepared, and thus, the contents of the Policy was not clear yet.

3.1.1 Outline of Export Policy 2006 – 2009

The Bangladesh government in 1972 formulated the first Export Policy, the next year of the country's independence. It was set for a single year and subsequent ones covered three or five years. Recent policies cover three years.

The MOC/EPB's Export Policy is a general guideline for ministries and implementation agencies with regard to the provision of incentive and does not set compulsory requirements for them. It is subject to change and constitutes a set of requests to respective ministries that have discretion in terms of implementation. Notwithstanding, Export Policy is the political decision that integrates political intentions and directives of the government.

(1) Export Policy Paper

Export Policy 2006 – 2009 was issued by the MOC in June 2007, one year later than the original schedule. During the year, the previous version (Export Policy 2003 – 2006) was applied. English version was published in December 2007. The statements that follow below in this section are based upon this English version of the Policy. Export Policy 2006 – 2009 is published in a 39-page booklet (letter size) consisting of the following three parts.

Main text: Pages 1 – 5
Annex 1: List of commodities that are banned from exports or can be exported under conditions, Page 6
Annex 2: Export promotion strategy paper, Pages 7 – 39

The main text of the policy statement in the first six pages, which consists of twelve articles, is summarized as follows. Note that this contains prerequisites of the policy, while key parts are contained in Annex 2 "Strategy Paper."

Key points in policy statements in twelve articles are excerpted below:

- The introduction states that keeping in mind the objectives stimulated in Poverty Reduction Strategy Paper (PRSP), the government has taken initiatives to diversify and liberate the export sector and ensure the supply of goods by means of globally competitive pricing and capacity building.
- The policy will come into effect from the day of publication in the Bangladesh Gazette and is applicable in all places with exception of the EPZs. The government reviews it at least once every year and if needed, makes any modification, expansion or correction.
- Foreign exchange control is subject to change by the Bangladesh Bank from time to time.
- The export prohibited products list is to be found in Annex 1.
- There is upper limit for sample exports and entre-pot trade prices (temporary import for re-export) are 5% higher than import prices; export can be made without letter of credit; defective products can be reshipped; re-export can be made without pre-shipment document upon the buyer's request; and a quality control certificate is obligatory, issued by the appropriate authority (the same sentence is also seen in Strategy Paper).
- Finally, it is said that Strategy Paper in Annex 2 will be considered as an integral part of this policy.

Strategy Paper in Annex 2 covers a whole range of export promotion policy matters and consists of the following five chapters (26 pages in total):

Chapter 1: Preposition
Chapter 2: Objectives
Chapter 3: Step towards export diversification
Chapter 4: General export facilities
Chapter 5: Product-specific export facilities

Chapter 5, product-specific export facilities, states measures for export promotions and facilities in which six industries (RMG, frozen fish, handicrafts, jute, and leather) are

specially taken up. In addition, the same chapter encompasses industrial category named "Others," which include ICT, agro-products and agro-processing products, herbal medicines, diamond processing and pharmaceutical products, among others. These sectors, except RMG and tea, overlap with the Highest Priority Sectors and Special Development Sectors that are discussed later. This confusion makes it difficult to understand Export Policy 2006 – 2009.

(2) Highest Priority Sector and Special Development Sector, and their incentives

Highest Priority Sector

Highest Priority Sector consists of sub-sectors that have high export potential but cannot show it fully in actual export business for various reasons. The following six industries are designated. (See Chapter 1 and Table 1-1.)

1) Agro-products and agro-processing products
2) Light engineering products, including automotive parts and bicycles
3) Footwear and leather products
4) Pharmaceutical products
5) Software and ICT products
6) Home textiles

These six sectors are eligible to access the following incentive measures:

1) Project loans with reduced interest rates on a priority basis
2) Income tax exemptions
3) Subsidies which are compatible with WTO Agreement on Agriculture, and WTO Agreement on Subsidies and Countervailing Measures
4) Possible financial benefits or subsidies for utility services such as electricity, water and gas, provided that they are compatible with WTO Agreement on Agriculture, and WTO Agreement on Subsidies and Countervailing Measures
5) Export loans with soft terms and lesser interest rates
6) Reduced air travel fares
7) Duty draw back/ bond facilities
8) Privileges for the establishment of backward linkage industries including infrastructural development so as to reduce production cost
9) Expansion of institutional and technical facilities to improve and control product quality
10) Assistance in production and marketing
11) Assistance in foreign market search
12) Taking necessary initiatives to attract foreign investments

Special Development Sector

On the other hand, Special Development Sector is ranked next to the Highest Priority Sector and refers to sub-sectors that have export capability but are not well organized in the areas of production, supply and/or export. The following nine industries are designated. (See Chapter 1 and Table 1-1.)

1) Finished leather production
2) Frozen fish production and processing
3) Handicraft products
4) Electronic products
5) Fresh flow and foliage
6) Jute products
7) Hand-woven textiles from hill areas (Pahari East bostro)
8) Uncut diamond
9) Herbal medicine and medicinal plants

These nine sectors are eligible to access the following incentive measures:

1) Project loans with general interest rates on a priority basis;
2) Consideration for export loans with soft terms and lesser interest rates
3) Subsidies which are compatible with WTO Agreement on Agriculture, and WTO Agreement on Subsidies and Countervailing Measures
4) Reduced air fare for shipment of products
5) Duty draw back/ bond facilities
6) Privileges for the establishment of backward linkage industries including infrastructural development so as to reduce production cost
7) Expansion of technical facilities to improve product quality
8) Assistance in product marketing
9) Assistance in foreign market search
10) Possible financial benefits for utility services such as electricity, water and gas
11) Taking necessary initiatives to attract foreign investments (FDI)

While the sub-sectors under Special Development Sector have some export record but are restricted in further expansion, the sub-sectors under Highest Priority Sector have high export potential, although actual exports are still small. The Export Policy 2006-2009 lists incentives available to the both priority sectors. Because many of these incentives are provided by government organizations other than the MOC and EPB, the policy is considered to be a guideline that cannot be enforced by the MOC. Export incentives are more or less

the same for both the Highest Priority Sector and Special Development Sector in terms of the incentives provided, while the former enjoys better conditions. They cover a wide range of areas, including finance, taxation, technological development, market development, infrastructure, and foreign investment promotion.

(3) Policy formulation procedures

Export Policy 2006 – 2009 was formulated on the basis of opinions collected in writing from related organizations (exporters' associations, chambers of commerce and industry, and commercial banks) in October 2005, which were incorporated into Export Policy 2006 – 2009. Collected opinions in writing were compiled into a 44-page document consisting of the following eight items. A total of 300 copies were distributed to the related organizations.

1) Finance by bank
2) Insurance
3) Customs, duties and taxes
4) Freight of air cargoes (vegetables, fruits and fish)
5) Fare of utilities (electricity, gas and water)
6) Transport (facilities for road, sea and air transport)
7) Other infrastructure
8) Miscellaneous

EPB compiled these opinions from the related organizations. Based on them, a draft Export Policy was formulated and submitted to the MOC, which then distributed it to ministries for discussion. Then, the 16th MOC Export Policy was approved by the minister's meeting and was announced to the public. The Bengali version of the formal booklet was published in June 2007 and the English version in December 2007. For the EPB, formulation of Export Policy every three years is an important undertaking. As of January 2009, the EPB is in the process of formulating Export Policy 2009 – 2012 by following the same steps.

(4) Periodical review

Section 2.6 of Export Policy 2006 – 2009 states that the policy is reviewed annually. Also, Section 1.3.4 of Annex 2 "Strategy Paper" states that the EPB reviews relevant targets and actual performance monthly, but official target figures are not determined.

On September 5, 2007, after the publication of Export Policy 2006 – 2009, the EPB sent a letter of request for implementation of the Export Policy, together with the booklet, to

61 organizations, including 28 government organizations, 8 chambers of commerce and industry, 10 trade associations, and 15 banks. However, they do not include all government organizations (such as the Ministry of Power, Energy and Mineral Resources while the Ministry of Land and the Ministry of Health and Family Welfare are included) or trade associations (limited to garment, jute, and leather products; while no letter was sent to other associations). On the other hand, individual requests were made to all fifteen banks including national banks.

One year later of the above on October 12, 2008, the EPB requested 20 chambers of commerce and industry, 25 associations, and 40 banks (85 organizations in total) to implement the current plan and to submit items to be incorporated into the next-term Export Policy 2009-2012. Also, only the request for plan implementation was made to 33 government organizations (including EPB 12). The deadline for submission was set at the end of November 2008. The number of organizations to which the request was made nearly doubled from 61 in 2007 to 118 in 2008.

1) Request for implementation of the current Export Policy (Export Policy 2006 - 2009)
2) Submission of items to be incorporated into the next Export Policy (Export Policy 2009 – 2012)

3.1.2 Role and Organization of Export Promotion Bureau (EPB)

(1) Historical background and role

The EPB is under jurisdiction of the MOC and is primarily responsible for formulation of Export Policy, export promotion activities, and some export-related services. During the period when Bangladesh was part of Pakistan, the MOC had the department called Trade Promotion and Commercial Intelligence. In the 1960s, it was reorganized to Export Promotion Bureau (EPB) of Pakistan and the head office in East Pakistan (Bangladesh) became the EPB regional office. East Pakistan had trade deficits with limited export goods (jute, leather, tea etc.) and markets (the United Kingdom and the USA). Thus, export promotion and diversification (item and market) were structural issues that existed before the independence from Pakistan.

In 1971, Bangladesh became independent from Pakistan. The EPB regional office was reorganized to the EPB and formulated the 1st Export Policy in 1972. As for formulation of Export Policy, the EPB is mandated to carry out the following activities.

- Formulation of export development strategies and follow-up reports and advice on the state of progress

- Establishment of a department or division responsible for overall coordination of policies and programs relating to export expansion

(2) EPB's finance (semi-autonomous)

In 1977, the EPB was reorganized to a semi-autonomous organization under Presidential Ordinance No.XL VII. As a result, the EPB is managed by the Board of Management that consists of 12 members, i.e., the Minister of Commerce (chairman), the head of the EPB (vice chairman), two director generals of the EPB, two representatives from the private industry (trade and industry), and six representatives (Joint Secretary or higher) from related ministries, i.e., the MOC, the MOI, the MOA, the MOTJ, and the MOFA. The semi-autonomous governance was selected in recognition that the EPB must be pragmatic and flexible in order to remain adaptive to rapid changes and development of international trade. The main idea was to promote economic development through the increase in production by using domestic resources as well as export expansion by means of market and product diversification,

As seen in Table 3.1-1, the EPB's annual budget is Tk 236.9 million (US$ 3.5 million) for fiscal 2008/09. Financial assistance from the central government accounts for around one half of the EPB's revenue source. The remaining half comes from charges relating to GSP and the issuance of the certificate of origin, participation fees for trade shows, and sales of publications. Overall, the EPB maintains a relatively high level of financial autonomy. It does not have its own building but plans to build a National Export House at the cost of Tk 150 million.

Table 3.1-1 Revenue and Expenditure of EPB

(million Taka)

	2007/2008		2008/2009
	Budget	Settlement	Budget
(Revenue)			
Office operation	10.1	10.4	10.2
Textile/Export market development	90.8	100.5	98.0
interest from deposit	-	-	8.8
Government subsidies	115.0	115.0	120.0
Total	215.8	225.8	236.9
(Expenditure)			
1. Current expenditure	195.5	165.6	224.5
Office operation (salary)	62.4	53.9	61.4
Textile	11.2	7.1	10.6
Export market dev.	106.9	89.6	137.6
Subsidies to ICT	15.0	15.0	15.0
2. Capital investment	4.9	0.4	3.4
3. Loan payment	1.0	0.4	0.8
Total expenditure	201.4	166.5	228.7
Net revenue	+ 14.4	+ 59.3	+ 8.2

Source: EPB
Note: Deposit return is included in Textile/Export market development

(3) EPB's organization

The EPB's head office consists of the following six divisions and two cells and has 202 full-time employees as of the end of October 2008. Note that the cell is an internal organization not recognized as division for the budget purpose. In addition, there are receptionists and other staff members, including 4 in Vice Chairman's Office, 2 in the secretary office (in charge of office administration), and 4 in two director generals' offices.

- Vice chairman's office (1 + 4 persons)
- Director generals' offices (2 + 4 persons)
- Secretary's office (1 + 2 persons)
- Administration and finance division (51 persons)
- Policy and planning division (18 persons)
- Statistics and research division (11 persons)
- Commodities development division (23 persons)
- Fairs and display division (26 persons)
- Information and publication division (17 persons)
- Textile Cell (39 persons)
- ICT Cell (3 persons)

Total: 202 persons

Moreover, there are three regional offices that employee a total of 21 persons (12 in Chittagong (including two branch offices in Chittagong and two branch offices in Comilla and Sylhet), 3 in Khulna, and 6 in Rajshahi), as well as Textile Cell employing 39 staff and Narayanganj office employing 7 staff (the area where there are a large number of knitwear factories). All in all, the total number of employees is 230, which is less than the prescribed number of 284 staff for budget purpose.

The Policy and Planning Division is responsible for Export Policy, with the Commodities Development Division providing assistance. The Statistics and Research Division develops monthly export statistics on the basis of customs clearance data. It also carries out monthly monitoring of Export Policy implementation jointly with the Commodities Development Division, but the monitoring covers export record only and does not measure effectiveness of Export Policy. The Fairs and Display division actively organizes exhibition and sales events of export products in and outside the country. It acts in the forefront of Export Policy implementation and publishes high quality booklets. Finally, the Information and Publication division manages a library, which is well equipped with personal computers and books (local and foreign) supported by GTZ and attracts a number of visitors.

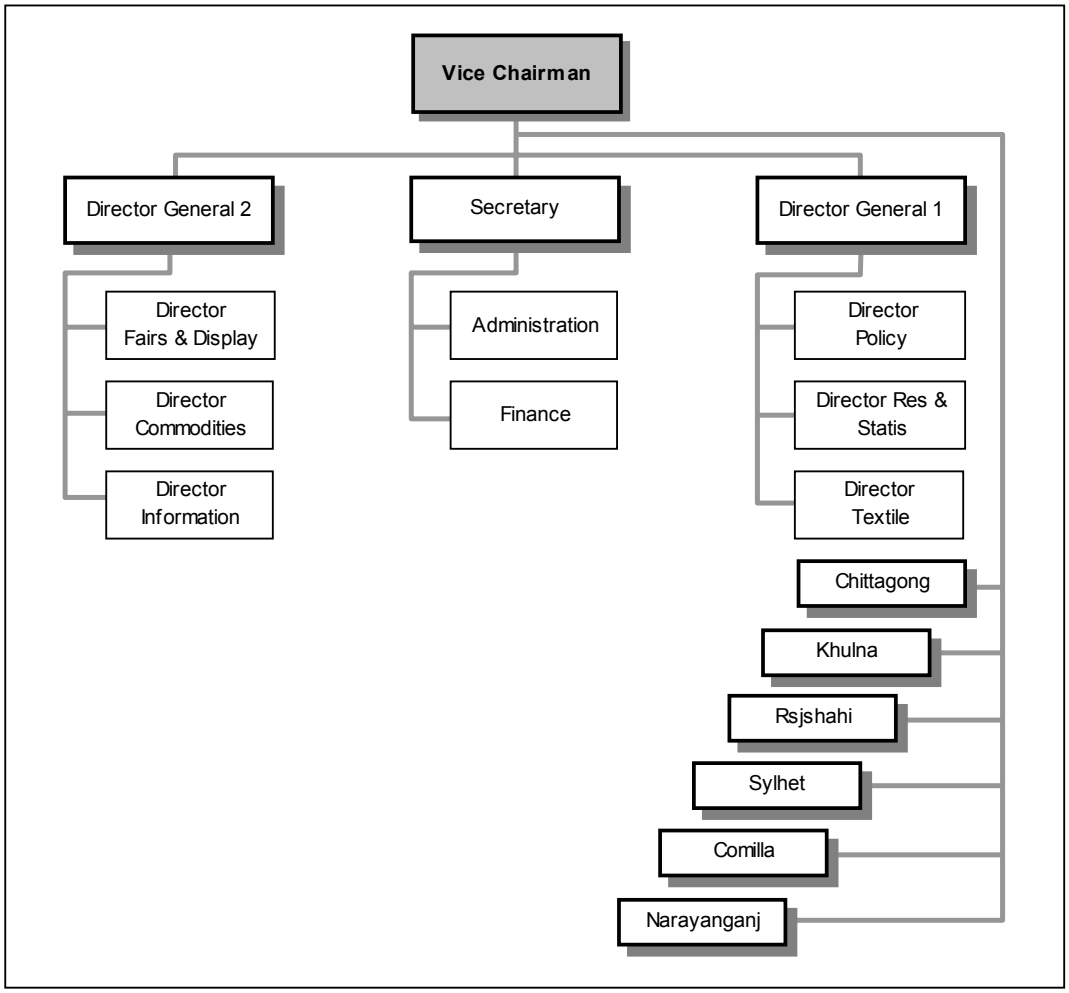


Figure 3.1-1 Organization of EPB

3.1.3 Current Status of Export Promotion Incentives

(1) Export support finance

Export support finance is provided by the following schemes that are operated by government funds, especially contribution by the central bank.

1) Export Development Fund (EDF) – central bank

The EDF was created in 1989 by providing the credit line of US$ 30 million. The interest rate is set at LIBOR + 1% (around 6% at present). The current credit line has expanded to US$ 100 million, which corresponds to less than 1% of the country's total export value. This is used for payment of imported raw materials required for export production, mostly RMG and knitwear products. Companies are required to open an L/C account for import. Because the EDF sets relatively restrictive conditions (up to 70% of the value of

import and the repayment period of six months) and a relatively small credit line, companies often rely on the back-to-back L/C service. To use this service, the company opens a main L/C account for export, based on which it obtains a "child" L/C for import of raw materials. If the company is unable to export its products on schedule and obtain payment from the main L/C account, it will dispose of the child L/C as the collateral, allowing the intermediary bank to make payment for raw materials. The back-to-back L/C transaction is very handy for exporters because they can pay for raw materials after receiving payment for exported products in foreign currency.

2) Packing credit – central bank

This service provides short-term loans for exporters in local currency and without eligibility requirements. The interest rate was set at 7% in January 2004. The credit line is limited to US$ 1.5 million per company per loan. The loan is designed to cover pre-shipment costs and expenses between the award of an export contract and the actual receipt of export price, including the opening of letter of credit, wages to factory workers, utilities charges, freight cost, insurance, and other charges. The upper limit is set at 75%. It is widely used by exporters because of the low interest rate (7% vs. 14-15% for commercial loan rates).

3) Equity and Entrepreneurship Fund (EEF) – central bank

The fund provides funds for agro-related products or IT companies (not individuals) by means of equity participation. The central bank's equity share is set below 49%, with capital contribution ranging between Tk5 million – 50 million per case. The shareholder needs to buy back the central bank's share three years later. Started in 2002, the EEF participated in 261 projects over six years. Of total, 217 companies (83%) (17 exporters inclusive) are related to agro-related products, fishery, meat processing, and furniture, whereas the remaining 34 companies (11 exporters) are in IT software, database, or animation businesses. Investment Corporation of Bangladesh (ICB) requested acquisition of the EEF operation, which was approved by the Ministry of Finance in January 2009.

4) Export Promotion Fund – EPB

The fund was established in 1995 with the total amount of Tk 50 million. The interest rate is set at 4.5% but 2.5% is added as service fee, resulting in the real rate of 7%. The EPB examines loan applications and actual loans are made through the Janata Bank. The scheme has not been used widely since the establishment of the fund and loans have been made to five software companies with the total loan amount of Tk. 20.75 million, and to four

handicraft companies in amount of Tk. 17.25 million. This is because the applicant is required to present the document certifying the export contract, which is generally difficult to obtain, i.e., request must be made to a Bangladesh embassy in the country where the buyer resides. The fund was created to target software and handicraft companies, but the credit provision to handicraft companies was discontinued.

5) Donor fund-based loan

The World Bank, the ADB, and the DFID deposit funds with the central bank or a specially designated organization in the long term and at low interest rates, so as to allow them to be loaned to private companies. The MOF sets loan terms and conditions in consultation with each donor organization, and commercial banks and non-bank financial corporations provide loans accordingly and report the results. Notably, the ADB created the SME Sector Program (SMESP) in 2005, totaling the US$ 50 million fund. Disbursement was completed in three years, two years earlier than the original schedule. Note that this is not a loan program specifically targeting export promotion.

6) Export Credit Guarantee Scheme

Commercial banks require exporters to buy insurance on a specific export contract in order to ensure loan repayment. In the case of RMG, manufacturers are mandatorily required to buy insurance to protect L/C transaction for imports of raw materials. This reflects customary practice that exporters of RMG products buy insurance on import prices of raw materials, while importers are insured in their own country. Under the export credit guarantee scheme, exporters are insured for up to 75% of the value of export, upon request by the bank. The guarantee fee is 0.4%, much lower than a market rate (0.6%), to make the scheme as an effective instrument to promote exports.

7) JDPC's credit guarantee/grant-in aid scheme for jute product diversification

The Jute Diversification Promotion Centre (JDPC) under the MOTJ provided support for investment in jute product development since 2002 and under the EU's support, by using: i) revolving fund of Tk. 200 million by EU; ii) grant fund of Tk. 30 million by EU; and iii) bank loans by MOTJ. The scheme entered into Phase II in January 2008 by providing support programs combining: i) credit guarantee based on the Tk. 150 million fund; and ii) grant-in-aid using the Tk. 50 million fund. It is designed to mobilize commercial loans by providing credit guarantee for bank loans (covering one third of total) together with grant-in-aid support for the same investment project (also one third) to lower the interest rate of the bank's loan. The borrower needs to contribute one third with its own funds. The

scheme is expected to produce good results, although it is relatively small in size and its coverage (eligibility) is limited.

(2) Export subsidy and tax incentive

In Bangladesh, there are three types of export subsidy and tax incentive programs: (1) bond facilities to exempt import duty; (2) duty drawback (refund of import duty); and (3) cash incentive/subsidy. In addition, tax holiday and tax incentives for startup companies in specific industries (accelerated depreciation of machinery or reduction of corporation income tax during the first 5-7 years) are also available.

1) Bond facilities

For manufacturers that import raw materials and make products from them for re-export, import duty on the raw materials may be exempted by obtaining license from the Customs Bond Commission. All products must be exported and the license period is limited to two years, although it can be extended by six months (two years and six months at maximum). Beyond the license period, import duty must be paid. This program is widely used by RMG manufacturers. Around 4,900 companies hold the license. The program is considered to produce the largest tax saving effect in the area of trade.

2) Duty drawback

This is applied to companies that have not obtained the above license or ship their products to the local market, allowing them to get paid duty refunded. The rate of refund is determined according to the export ratio (weight basis). Although the tax saving effect is relatively large, it is less than one half that effected by bond facilities.

3) Cash incentive/subsidy – MOF/central bank

The central bank is responsible for disbursement of cash incentive and subsidy according to the request from the MOF. Cash subsidy for exporters is available in five types (5%, 7.5%, 10%, 15% and 20% of export value) and application is accepted at commercial banks. The commercial bank examines and accepts an application. Then it sends a complete set of application documents to the central bank for final check. The applicant receives cash subsidy at the central bank. Generally, this program provides greater incentive for farms and cottage industries but lower for matured industries.

Cash subsidy as percentage of export value varies with products, creating different levels of incentive.

Table 3.1-2 Applicable products to Cash incentives as of November 2008

Incentives	Products
20%	①Agri and agri processed products including vegetables & fruits ②Halal meat ③Liquid glucose ④Products made of hoogla, straw, coir of sugar cane, in a case of more than 80% of local raw materials
15%	⑤Leather products ⑥Products made of hoogla, straw, coir of sugar cane, in a case of more than 50% of local raw materials ⑦Bicycle ⑧Crushed bone ⑨Hatching eggs and day old chickens
10%	⑩Frozen shrimp and other fish ⑪Potato ⑫Light engineering products
7.5%	⑬Jute products
5%	⑭Local fabrics

Source: Ministry of Finance

Among the six Highest Priority Sectors, agro-products and agro-processing products enjoy the highest level of incentive (20%), while light engineering 10%. On the other hand, the remaining four industries are not eligible to cash incentive. Among the nine Special Development Sectors, handicraft products receive 15% incentive, home textile 20%, leather products15%, and frozen fish production and processing 10%. On the other hand, electronic products, fresh flower and foliage, uncut diamond, and herbal medicine cannot receive any cash incentive. According to the National Board of Revenue, the annual budget for the incentive program remains more or less the same, while eligible items are changed every few years. Clearly, there is a difference between the priority sectors designated in Export Policy and items eligible to the cash incentive program, although it seems to be caused by the reshuffling cycle.

4) Tax holiday

Tax holiday is exemption or reduction of corporate income tax applied at three levels, 0% (software in the Highest Priority Sector and handicraft in the Special Development Sector), 15% (home textile), and 50% of corporate income tax payable. The remaining industries in the priority sectors under Export Policy 2006 – 2009 receive 50% reduction.

Thus, all the priority sectors are enjoying the tax holiday privilege, although they may be changed from time to time.

5) Reduction of corporate income tax or accelerated depreciation during the first 5-7 years

Finally, these tax incentives are applied to startup companies in the following industries: (1) any of designated manufacturing activity; (2) infrastructure-related; and (3) tourism. They can select any of the following incentives:

a. Exemption of Corporate income tax for five years: 100% in the first two years, 50% in the third and fourth years, and 25% in the final year (seven years for hill areas, i.e., Rajshhi, Khulna, Sylhet, and Barisal)
b. Accelerated depreciation of purchased machinery and equipment (with additional privilege upon the BOI's approval)

Note that designated manufacturing industries are the same as those specified as part of the BOI's privilege in Table 2.4-1, Chapter 2. Among the priority sectors under Export Policy, only pharmaceutical products are eligible, while the remaining 14 industries are not included in this "designated manufacturing" category.

(3) Support for export market development

The EPB has been sponsoring around 30 foreign trade fairs annually. Originally, they have been held in export markets (industrialized countries). Recently, they are increasingly held in Russia and emerging countries. In particular, two or more trade fairs are held annually in China, India, and the UAE. Products displayed at these trade fairs are dominated by knitwear and RMG products, fishery product and other foodstuff, ICT, pharmaceuticals, and bicycles. Jute appears to be included in general or home textile items. These trade fairs are typically held for 3-5 days, with some exceeding 10 days. The number of visitors and sales are not published.

Table 3.1-3 International Fair by EPB

Fiscal Year	Numbers	Place	Commodities
2008-2009	33 scheduled 10 times up to Nov.	Turkey2, Germany, Japan, Italy, USA, Nigeria, Sri-lanka, China, UAE	Consumer goods3, Leather2, ICT2, RMG, Gift & household products,
2007-2008	29 scheduled 24 times actually	China4, India3, germany3, Russia3, USA2, Italy, Bergium,Japan, Canada, Vietnum, Turkey, UAE, Senegal, Nepal	General 12, RMG3, Seafood2, Leather, Home textile, Handicraft, Footwear, ICT, Pharmaceuticals, Bicycle
2006-2007	31 scheduled 21times actually	Germany3, France2, USA2, China2, UAE2, Japan, Russia, Bergium, Koea, Malaysia, Saudi Arabia	Consumer goods7, Knit & RMG3, Leather2, ICT, RMG, home textie, Furniture, Food, Seafood, Main exportable, Bicycle
2005-2006	31schduled 26 times actually	Germany6, India3, China2, UAE2, UK, Spain, USA, Bergium, Sri-Lanka, Iran, Butan, Myanmar, Indonesia	General9, Handicraft2, Food2, ICT2, Pharmaceuticals2, Seafood, Leather, Handicraft, Knit & RMG, shoe, Bicycle

Source: EPB
Note: Even if EPB expressed the participation, sometimes postponed or canceled by the reasons of place availability, insufficient sponsors etc.

Finally, the trade fairs create opportunity for participants, including exporters, importers (raw materials), manufacturers, and sellers, to study foreign markets through communication with buyers. At the same time, as trade fairs are increasingly held worldwide in response to rapid growth of international exchange including technology dissemination, the EPB contributes greatly to promotion of Bangladesh and its industries in the world market.

(4) Other

1) Infrastructure (electricity)

Export Policy 2006 – 2009 states that the Highest Priority Sectors can receive economic incentives in terms of utilities charges (electricity, industrial water, gas). However, the field survey indicates that a special electricity charge is not set for export-related industries. Meanwhile, the current Export Policy identifies the need for the fostering of support industries as part of infrastructure development. Generally, the shortage of electricity supply is very serious (not the jurisdiction of the MOC).

2) Air freight

Fresh vegetables, fruits and fishery products produced in Bangladesh are widely demanded in overseas markets, mainly the United Kingdom (London) and the Middle East,

partly because many Bangladeshis live in these countries. The government ensures smooth transport of fresh products by securing cargo space with airline companies and by setting lower air freight. Freight reduction is enforced to narrow the difference from air freight from India, which is set at low levels because of proximity to the Middle East. For instance, air freight for fresh vegetables to Dubai is set at Tk. 55.6/kg, as compared to Tk. 74.0/kg for ordinary air cargo (resulting in 25% reduction).

At present, the national airline, Biman Bangladesh Airlines, handles 90% of the subsidized fresh agro air cargo. Private airlines are reluctant to handle fresh agricultural products partly because of defiling vessels and partly because of delay in receipt of such goods at the destination airports. Those fresh goods are usually packed by bamboo baskets at lower cost of Tk. 10/basket instead of cotton cloth or paper that costs Tk. 35/basket. Farmers and traders have not recognized the fact that the fresh goods can be sold at higher price by Tk. 50/package or more if they are packed by a suitable way.

3.2 Analysis of the Current Export Policy and Recommendations

This section examines the country's export promotion policy, as to whether it is properly operated, and makes recommendations on important matters.

3.2.1 Clear Target Setting

According to the EPB, previous Export Policies specified export targets and necessary actions to be taken. However, Export Policy 2006 – 2009 does not contain either of them. On the other hand, the EPB, which is virtually the implementation body for the Export Policy, classifies export items into three categories according to change over the previous year (i.e., increase, unchanged, and decrease) and use them as an index. The EPB's organization is divided into departments according to commodities, and export records in terms of change over the previous year are used as a major index to measure performance.

In reality, however, the increase or decrease in commodity exports is not governed by the Export Policy and is largely caused by the world economy and market trends. Thus, commodity-based export targets (value basis) should be established for the purpose of making the government's forecast known to the public, while neither the EPB nor the MOC is responsible for achieving the export targets in terms of value. Instead, they should be responsible for setting and achieving targets for export incentive. Therefore, it is desirable to specify in Export Policy target export values as well as quantity of incentives to be given to priority sub-sectors, together with action programs.

3.2.2 Clear Focusing on the Highest Priority Sector

The Highest Priority Sector (six sub-sectors) is said to represent industries that have high export potential but cannot show it fully in actual export business for various reasons. On the other hand, the Special Development Sector represents nine sub-sectors that have export capability but need improvement in the areas of production, supply and/or exporting.

According to the EPB, there are no clear criteria for selection of priority industries. There is no clear standard for reshuffling every three years. At present, RMG (Ready Made Garment and Knitwear) accounts for 75% of the total export value of the country, and the total export value of the priority 15 sub-sectors exceeds 75% of the rest of 25% of country's total excluding RMG as seen in Table 3.2-1. This means that most sub-sectors making exports, other than RMG, are designated as priority industrial sub-sectors. Finally, there is no clear standard for distinguishing the Highest Priority Sector from the Special Development Sector. Development policy papers published by the government usually tend to give priority to a broad range of

sectors or sub-sectors. This is understandable as the government has to make political consideration under some circumstances.

Table 3.2-1 Ranking of Export from Bangladesh by Commodity

(Unit: Billion Taka)

Order	Commodities	July-June 2005-2006		July-June 2006-2007	
		Export	%	Export	%
1	Woven garments	274.47	38.82	321.66	38.25
2	Knitwear	256.54	36.29	314.47	37.39
3	Frozen food	30.86	4.37	35.59	4.23
4	Specialized textile & household linen, Textile articles	24.13	3.41	33.06	3.93
5	Raw jute & Jute goods (all sorts)	34.23	4.84	32.31	3.84
6	Leather (Crust/finished)	17.29	2.45	18.38	2.19
7	Engineering products	13.36	1.89	16.36	1.95
8	Chemical products (Fertilizer, Pharmaceuticals)	14.00	1.98	14.86	1.77
9	Footwear (all sorts)	6.64	0.94	9.39	1.12
10	Agricultural products	6.35	0.90	6.06	0.72
11	Petroleum by products	5.94	0.84	5.79	0.69
12	Ceramic products	1.68	0.24	2.07	0.25
13	Computer services	1.82	0.26	1.68	0.20
14	Agro processed food	1.37	0.19	1.56	0.19
15	Handicrafts	0.29	0.04	0.56	0.07
16	Tea (In packet/bulk)	0.80	0.11	0.48	0.06
	Other manufactured products	14.60	2.07	23.09	2.75
	Other primary commodities	2.58	0.36	3.60	0.43
Total		706.95	100.00	840.97	100.00

Source: Export Promotion Bureau "Statement of Monthly Export, June 2007"

In consideration of the above factors, the MOC and the EPB shall provide the six sub-sectors listed in Highest Priority Sector with the most preferential incentives as the government's strong intention. The question is how promotion and support measures for these industrial sub-sectors should be applied. Also, the MOC and EPB shall also request various ministries, to follow the guideline set in the current Export Policy.

Finally, it should be pointed out that the six sub-sectors in Highest Priority Sector do not correspond with sub-sectors selected by the BPC under the MOC (i.e., software, light engineering, and leather products) and those covered by the EPB's financial support program (EPF) (software and handicraft products), but they are included in the 15 priority sub-sectors. Nevertheless, the MOC and the EPB should not change the sub-sectors of Highest Priority

Sector until they achieve a certain success in export expansion or until they become unjustifiable for usage of government resources to support from the viewpoint of national economy

3.2.3 Monitoring and Modification of Export Policy

It is recommended that export promotion by the MOC/EPB should be carried out in the PDCA cycle. Accordingly, proposals made in 3.2.1 are related to the "Plan" component. In 3.2.2, the "Plan," "Do" and "Action" components are addressed. This section makes proposals relating to the "Check" component, which includes periodical monitoring of performance of the Export Policy, the check on deviation between the target and the actual result, and modification of the target and the means (support measures).

At present, the documents of Export Policy is subject to annual review, but it does not include the monitoring of performance of incentives actually given to industries by various ministries and agencies. The EPB conducts questionnaire surveys of trade associations, chambers of commerce and industry, and financial institutions, but collected data are not compiled or analyzed in an integrated form. For instance, there is no way to know the actual value of tax incentive given for each of the priority sub-sectors.

As a result, it is not practical to measure effectiveness of Export Policy on a performance basis and to revise Export Policy as required. It is therefore proposed to monitor actual incentives performed by relating ministries and agencies, in order to use them for midterm and every three-year's revision of Export Policy. The target sub-sectors for monitoring may be limited to the six sub-sectors in Highest Priority Sector or 15 sub-sectors including those in Special Development Sector.

3.2.4 Establishment of Contact Point at Related Ministries

As Export Policy covers a wide range of areas, more than two departments at every ministry handle it. As a result, the EPB has to communicate with many contact persons, requiring considerable time and effort to make smooth operation difficult in many cases. It is therefore proposed to integrate contact points at each ministry into one. It is not necessary to establish a new division handling Export Policy. In addition, it is recommended to hold a periodical meeting by these ministry-level contact persons and representatives of the central bank, under the leadership of the MOC (and EPB as the secretariat). The meeting should provide opportunity to monitor and evaluate the actual progress of incentives provided by ministries and to hear policy recommendations from them.

3.2.5 Harmonization with Development Partners (Donors)' Programs

In Bangladesh, a variety of donor organizations (developing partners) carry out development programs under a bilateral or multilateral arrangement. They are planned and implemented on the basis of philosophy and prospect of each organization and are not necessarily in line with Bangladesh's development policy and Export Policy. To ensure that Export Policy produces its maximum effect, the government should more participate in the planning stage of each development program and request for modification if necessary. Furthermore, the MOC and EPB may guide development partners' programs from their planning stage in line with Export Policy.

As Export Policy is a guideline and does not have legal force, it is difficult to achieve its objective unless support programs directly targeting export industries or priority industries are implemented. For instance, the MOC requests commercial banks to extend low-interest loans to companies specifically in the six Highest Priority Sectors, but commercial banks will not likely provide such loans in consideration of their own interest. To overcome the problem, it is imperative to establish a special export promotion finance program to provide low-interest loans and to commission actual lending to commercial banks. Or a credit guarantee system may be established to lower risks for commercial bank's loans.

Given the government's limited resources, donor organizations can provide effective support in a wide range of areas other than finance, including technical assistance for export promotion and market development. It is therefore important to harmonize Export Policy with development programs assisted by development partners.

3.3 Key Issues and Proposals Relating to Export Diversification

The proposals presented in this section are made on the basis of the following information and findings.

1) Results of preliminary study on the six candidate sub-sectors, as implemented in the priority sub-sector selection process presented (Chapter 4)
2) Lessons learned from implementation of two Pilot Projects (Chapter 5)
3) Results of various surveys in relation to the development of action programs (Chapter 6 and 7)
4) Knowledge of the JICA Study Team obtained from similar projects and activities conducted by the members of the Study Team in other countries

3.3.1 Promotion of Bangladesh for World Market Recognition

In the Pilot Project covering computer software industry, business matching with the Japanese market was promoted. The most notable finding from the Pilot Project is the lack of recognition in the Japanese market that Bangladesh is an emerging software exporter. In fact, Bangladesh remains obscure in the Japanese market not only for software but other goods and services as well. The lack of market recognition is probably true of other countries. Thus, the first step of the country's export promotion plan should focus on efforts to raise recognition of Bangladesh in the world market.

In consideration of government resource limitation, promotional efforts should start with selection of priority markets or countries. Table 3.3-1 lists top ten countries in terms of export destination. The top ten countries account for a combined share of 80% of the total export value. The top-ten list is dominated by the USA, Canada, and West European countries, with India, a neighboring country, placed at the 10th. (Note that India may rank higher because smuggling data are not included.) Clearly, the country's export partners are geographically skewed.

Table 3.3-1 Export Destination by Country (Top 10)

Country	July 2006-June 2007		July 2007-June 2008	
	(Million US$)	(%)	(Million US$)	(%)
1 U.S.A	3,441	28.26	3,590	25.45
2 Germany	1,955	16.06	2,175	15.41
3 U.K	1,174	9.64	1,374	9.74
4 France	732	6.01	953	6.75
5 Netherlands	459	3.77	654	4.63
6 Spain	528	4.33	598	4.24
7 Italy	516	4.24	579	4.10
8 Canada	457	3.75	533	3.78
9 Belgium	436	3.58	488	3.46
10 India	289	2.38	358	2.54
Top 10 Toal	9,987	82.02	11,302	80.10
World Total	12,178	100.00	14,111	100.00

Source: "Country-wise Export of Commodities by broad description from Bangladesh during the period July-June, 2007-2008," EPB

Outside the top-ten list, Japan (14th place in 2007/8), China (18th place), and Russia (23rd place), and the Middle East countries constitute substantial markets. It is therefore proposed to select priority target countries from the above list and to conduct the following promotional activities.

1) Reinforcement of Bangladesh's diplomatic establishments and their functions
   - To appoint full-time staff in charge of export promotion at embassies in the target markets (assigned by the Ministry of Commerce and the EPB).
2) Publicity and media exposure
   - To increase publicity by using opportunities such as the anniversary of the friendship treaty with the target country and cultural exchange.
3) Intensification of top sales activity
   - To increase visits by key government officials to the target country (President, Prime Minister, and ministers) in conjunction with the activities in 2).
4) Holding of product exhibitions and seminars for country's promotion and cultural exchange purposes
   - To hold events that promote the country's culture and other aspects, including product exhibitions and investment promotion seminars, while taking maximum advantage of support from donors of the target country.

3.3.2 Focus on Export Diversification through Promotion of Foreign Direct Investment

(1) Background and rationale

Export diversification means to decrease the share of RMG (ready made garment including knitwear) and increase the number of key export items, while maintaining the current export level of RMG which accounts for over 75% of the country's total export value. To achieve this, the following approaches should be taken.

1) To focus on export increase (value basis) for top-ten commodity items (e.g., frozen shrimps, jute products, and leather products; the item in second place holds only 5% share).
2) To increase exports of non-traditional items below the top-ten ranking (e.g., light engineering, electrical and electronics products).
3) To promote exports by foreign companies (for both traditional and non-traditional items) through the attraction of foreign direct investment.

As for the two sub-sectors selected for the Study, the jute products industry is classified into 1) above, whereas the software industry in 2), although it is close to the top-ten group. Note that promotion of an item that is further away from the top ten takes a longer period of time to become a major export item and decreases cost effectiveness of public support. On the other hand, category 3) tends to be neglected in Bangladesh. Foreign direct investment in the industrial sector brings market opportunity, capital, job opportunity, and technology to the country without the government's effort. It can also help improve competitiveness of industries in category 2) by using them as supplier. Yet, the Bangladesh government does not appear to realize effectiveness of foreign direct investment fully.

It can be said that economic takeoff of Southeast Asian countries owes much to direct investment by Japanese manufacturers. In fact, direct investment by Japanese companies moved from Hong Kong and Singapore to Korea and Taiwan, then to Thailand and Malaysia and finally to China, in order to look for countries with lower labor cost. These countries made successful takeoff concurrently with Japanese investment. The Bangladesh government should study and understand the effective linkage between export diversification and foreign investment attraction under the leadership of the BOI.

(2) Proposed approach for promotion of foreign direct investment

During the meeting with the BOI officials, the JICA Study Team received questions on methods to attract foreign direct investment. The following approach is proposed by using a major investment promotion campaign (one year) carried out by the Thai BOI for Japanese companies as an example.

1) Target: Should be focused on only one country
2) Campaign period: One year
3) Budget: US$ 3 – 5 million over one year
4) Activities: The following activities will be carried out by hiring foreign and local consultants.

- Development of an investment promotion kit

  Including legislation and incentive programs for foreign investment, application and registration procedures, provision of industrial estates/EPZs, infrastructure, and collection and compilation of relevant cost data.

- Media-mix approach

  A full-page advertisement will be made on leading newspapers in the target country, together with TV spot advertisements, production of a documentary program, and arrangement for media interview with key officials. These activities include sales promotion of Bangladesh itself, as discussed in 3.3.1. Then, an investment promotion advertisement will be put on newsletters of banks, trading companies, chambers of commerce and industry, which are closely linked to potential investors in the target country. Also, investment promotion seminars are held in selected regions and cities of the target country in cooperation of the above companies and organizations.

- Focused campaign approach

  This type of investment attraction focuses on each of potential investors of the target country. Based on company databases (list of seminar participants, list of bank customers, and directories), questionnaire surveys are conducted. Companies that are interested in investment to Bangladesh are compiled into a database and the promotion kit is sent to them. Investment promotion tours are planned and promoted by telephone and corporate visit.

- Organization and implementation of the investment promotion tour

As the final part of the focused campaign, the investment promotion tours are organized. The tour visits industrial estates (EPZs), factories, and infrastructure facilities. An important factor here is enthusiasm of top government officials. These types of tours have a large effect on foreign investment attraction much more than usually expected.

3.3.3 Introduction of the Equipment Modernization Finance Scheme for Export-oriented Industries

When Bangladesh became independent in 1971, it nationalized major companies, which were privatized again (sold to private investors) ten years later. During the ten-year period of nationalization, equipment renewal was insufficient. As privatized jute mills were required to assume debts made by state enterprises, they could not have funds to modernize equipment and machinery. As a result, their production equipment is fairly aged. However, there is the shortage of fund supply in comparison to large potential demand. It is easily presumed that other sub-sectors also have large demand for long-term credit facilities to modernize equipment and machinery.

Although the government provides support in the area of tax incentive and subsidies for export promotion, it does not have any credit facilities for export promotion. It is proposed to introduce the credit facility "export sector diversification program" (proposed in 6.3 as Program 2-3 for the jute products industry) for all industries. As the program is mostly the same as Program 2-3, its key points are presented as follows.

- Eligible borrower: Companies in all industrial sectors, which intend to make capital investment for export expansion
- Use of loan: Purchase of machinery and equipment required for production and its spare parts, as well as additional working capital incurred by such capital investment
- Export requirement: 60% or more of products produced by said investment shall be exported (value basis).
- Repayment condition: Long-term loan (5-8 years including the grace period of around 2 years)
- Interest rate: Below the prevailing market rate

3.3.4 Dissemination of Basic Production Management Technology

The major comparative advantage in terms of export competitiveness, commonly seen among all industrial sectors in Bangladesh, is high quality and low cost workforce. On the other hand, the major disadvantage is the lack of efficiency in production. The lack of

efficiency means not only hardware aspects, such as insufficient infrastructure and aging production equipment, but also software aspects including government service and finance. Among various problems, the JICA Study Team has found "production management technology" to be the most crucial factor that generally lacks in the entire industrial sector. The lack of this "software technology" became apparent in the course of the Pilot Project for the jute products industry, which provided opportunity to observe and analyze the actual production lines.

During the Pilot Project, the JICA Study Team visited the four model jute mills, four times each, to provide field advice and guidance as a KAIZEN program. As a result, production at these factories increased by more than 10% on average. The results were achieved by applying production management techniques. Not much cost was incurred. This software technology can be applied to all export-oriented industries and can improve productivity significantly. It should therefore be disseminated to other industries on the basis of long-term plans (5 – 10 years). Specifically, it is proposed to disseminate the production management technology to the whole country under the scheme illustrated in Figure 3.3-1, which is based on Strategies 3 and 4 for the action program for the jute products industry, as presented in 6.3. See Programs 3-1, 3-2, 4-1 and 4-2 in 6.3 for detailed steps of the improvement scheme and the curriculum. Note that, as seen from the diagram, the training of production management consultants (PMCs) is given of priority.

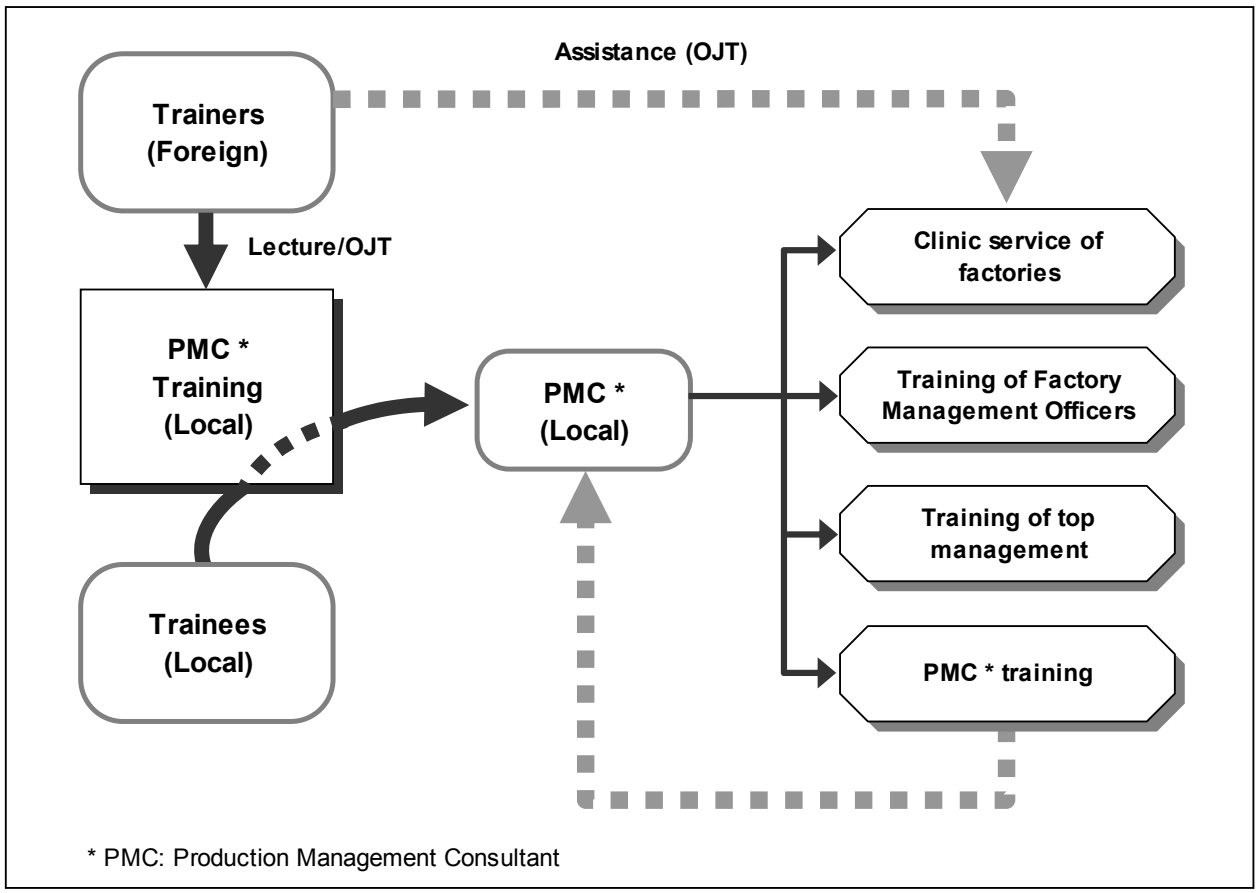


Figure 3.3-1 Schematic Diagram of Production Management Improvement

3.3.5 Special Recommendations

In addition to the above proposals, recommendations are made in the following three areas that are considered to be critical in successful export promotion, although they are generally outside the scope of the Study. They are based on and reflect the Study Team's past experience.

(1) Improvement of electricity supply

Power outage and unstable quality of electricity supply should be recognized and improved as the most urgent issue for Bangladesh's industrial sector. While the issue is not entirely neglected, the government should give the highest priority by devoting its resources as far as possible. Power outage creates immeasurable damage to the industrial sector. The Study Team's experience in the Pilot Project suggests that the export industry's production cost can be reduced by around 20% if stable electricity supply is ensured.

(2) Improvement of packaging

Improper export packaging is said to cause significant loss (estimated at 30%) to fresh vegetables exported (air transported) from the country. This presumably happens in distribution of other products, including low processed primary products and industrial products. Also, packaging of processed food including confections does not reach export grades. As perceived by importing countries, packaging severely affects sanitary and safety of export products and the country's packaging technology including design should be improved significantly. For instance, packaging technology in Thailand has achieved considerable improvement through the One Tambon (Village) One Product (OTOP) program. It may be used as a model case for the Bangladesh industry.

(3) Promotion of direct air transport service with target countries

Many countries have experienced that the lack of direct air transport service is a major obstacle to export promotion, even if promotional efforts are made in the target country. Export promotion can be expected when there is the smooth movement of goods and people between exporting and importing countries. In particular, direct service should be established between Bangladesh and the target country for investment promotion. The government needs to contact airline companies and other relevant organizations in order to collect necessary information and initiate negotiations.

Chapter 4 Selection of Promising Sub-sectors

Chapter 4 Selection of Promising Sub-sectors

This chapter describes the method by which the current Study selected the two promising sub-sectors that were targeted in the Study, out of the candidate six sub-sectors. The stakeholders who participated in a workshop held in June 2007 selected two sub-sectors. Therefore, the statistical data used for the selection process are those collected before the workshop, and as such, the data are old from the date of submission of this Report. Figure 4.1-1 below shows workflow of the Study which is reported from the current chapter to the chapter 7.

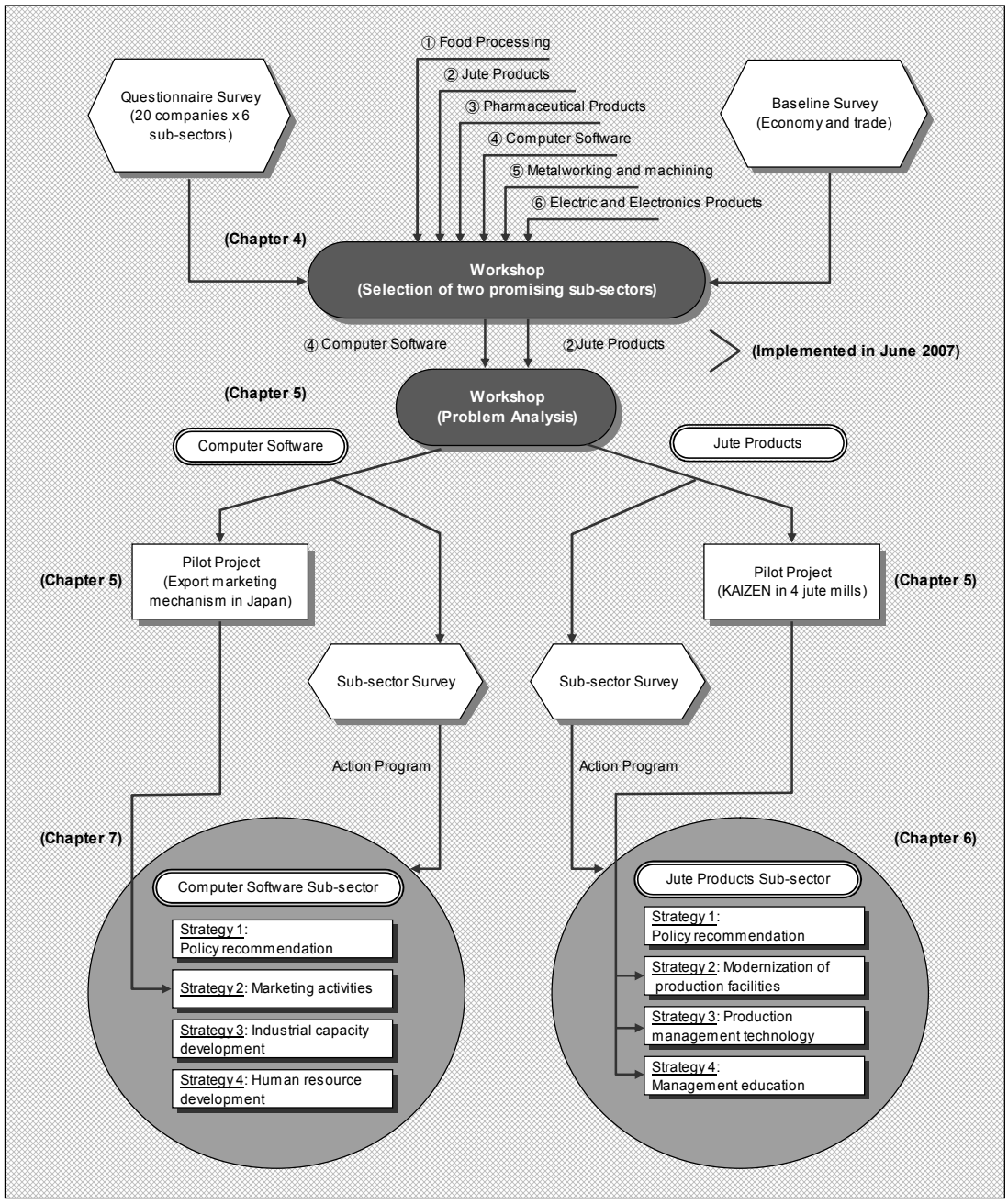


Figure 4.1-1 Methodology and Work Flow of Study

4.1 Outline of Candidate Six Sub-sectors

This section clarifies outline of the candidate six sub-sectors in view of export potential and summarizes SWOT analysis of them. The information clarified herein is used as one of basic data for selection of target two sub-sectors in a following section.

JICA Study Team conducted interview surveys to related public and private organizations in the First Field Survey and two to three companies of each candidate sub-sector in the Second Field Survey in addition to statistical analysis and literature review. The following associations were interviewed by the JICA Study Team.

(1) Chambers of commerce and industry
- ◆ Federation of Bangladesh Chambers of Commerce and Industry (FBCCI)
- ◆ Bangladesh Chamber of Industries

(2) Trade associations
- ◆ Exporters Association of Bangladesh
- ◆ Bangladesh Association of Software and Information Services (BASIS)
- ◆ Bangladesh Jute Exporters Associations
- ◆ Bangladesh Fruits, Vegetables & Allied Products Exporters Association
- ◆ Bangladesh Automobiles Assemblers and Manufactures Association (BAMA)
- ◆ Bangladesh Engineering Industry Owners' Association (BEIOA)
- ◆ Bangladesh Electronics Manufacturing Association (BEMA)
- ◆ Bangladesh Association of Pharmaceutical Industries

(3) Ministries and Authorities
- ◆ Ministry of Commerce (MOC)
  - Export Promotion Bureau (EPB)
  - Bangladesh Foreign Trade Institute

(4) Donors
- ◆ Danish International Development Assistance (DANIDA)
- ◆ Development Partners Support Group (DPSG)
- ◆ Local Consultative Group (LCG)
- ◆ United Kingdom Department for International Development (DFID)
- ◆ Japan Bank for International Cooperation (JBIC)*
- ◆ Japan External Trade Organization (JETRO)
- ◆ Japan International Cooperation Agency (JICA)

*Note: International cooperation divisions of JBIC were merged into JICA in 2008.

Table 4.1-1 shows the total export value from Bangladesh (FY2004/2005) by sub-sector in order of higher export amount with its share in percentage sourced by EPB statistics. The orders of first, second and 18th are categorized in a textile industry that shares 75% of the total export. This level has remained unchanged for these years. The third order, that is frozen food, accounts for less than 5% share of the total export value.

Table 4.1-1 Total Export from Bangladesh

(Unit: US$ Million)

Order	Commodities	Export	%
1	Woven Garments	3598.20	41.47
2	Knitwear	2819.47	32.57
3	Frozen Food	420.74	4.86
4	Other manufactured goods	372.29	4.30
5	Jute Goods	307.48	3.55
6	Leather	220.93	2.55
7	Chemical Products	197.18	2.28
8	Home Textile	156.14	1.80
9	Raw Jute	96.19	1.11
10	Footwear	87.55	1.01
11	Engineering Products	85.02	0.98
12	Agricultural Product	82.47	0.95
13	Bi-Cycle	40.98	0.47
14	Petroleum by Products	35.08	0.41
15	Other Primary Comm.	33.05	0.38
16	Ceramic Tableware	28.75	0.33
17	Electronic Goods	22.40	0.26
18	Textile Fabrics	16.96	0.20
19	Tea (Including packet tea)	15.85	0.18
20	Computer Service	12.68	0.15
21	Handicrafts	5.12	0.06
Total		8654.52	100.00

Source: Export Promotion Bureau "Bangladesh Export Statistics 2004-2005"

In the description of this section, the abbreviate word "TSC" is often used, which stands for Trade Specialization Coefficient. TSC is computed by the following formula:

$$TSC = \frac{\text{Export - Import}}{\text{Export + Import}}$$

Thus, TSC value results in between -1 and +1. When TSC is computed for sub-sector by sub-sector, a value of -1 shows that the sub-sector fully imports its products without any

exportation. In contrast, the TSC value +1 means that the sub-sector is exporting its products without any importation. Therefore, the nearer to +1 the TSC value is, the more competitive the sub-sector is in the world trade market.

4.1.1 Food Processing

4.1.1.1 Definition

Food processing industry produces food (including beverage) products that have been processed. “Processing” here omits natural, live and fresh food products (or unprocessed food products) from the Study target. Food processing industry covers any processed agricultural, fishery and dairy products including simply processed products, e.g., chilled, frozen, smoked, salted, dried, tea, spices, coffee and cereals.

Refer to Table 4.1-2. In two-digit HS classification, HS02 to HS04, HS07 to HS11, and HS15 to HS22 can be classified as food products in a broad sense. Among these, HS15 to HS22 can be clearly regarded as processed food products. For the statistic analysis purpose only, however, not only were processed food products looked at, but also primary food products, such as fresh foods, were researched here because it is virtually impossible to exclude only primary food products from the broad category of food products in the HS classification. It should be noted that since, amongst food products of Bangladesh, only frozen shrimp (HS0306) brings in remarkable export earnings, general picture of export competitiveness of food processing sub-sector does not deviate significantly from the case where primary food products are included. In addition, export market size does not widen significantly even when primary food products are included, largely because absolute trade values of the primary food products are not influentially big.

Table 4.1-2 Classification by HS 1996 Code for Food Processing Sub-sector

HS Code	Description	HS Code	Description
0201	Meat of bovine animals, fresh or chilled	1101	Wheat or meslin flour
0202	Meat of bovine animals, frozen	1102	Cereal flours other than of wheat or meslin
0203	Meat of swine, fresh, chilled or frozen	1103	Cereal grouts, meal and pellets
0204	Meat of sheep or goats, fresh, chilled or frozen	1104	Worked cereal grains except flour, groat, meal, pellet
0205	Horse, ass, mule, hinny meat, fresh, chilled or frozen	1105	Potato flour, meal, flakes, etc
0206	Edible offal of domestic animals	1106	Flour and meal of legumes, roots, tubers, nuts, citrus
0207	Meat, edible offal of domestic poultry	1107	Malt
0208	Meat, edible meat offal nes, fresh, chilled or frozen	1108	Starches, inulin
0209	Pig and poultry fat, unrendered	1109	Wheat gluten
0210	Salted, dried or smoked meat or offal, flour and meal	1501	Lard, other pig fat and poultry fat, rendered
0302	Fish, fresh or chilled, whole	1502	Bovine, sheep and goat fats, raw or rendered
0303	Fish, frozen, whole	1503	Lard stearin, oleostearin & oils, natural tallow oil
0304	Fish fillets, fish meat, mince except liver, roe	1504	Fish, marine mammal fat or oil not chemically modified
0305	Fish,cured, smoked, fish meal for human consumption	1505	Wool grease and fatty derivatives (including lanolin)
0306	Crustaceans	1506	Animal fat, oil, fractions not chemically modified nes
0307	Molluscs	1507	Soya-bean oil, fractions, not chemically modified
0401	Milk and cream, neither concentrated nor sweetened	1508	Ground-nut oil, fractions, not chemically modified
0402	Milk and cream, concentrated or sweetened	1509	Olive oil and its fractions, not chemically modified
0403	Buttermilk, cream, yogurt etc	1510	Olive oil, fractions, blends, not chemically modified
0404	Whey, natural milk products nes	1511	Palm oil and its fractions, not chemically modified
0405	Butter and other fats and oils derived from milk	1512	Safflower, sunflower and cotton-seed oil, fractions
0406	Cheese and curd	1513	Coconut, palm kernel, babassu oil, fractions, refined
0407	Birds eggs, in shell, fresh, preserved or cooked	1514	Rape, colza, mustard oil, fractions, simply refined
0408	Birds eggs, other than in shell, egg yolks	1515	Fixed veg fat, oil, fractions, not chemically modified
0409	Honey, natural	1516	Animal and vegetable fats or oils, hydrogenated only
0410	Edible products of animal origin, nes	1517	Margarine, edible animal or veg oil preparations nes
0701	Potatoes, fresh or chilled	1518	Processed animal, vegetable oils, industrial preps nes
0702	Tomatoes, fresh or chilled	1520	Glycerol (glycerine), glycerol waters & glycerol lyes
0703	Onions, shallots, garlic, leeks, etc. fresh or chilled	1521	Veg waxes except triglycerides, insect wax, spermaceti
0704	Cabbage, cauliflower, kohlrabi & kale, fresh, chilled	1522	Degras, residues from treatment animal, veg waxes
0705	Lettuce and chicory, fresh or chilled	1601	Sausages, similar products of meat, meat offal & blood
0706	Carrots, turnips, beetroot, etc. fresh or chilled	1602	Prepared or preserved meat, meat offal and blood, nes
0707	Cucumbers and gherkins, fresh or chilled	1603	Extracts, juices of meat, fish, aquatic invertebrates
0708	Leguminous vegetables, fresh or chilled	1604	Prepared or preserved fish, fish eggs, caviar
0709	Vegetables nes, fresh or chilled	1605	Crustaceans, molluscs, etc, prepared or preserved
0710	Vegetables (uncooked, steamed, boiled) frozen	1701	Solid cane or beet sugar and chemically pure sucrose
0711	Vegetables provisionally preserved, not ready to eat	1702	Sugars nes, lactose, fructose, glucose, maple syrup
0712	Vegetables, dried, not further prepared	1703	Molasses from the extraction or refining of sugar
0713	Vegetables, leguminous dried, shelled	1704	Sugar confectionery, non-cocoa, white chocolate
0714	Manioc, rrowroot, salep etc, fresh, dried, sago pith	1801	Cocoa beans, whole or broken, raw or roasted
0801	Coconuts, Brazil nuts and cashew nuts, fresh or dried	1803	Cocoa paste
0802	Nuts except coconut, brazil & cashew, fresh or dried	1804	Cocoa butter, fat, oil
0803	Bananas, including plantains, fresh or dried	1805	Cocoa powder, unsweetened
0804	Dates, figs, pineapple, avocado, guava, fresh or dried	1806	Chocolate and other foods containing cocoa
0805	Citrus fruit, fresh or dried	1901	Malt extract, flour, dairy preparations, low cocoa
0806	Grapes, fresh or dried	1902	Pasta, couscous, etc.
0807	Melons, watermelons and papaws (papayas), fresh	1903	Tapioca and tapioca substitutes
0808	Apples, pears and quinces, fresh	1904	Cereal food (roasted, swelled), cooked grain not maize
0809	Stone fruit, fresh (apricot, cherry, plum, peach, etc)	1905	Baked bread, pastry, wafers, rice paper, biscuits, etc
0810	Fruits nes, fresh	2001	Vegetables, fruit, nuts, etc, preserved in vinegar
0811	Fruits and nuts, uncooked boiled or steamed, frozen	2002	Tomatoes prepared, preserved, not in vinegar
0812	Fruits, nuts provisionally preserved, not ready to eat	2003	Mushroom, truffle, prepared or preserved, not vinegar
0813	Fruit, dried, nes, dried fruit and nut mixtures	2004	Vegetables nes, prepared, frozen
0814	Peel of citrus fruit or melons	2005	Vegetables nes, prepared/preserved, not frozen/vinegar
0901	Coffee, coffee husks and skins and coffee substitutes	2006	Fruits, nuts, fruit-peel, etc preserved by sugar
0902	Tea	2007	Jams, jellies, marmalades, fruit, nut pastes, purees
0903	Mate	2008	Fruit, nut, edible plant parts nes, prepared/preserved
0904	Pepper (Piper), crushed or ground Capsicum, Pimenta	2009	Fruit and vegetable juices, not fermented or spirited
0905	Vanilla beans	2101	Extracts, essences, concentrates of tea, coffee, mate
0906	Cinnamon and cinnamon-tree flowers	2102	Yeast, dead unicellular organisms nes, baking powders
0907	Cloves (whole fruit, cloves and stems)	2103	Sauce, condiments, mixed seasoning and mustard
0908	Nutmeg, mace and cardamons	2104	Soups, broths and homogenized food preparations
0909	Seed spices	2105	Ice cream and other edible ice
0910	Other spices	2106	Food preparations, nes
1001	Wheat and meslin	2201	Unsweetened beverage waters, ice and snow
1002	Rye	2202	Waters, non-alcoholic sweetened or flavoured beverages
1003	Barley	2203	Beer made from malt
1004	Oats	2204	Grape wines(including fortified), alcoholic grape must
1005	Maize (corn)	2205	Vermouth and other flavoured grape wine
1006	Rice	2206	Fermented beverages nes (eg cider, perry, mead)
1007	Grain sorghum.	2208	Liqueur, spirits and undenatured ethyl alcohol <80%
1008	Buckwheat, millet and canary seed, other cereals	2209	Vinegar and substitutes for vinegar from acetic acid

4.1.1.2 Overview

Bangladesh is basically a food importing country for both fresh and processed food products with the Trade Specialization Coefficient (TSC) of -0.58. Raw materials for food processing are divided into three categories; agriculture products such as rice, wheat, potato, beans, maize, vegetables, fruits, tea, etc.; diary products such as beef cattle, poultry, mutton, milk and cheese, eggs, honey, etc.; and fishery products such as fish, crustaceans including prawns and shrimps, fresh water fish including eel, etc. As for export, frozen shrimp stands significantly out of other food products in export values, followed by fresh vegetables, frozen fishes and tea with far smaller values by one digit or more than that of frozen shrimp. Main import items are palm oil, soybean oil, wheat, vegetables, rice, and solid cane/beet sugar. Fruits also are imported more than exported and demands for dairy products such as milk are met by import.

As for processed food products, if, those which degree of processing is low, namely, chilled, frozen, smoked, salted, dried, tea, spices, coffee, and cereals, are excluded, annual average import value during 2002-2004 was US$ 955 million and that of export was US$ 6.8 million with TSC of -0.99. Therefore, Bangladeshi food export is dominated by fresh products (mostly vegetables) and frozen products (mostly shrimp), which are not processed or only slightly processed.

If Bangladesh is to export processed food products out of its domestic raw materials, it would perhaps need to heighten degree of processing in fishery products, which possess comparative advantage in the world market. As for processed agricultural products, although some fruits processing products can be exported in harvest season, domestic demand should be first fulfilled for import substitution. Dairy products also should aim at self-sufficient production prior to export promotion so as to prevent foreign currency outflow.

4.1.1.3 Figures

(1) Production of food products

Table 4.1-3 shows production value of selected food products.

Table 4.1-3 Food Production in Bangladesh (FY 2005 and 2006)

BSIC Code**	Fiscal Year	2004/05	2005/06 (P)	2005/06 (P) *
	Unit	10^9 Taka	10^9 Taka	(US$ Million)
3114	Shrimps & Floglegs	28.60	26.90	405.1
3115	Soyabean Oil & Vegetable ghee	2.61	3.17	47.7
3118	Atta, Maida, Suji	1.64	1.95	29.4
3122	Bakery Products	1.24	1.43	21.5
3123	Sugar	2.94	4.80	72.3
3126/27	Tea	3.47	3.80	57.2
3128	Edible Salts	0.325	0.453	6.82
3134	Beverage (Soft Drink)	4.02	4.86	73.2
3143	Biddies	4.05	4.33	65.2

*Converted by the exchange rate of US$1.0=Taka 66.4
** Bangladesh Standard Industrial Classification: BSIC 1986
Source: Bangladesh Bureau of Statistics "Statistical Bulletin – Bangladesh, August 2006"

(2) Trade

Table 4.1-4 and figures that follow it show trade values of food products in Bangladesh during 2002-2004 as per the United Nations Commodity Trade Statistics Database.

Table 4.1-4 Food Trade of Bangladesh (2002-2004 Average)

	Export	Import	Trade Balance
Fresh Products (US$ Million)	398*	551	-153
Processed Products (US$ Million)	7	955	-948
Total (US$ Million)	405	1,506	-1,101

* Includes US$ 320 Million of Crustaceans (Frozen shrimps)
Source: United Nations Commodity Trade Statistics Database

Main Trade Products (by HS code in US$ million)

(Import)

1511	Palm oil and its fraction, not chemically modified:	372.7
1507	Soya-bean oil, fractions, not chemically modified:	312.6
1001	Wheat and meslin:	200.3
0713	Vegetables, leguminous dried, shelled:	111.3
1006	Rice:	107.1
1701	Solid cane or beet sugar and chemically pure sucrose:	106.1
0402	Milk and cream, concentrated or sweetened:	81.2

0703	Onions, shallots, garlic, leeks, etc. fresh or chilled:	26.4
1901	Molt extract, flour, dairy preparations, low cocoa:	14.2
2106	Food preparations, nes:	10.9
0904	Pepper (Piper), crushed or ground Capsicum, Pimenta:	10.6

(Export)

0306	Crustaceans:	320.4 (Major destinations: USA, Belgium, UK)
0709	Vegetables, fresh or dried:	24.3 (Major destinations: UK, Saudi Arabia, Qatar)
0303	Fish, frozen, whole:	19.2
0902	Tea:	14.9

4.1.1.4 SWOT Analysis (Food Processing)

(1) Strengths

1) General: Processing cost is competitive thanks to low labor cost.
2) Fishery: Shrimp and fish already have export markets possessing certain competitiveness.
3) Fishery: Water is abundantly available for full-control cultivation.
4) Fruits & vegetables: Climatic/soil conditions are suitable for wide variety of products.
5) Vegetables: Export markets already exist for fresh vegetables.

(2) Weaknesses

1) General: Grade of processing (value-added) and production technology are still low.
2) General: Quality assurance system for health and hygiene is below international standards, e.g. HACCP (Hazard Analysis and Critical Control Point)
3) Agriculture/Dairy: Domestic supply is in short for domestic consumption.
4) Fruits & vegetables: Export transportation infrastructures are not well developed including cold chain facilities, ports, etc.
5) Fruits & vegetables: Inadequate post harvest handling increases losses.
6) Fruits: Price is not competitive due partly to plantations and orchards for mass production.

(3) Opportunities

1) General: International markets of food and food-processing are growing.
2) Fish: Export diversification for species of fish is possible.
3) Fish: Export of processed fish including by-product of shrimp catch and white flesh fish is possible.

4) Fruits and vegetables: Juiced, canned, dried, jammed, and ketchup products are competitive in export for the limited species and seasons.

(4) Threats

1) General: Harsh competition with neighbor countries is expected.
2) General: Punishment against inadequate sanitation/inspection may come from international markets.
3) Agriculture/Dairy: Indigenous raw materials might become unavailable for export processing due to increase in domestic demand of food.
4) Fish: Pond cultivation of fish may bring about environmental problems and infectious diseases for fishes.

4.1.2 Pharmaceutical Products

4.1.2.1 Definition

Here, simply, what is generally called pharmaceutical products are undertaken, such as, but not limited to, medicaments, glands, cultures, organ extracts, antisera and vaccines in condition that these products are for therapeutic and prophylactic use. As far as medicaments are concerned, the Study covers both Active Pharmaceutical Ingredients (API, or bulk materials) and generic/patented drugs in dosage.

Table 4.1-5 Classification by HS 1996 Code for Pharmaceutical Products Sub-sector

HS Code	Description
3001	Glands etc, dried, organ extracts, for therapeutic use
3002	Blood, antisera, vaccines, toxins and cultures
3003	Medicaments mixed together for therapeutic use, bulk
3004	Medicaments, therapeutic, prophylactic use, in dosage
3006	Special Pharmaceutical goods

See Table 4.1-5. In two-digit HS classification, these products correspond with HS30 that literally represents the pharmaceutical products and statistical analysis was made at four-digit level under HS 30. However, medical products for outer use are omitted such as wadding, gauze and bandages which are classified in HS3005.

4.1.2.2 Overview

Pharmaceutical industry in Bangladesh is a growing industry aiming mostly at domestic market with recent average annual growth rate exceeding 10%. Although 95% of domestic demand for pharmaceuticals is said to be met by domestic products in Bangladesh, the fact is that Bangladesh mostly imports raw materials, or bulks, by which drugs are formulated for domestic demands. Only small part of production, or 5% of domestic consumption values, is intended for export (almost all export products are formulated products), thus resulting in import in far excess of export (TSC = -0.79).

Production process of pharmaceutical products is divided into three parts: 1) research & development for new drugs and patent acquisition; 2) production of Active Pharmaceutical Ingredient (API); and 3) formulation of drugs e.g. tablets, capsules, powders and injections. Off-patent drugs, or generic drugs, can be produced without paying patent fee and sold at low prices skipping the process 1). However, even APIs for generic drugs require certain level of production technologies, R&D capability and the same inspection standard as those for the patented drugs.

Bangladesh is one of the Least Developed Countries (LDCs) designated by the United Nations. As an LDC, Bangladesh enjoys the preference treatment by the WTO/TRIPS whereby the country can produce and export even patented drugs to other LDCs without paying any patent fees (valid till 2016). It is worth noting that among 49 LDCs, only Bangladesh has ability to produce and export such drugs, although pharmaceutical markets in LDCs are not attractively large.

Pharmaceutical production in Bangladesh is currently limited mostly to formulation of generic drugs for the domestic market. This industry is still at the level of import substitution of formulated drugs. While foreign direct investment (FDI) in API production has long been awaited, foreign companies cannot find it beneficial to produce their patented drugs in off-patent countries like Bangladesh where patent is hardly protected. Even if foreign companies attempt to take advantage of the WTO/TRIPS preferential treatment stated above, they can export only to LDCs whose pharmaceutical markets are not large enough to bring in profit. As profitable API production often requires economies of scale, there need be large domestic and international demands that are sufficient to compensate for the large scale production.

4.1.2.3 Figures

(1) Production and consumption

The following figures show demand and consumption situation of formulated drugs in Bangladesh in 2005 as per the "Strategy for Establishing the API Park" (Ministry of Industries).

Gross domestic demand for formulated drugs:	US$ 500 million
Rate of domestic demand met by domestically formulated drugs:	95%
Domestic consumption of formulated drugs:	US$ 480 million
Export of formulated drugs:	US$ 20 million
Import of formulated drugs:	US$ 25 million

The following figures show company and employment data in pharmaceutical industry in Bangladesh as per the "Strategy for Establishing the API Park" (Ministry of Industries).

Number of Companies registered:	230
Number of Companies in operation:	150
Number of Employees:	26,000
Number of Companies which produce generic drugs:	85
Market share of the 85 companies which produce generic drugs:	95%
Market share of top 10 companies:	70%
Market share of top 2 companies (Square, Beximco):	25%

(2) Trade

Bangladesh's export of pharmaceutical products, which amounted to about US$ 19 - 20 million in 2004 as per the United Nations, has been in expansion particularly in developing countries where import regulation is relatively loose. Top 3 export destination countries were India, USA, and Brazil in 2002, Brazil, Sri Lanka, and Netherlands Antilles in 2003, and Brazil, Belgium, and Spain in 2004. The reason why Belgium appeared in 2004 was that the Swiss company, Novartis (Bangladesh) Limited, started production in Bangladesh and began exporting to EU countries.

Import value of API and formulated products was about US$ 90 million in 2004 and export value was about US$ 19 million according to the United Nations. Thus, import exceeded export by US$ 71 million in 2004. Assuming that US$ 25 million out of US$ 90

million was used for import of formulated products, the rest of US$ 65 million was deemed to be allotted to import of raw materials or API. Around five or six companies are domestically producing API covering about 20% of the domestic requirements. The rest 80% was met by API import that amounts to US$ 65 million.

Table 4.1-6 Trade of Pharmaceutical Products in Bangladesh

(Unit: US$ Million)

United Nations Statistics			EPB Statistics	
Year	Export	Import	Year	Export
2000	-	-	2000/01	6.9
2001	-	-	2001/02	6.6
2002	6.91	87.77	2002/03	9.0
2003	6.18	94.50	2003/04	12.7
2004	19.43	89.99	2004/05	21.3
2005	-	-	2005/06	27.5

Source: United Nations Commodity Trade Statistics Database
Export Promotion Bureau "Bangladesh Export Statistics 2004-2005"

4.1.2.4 SWOT Analysis

(1) Strengths

1) Low cost API is available by imports from India and China.
2) Conversion cost is low due to already build-in capacity and cost-competitive labor.
3) Bangladesh can enjoy the transition period for intellectual property rights until 2016.
4) Bangladesh is the only one country that can produce pharmaceuticals in 49 LDCs.
5) Bangladesh supplies various formulated products, covering 95% of domestic markets.

(2) Weaknesses

1) Production is mostly limited to off-patented (generic) formulated products by imported API.
2) R&D capability is still low for producing API as well as finished products.
3) Public and reliable Drug Testing Laboratory (DTL) lacks.
4) Food and Drug Administration (FDA) for regulations lacks.
5) Patented products are not protected in businesses in Bangladesh.
6) Quality of Bangladesh products cannot still meet requirements of regulation-strict countries.

(3) Opportunities

1) Markets for generic pharmaceuticals are expanding in the world.
2) Bangladeshi market share can expand due to termination of WTO preferential treatment for China and India.
3) Markets are aware of Bangladesh as pharmaceutical suppliers.
4) Construction of API Park will develop the industry for the upstream.

(4) Threats

1) Transition period for intellectual property rights will terminate in 2016.
2) Importing countries strengthen regulations against low grade pharmaceuticals.
3) Harsh competition may come from India and China in generic pharmaceutical markets

4.1.3 Jute Products

4.1.3.1 Definition

For this classification, reference is made partly to the classification employed by the Export Promotion Bureau (Source: "Statement of monthly report" in which the concerned group is named "Jute Goods"). Here, both traditional jute products and so-called jute diversified products (JDPs) are taken up. Besides, raw jute is also included in the Study target because raw jute and jute products are often treated as integral part of the industry.

Table 4.1-7 Classification by HS 1996 Code for Jute Products Sub-sector

HS Code	Description
5303	Jute, other bast fibre, raw or processed, not spun
5307	Yarn of jute, bast fibre except flax, true hemp, ramie
5310	Woven fabric of jute or other bast fibres of 5.03
5607.10	Twine, cordage, ropes and cables, of jute, bast fibres
5703.90	Carpets of materials nes, tufted
6305.10	Sacks & bags, packing, of jute or other bast fibres

See Table 4.1-7. For the statistical analysis on trade of jute products, basically the path was followed whereby raw jute is manufactured into more sophisticated products. In the HS classification, it starts with yarn (HS5307), then to woven fabric (HS5310) and twine, cordage, ropes and cables (HS5607.10), and finally to sacks and bags (HS6305.10) and carpets (HS 5703.90). These items are mostly traditional jute products, although they may include some types of JDPs. It should be noted that most of newly developed JDPs may not be included in

the statistical analysis here because it is virtually impossible to exactly sort out particular JDPs from the HS classification. Raw jute (HS5303) is included in this statistical analysis too for the reason stated above.

4.1.3.2 Overview

Bangladesh is a leading country in jute business in the world. Production and export of jute in Bangladesh account for about 4% of both of its Gross Domestic Products (GDP) and export receipts. According to the Food and Agriculture Organization of the United Nations (FAO), world total production of raw jute was around 2.68 million tons in 2005/2006, of which some 0.99 million tons, or 37%, were produced in Bangladesh. Although Bangladesh used to be producing some 3 million tons of raw jute at its peak time, the production has recently been remaining at about 1 million tons per annum due largely to competition with synthetic fibers for the quality and price. Besides, cultivated acreage of raw jute depends on the comparative advantage with price of other cash crops including rice, that is, when price of other crops are higher than that of raw jute, farmers tend to cultivate other crops instead of raw jute.

Five countries including Bangladesh, India, Myanmar, Thailand and Vietnam share 95% of jute production over the world. The strongest competitor of Bangladesh is India. In 2006, however, Bangladesh enjoyed higher price of jute products by 20% with increase in volume of order because strikes occurred in the jute industry in India. Jute industry of Bangladesh is export-oriented where US$ 64 million and US$ 259 million equivalent of raw jute and jute products respectively were exported during 2002 to 2004 on annual average. In terms of the Trade Specialization Coefficient (TSC), these values come down to 0.83 for raw jute and 0.96 for jute products, indicating that jute industry in Bangladesh carries strong degree of international competitiveness.

Although jute used to be important raw materials for so-called 3B, such as bag, bandage and backing cloth, development of synthetic fibers replaced jute as its primary role in producing these products. Yet, as environmental consciousness got more and more popularity over the world, jute has again begun to draw attention as substitution for the synthetic fibers, which are generally regarded as hazardous to the environment. Also, usage for raw jute has started to be diversified, the most notable example of which is usage for internal parts of cars. Moreover, there has emerged possibility for jute plantation to be treated as a commodity for the emission trading system in conformity with the Kyoto Protocol, because jute has ability to soak in large amount of CO_2.

All the jute mills that produce yarn, twine, sack, carpet etc. were once nationalized till 1974, and then those mills were divided into public and private mills in 1982/83. Public mills which could not make profit have been gradually shut down from production. The mills of the country are mostly operating with obsolete machinery that causes low productivity.

Since more than 10 million to 15 million people are working in raw jute cultivation as farmers, institutional support of the government for this sub-sector has historically been established. There is the Ministry of Textile and Jute, under which the Jute Diversification Promotion Centre is also active. There is also the Bangladesh Jute Research Institute under the Ministry of Agriculture, doing research and development activities like the breed improvement activity.

4.1.3.3 Figures

(1) Production and consumption

1) Usage and application

Raw Jute:	Quality grade is divided into BW, BT and MESTA
Jute Products:	Sack and Bag – Potato bag, coffee bag, etc
	Tape – Protection materials for trees, etc
	Bandage – Bundling materials for agricultural products, etc
	Cloth – Carpet backing cloth, hessian cloth, general fabrics, etc
	Yarn, Twine – Yarn, rope
	Carpet, Rug
	Shopping Bag
	Craft product

2) Production

The following are estimated figures prevailing in the jute industry.

Raw jute production:	1 million tons per year
Raw jute export:	0.33 million tons per year
Raw jute processed into manufactured goods mostly for export:	0.67 million tons per year
Capacity utilization rate of jute mills:	50-60%
Estimated potential production capacity in full operation:	1.4 million tons per year

3) Company, employee and production facility

Number of Public Companies:	22 (JICA's preliminary study report)
Number of Private Companies:	70 (JICA's preliminary study report)
Number of Employees in Public Companies:	52,000 (JICA's preliminary study report)
Number of Employees in Private Companies:	58,000 (JICA's preliminary study report)
Number of Jute Spinning Machines:	350,000 spindles (Interview survey)
Number of Looms:	30,000 (Interview survey)

Assuming that 13 kg per day is a production capacity per spindle on the basis of three shift operation, 1.42 million tons should be obtained as a total capacity of the country on assumption of 312 operation days per year. This estimate meets the above estimated potential production capacity in full operation or 1.4 million tons per year.

(2) Trade

Table 4.1-8 Jute Trade Value (2002-2004 Average)

(Unit: Million US dollars)

Commodity	Export	Import	TSC
Jute, other bast fibre, raw or processed, not spun	64.01	5.99	0.83
Yarn of jute, bast fibre except flax, true hemp, ramie	96.88	4.53	0.91
Woven fabric of jute or other bast fibres of 53.03	54.75	0.58	0.98
Twine, cordage, ropes and cables, of jute, bast fibres)	26.93	0.31	0.98
Carpets of materials nes, tufted	0.10	0.01	0.82
Sacks & bags, packing, of jute or other bast fibres	80.43	0.22	0.99
Total	323.10	11.63	0.93

Source: United Nations Commodity Trade Statistics Database

Export value of raw jute and jute products from Bangladesh together was US$ 323 million on annual average during 2002-2004. As for export destination of raw jute, top three countries are Pakistan, China and India in way-down order. Top three export destinations of jute yarn are Turkey, Iran and Belgium and those of woven fabric of jute are Iran, USA and Australia in the same order. As far as carpet is concerned, the order turns to Turkey, Iran and USA and as for sacks and bags, India is the major export destination.

There are three associations that promote export of jute products and related issues (as of June 1997):

1) Bangladesh Jute Goods Association
   Member: 210 exporters
   Share: 50% or more of total export
2) Bangladesh Jute Mills Corporation
   Member: 22 Public jute mills
   This corporation manages all public mills.
3) Bangladesh Jute Mills Association
   Member: 80 private jute mills

4.1.3.4 SWOT Analysis

(1) Strengths
1) Raw jute is locally available as complete indigenous products with high quality.
2) Labor cost is competitive in jute cultivation and production of jute products.
3) Bangladeshi jute has competitiveness in international markets.
4) Jute has superior nature, namely decomposable and eco-friendly nature, that is not substitutable by synthetic fibers.
5) Bangladesh is famous as a leading country in international jute markets.
6) R&D institutes exist for product diversification and seed improvement.
7) Competitors are limited to several countries.

(2) Weaknesses
1) Most of jute processing factories use superannuated machinery and facilities.
2) Low productivity in jute processing brings about high production cost.
3) Synthetic fibers reduce usage of jute with their better nature and low cost.
4) Insufficient jute product diversification results in low value-addition.
5) Processing capability decreases mainly by shut-down of state owned mills.
6) Financial source is not easily available to modernize production facilities or factories.

(3) Opportunities
1) Jute products obtain popularity as environment-friendly products over the world.
2) Jute products are diversified for car parts, building materials and mixed spinning.
3) Increase in oil price is to motivate reduction in use of synthetics and plastics.
4) More entrepreneurs enter the market for jute diversified products.
5) Jute price increase induces entrepreneurs to invest in this sub-sector.
6) Rival countries, especially India, reduce dependence on export of jute products.

(4) Threats

1) Synthetic fibers continue to replace usage of jute products.
2) Jute cultivating area decreases due to competing with other crops like rice.
3) China, India and Vietnam establish higher reputation in international markets.
4) Other natural fibers like kenaf invade jute markets

4.1.4 Light Engineering (Metalworking and Machining)

4.1.4.1 Definition

In this Study, the Light Engineering Industry (LEI) is considered centering on metalworking and machining. Also, for the classification purpose, a reference is made to the small leaflet "Light Engineering -Products from Bangladesh-" published by the Export Promotion Bureau. In this publication, examples of the Light Engineering products are raised, such as, household items like tap, bib-cocks and crokeries, simple machine parts like bolts and nuts and grill, complex machines like lathe machines and concrete machines, and bicycle. As in the classification for the Food Processing, "processing" is emphasized (of metal and by machine in this case) here as well. Hence, basically the products in which the degree of metal processing is small are excluded from the Study target, such as, plate, bar, rod, sheet, tube and pipe, among others. In addition, heavy industry products and the products that require relatively high technology are omitted. This is largely because what is undertaken here is "Light" engineering, not "Heavy," and the Light Engineering Industry in general is not characterized by sophistication in its required technologies.

See Table 4.1-9. In terms of two-digit HS classification, articles of iron or steel (HS73), articles of major base metals (HS74 to HS80), and machinery (HS84) were selected as main products of the Light Engineering Industry. However, for HS73, and HS74 to HS80, commodities in which degree of processing is small were excluded from this classification. Also, household-use electric machineries located in HS84 (HS8415, HS8418, HS8422, HS8450 and HS8471) are left out. Moreover, amongst commodities in HS84, heavy industry products are excluded, such as nuclear reactor, boiler, turbine, turbojet, engine, crane, lift, fork-lift, hoist, bulldozers, machine tools and other similar products (HS8401 to HS8412, HS8425 to HS8430, and HS8456 to HS8465). It should be noted, however, that parts for those omitted products are included here. Other commodities that were studied here include parts of railway (HS8607), parts and accessory for motor vehicles (HS8708), bicycles (HS8712), invalid carriage/wheelchair (HS8713), parts for bicycles/motor bicycles (HS8714), and baby carriage (HS8715).

Table 4.1-9 Classification by HS 1996 Code for Light Engineering Sub-sec

HS Code	Description	HS Code	Description
7309	Reservoirs, tanks, vats, etc, iron or steel cap >300l	8440	Book-binding machinery including book sewing machines
7310	Tank, cask, box, container, iron/steel, capacity <300l	8441	Machinery for paper pulp, paper, paperboard making nes
7311	Containers for compressed, liquefied gas, iron, steel	8442	Machinery, apparatus, equipment for print preparation
7312	Stranded steel wire, cable/etc, no electric insulation	8443	Printing and ancillary machinery
7313	Wire for fencing, including barbed wire	8444	Machines to extrude, draw, cut manmade textile fibres
7314	Iron or steel cloth, grill, fencing and expanded metal	8445	Machines for processing textile fibres
7315	Chain and parts thereof, of iron or steel	8446	Weaving machines (looms)
7316	Anchors, grapnels and parts thereof, of iron or steel	8447	Machines for knitting, lace, embroidery, tufting, etc
7317	Nails, staples, etc, iron/steel, not office stationary	8448	Auxiliary machinery and parts for textile machinery
7318	Screws, bolts, nuts, rivets, washers, etc, iron, steel	8449	Machinery for making felt, nonwovens, including hats
7319	Sewing, knitting needles, etc, hand use, iron or steel	8451	Machinery nes, to clean, iron, impregnate textiles
7320	Springs and leaves for springs, of iron or steel	8452	Sewing machines (not book sewing), related furniture
7321	Stoves, ranges/barbecues,etc, non-electric, iron/steel	8453	Machinery for hide and leather work including footwear
7322	Radiators, non-electric heaters (with fan), iron/steel	8454	Converters, ladles, ingot moulds etc, for metallurgy
7323	Table, kitchen, household items of iron or steel nes	8455	Metal-rolling mills and rolls thereof
7324	Sanitary ware and parts thereof, of iron or steel	8466	Parts and accessories for machine tools
7325	Cast articles, of iron or steel nes	8467	Tools for working in the hand, non-electric motor)
7326	Articles of iron or steel nes	8468	Equipment for soldering, brazing or welding
7419	Articles of copper nes	8469	Typewriters and word-processing machines
7508	Articles of nickel, nes	8470	Calculators, cash registers, ticket-machines, etc
7616	Articles of aluminium nes	8471	Automatic data processing machines (computers)
7806	Articles of lead nes	8472	Office machines, non-calculating
7907	Articles of zinc nes	8473	Parts, accessories, except covers, for office machines
8007	Tin articles nes	8474	Machinery to sort, screen, wash, etc mineral products
8413	Pumps for liquids	8475	Machines for hot working of glass, light bulbs, etc
8414	Air, vacuum pumps, compressors, ventilating fans, etc	8476	Automatic goods vending, money changing machines, etc
8416	Furnace burners, equipment, liquid, powder or gas fuel	8477	Machinery for rubber, plastics industry
8417	Industrial, laboratory furnaces, ovens, incinerators	8478	Machinery for preparing tobacco
8419	Machinery, non-domestic, involving heating or cooling	8479	Machines nes having individual functions
8420	Calendaring, rolling machines, except for metal, glass	8480	Moulds for metals (except ingot), plastic, rubber, etc
8421	Liquid, gas centrifuges, filtering, purifying machines	8481	Taps, cocks, valves for pipes, tanks, boilers, etc
8423	Weighing machinery except balances sensitivity > 50 mg	8482	Ball or roller bearings
8424	Equipment to project, disperse or spray liquid, powder	8483	Shafts, cranks, gears, clutches, flywheel, pulleys etc
8431	Parts for use with lifting, moving machinery	8484	Gaskets and similar joints of metal sheet
8432	Agricultural machinery, soil preparation, cultivation	8485	Machinery parts, without electric features, nes
8433	Harvesting, produce cleaning and grading machinery	8607	Parts of railway, tramway locomotives, rolling-stock
8434	Milking machines and dairy machinery	8708	Parts and accessories for motor vehicles
8435	Presses, crushers etc for wine, fruit juice, beverages	8712	Bicycles, other cycles, not motorized
8436	Machinery for feedstuffs, poultry, beekeeping	8713	Invalid carriages, wheelchairs, including motorized
8437	Machines to clean, sort, mill seed, grain, dry legumes	8714	Parts and accessories of bicycles, motorcycles, etc
8438	Industrial food and drink preparation machinery nes	8715	Baby carriages and parts thereof
8439	Machinery for making pulp, paper, paperboard		

4.1.4.2 Overview

Light Engineering Industry, which is the very basis for the whole industrial technologies, has very wide coverage in terms of types of the products manufactured in it. It covers metalworking and machining such as metal/steel casting, forging, heat treating, welding, electro-plating, surface coating, lathe working, and pressing by which machineries and parts/accessories are manufactured. Mold- and die-marking is also a part of this industry.

Most of companies in this industry in both Bangladesh and the world are small or medium in size. Many of companies in this sub-sector of Bangladesh employ 10-30 people, while companies with 50 to 70 employees can be considered medium scale and those with 100 employees or more can be regarded as large scale in light of standard of this sub-sector in Bangladesh.

While the Bangladesh Bureau of Statistics (BBS) publishes industrial statistics, its coverage of this sub-sector is very small, and hence, it is hard to come by entire production of this industry through the statistical information. According to interviews with the BEIOA and company visits that the JICA Study team has conducted, one typical type of Light Engineering Industry in Bangladesh is that it imports raw materials, out of which it produces chassis through shearing and welding, and finally manufacturing machines like agricultural machines. Also the typical type is the production of repair parts for machineries. In other words, Light Engineering Industry in Bangladesh may be characterized largely by customized metalworking and machining using general machinery.

Light Engineering industry in Bangladesh exported US$ 37 million and imported US$ 819 million on annual average during 2002-2004 (TSC: -0.91). There are only a few items whose annual export values exceed US$ 1 million, while a host of products of this industry is widely imported. Bangladesh's Light Engineering Industry is the import substitution industry which has yet to achieve sufficient export capability.

4.1.4.3 Figures

(1) Production

According to the "Report on Identification of Employment Oriented Export Sectors" (United Nations Development Programme, May 2005), in Light Engineering Industry in Bangladesh, there are about 7,000 companies mainly in the fields of car parts, train engines, railway parts, bicycle, machines for textile/chemical/sugar industries, machine tools, ship parts, and industrial tools, totally employing about 800,000 people (though according to the BEIOA, there are 20,000-30,000 companies in this industry, employing 700,000 people). The industry brings out total sales volume of US$ 160 million per annum as per the same Report. Table 4.1-10 shows production statistics of main Light Engineering products in Bangladesh.

Table 4.1-10 Light Engineering Production in Bangladesh (FY 2004 and 2005)

	2004/05 (10^6Taka)	2005/06 (10^6Taka)	2005/06 (10^6US$*)
Basic metal industry	6,445	7,255	109.3
Utensils(Aluminum)	779	846	12.7
Utensils(Enamelware)	62	39	0.6
Plumbing Equipment	309	475	7.2
Engine & Turbine (Diesel engine)	nil	nil	nil
Engine & Turbine (Centrifugal pumps)	11	11	0.2
Engine & Turbine (Turbine pumps)	18	22	0.3
Textile machinery	163	255	3.8
Total	-	-	134.1

* Converted by the rate of US$ 1.0=Taka 66.4
Source: Bangladesh Bureau of Statistics "Statistical Bulletin – Bangladesh, August 2006"

(2) Trade

Table 4.1-11 and 4.1-12 show exported and imported items of Light Engineering Industry (LEI) in Bangladesh whose values exceed US$ 1 million and US$ 10 million respectively. Import of industrial machines especially for textile industries is very large, while there is no export item which brings in remarkable earnings.

Table 4.1-11 Major Export Items of Light Engineering Industry (Value of US$ one million or above) (Average 2002-2004)

(Unit: US$ Million)

HS Code	Description	Export	Import	TSC
7311	Containers for compressed, liquefied gas, iron, steel	1.23	4.56	-0.57
8466	Parts and accessories for machine tools	3.29	5.35	-0.24
8479	Machines nes having individual functions	2.25	47.45	-0.91
8708	Parts and accessories for motor vehicles	3.95	7.09	-0.28
8712	Bicycles, other cycles, not motorized	20.12	24.39	-0.10
LEI Total		37.26	819.27	-0.91

Source: United Nations Commodity Trade Statistics Database

Table 4.1-12 Major Import Items of Light Engineering Industryl (Value of US$ 10 million or above) (Average 2002-2004)

(Unit: US$ Million)

HS Code	Description	Export	Import	TSC
8413	Pumps for liquids	0.20	18.99	-0.98
8414	Air, vacuum pumps, compressors, ventilating fans, etc	0.51	24.72	-0.96
8419	Machinery, non-domestic, involving heating or cooling	0.05	23.18	-1.00
8421	Liquid, gas centrifuges, filtering, purifying machines	0.03	11.93	-1.00
8432	Agricultural machinery, soil preparation, cultivation	0.00	34.97	-1.00
8436	Machinery for feedstuffs, poultry, beekeeping	0.00	11.44	-1.00
8438	Industrial food and drink preparation machinery nes	0.00	14.04	-1.00
8443	Printing and ancillary machinery	0.01	17.55	-1.00
8445	Machines for processing textile fibres	0.07	101.41	-1.00
8446	Weaving machines (looms)	0.03	26.95	-1.00
8447	Machines for knitting, lace, embroidery, tufting, etc	0.04	54.15	-1.00
8448	Auxiliary machinery and parts for textile machinery	0.10	20.75	-0.99
8451	Machinery nes, to clean, iron, impregnate textiles	0.08	57.45	-1.00
8452	Sewing machines (not book sewing), related furniture	0.69	55.48	-0.98
8455	Metal-rolling mills and rolls thereof	0.00	24.95	-1.00
8473	Parts, accessories, except covers, for office machines	0.40	37.29	-0.98
8474	Machinery to sort, screen, wash, etc mineral products	0.09	21.10	-0.99
8477	Machinery for rubber, plastics industry	0.05	25.27	-1.00
8478	Machinery for preparing tobacco	0.26	10.76	-0.95
8479	Machines nes having individual functions	2.25	47.45	-0.91
8712	Bicycles, other cycles, not motorized	20.12	24.39	-0.10
8714	Parts and accessories of bicycles, motorcycles, etc	0.22	14.89	-0.97
LEI Total		37.26	819.27	-0.91

Source: United Nations Commodity Trade Statistics Database

4.1.4.4 SWOT Analysis

(1) Strengths

1) Manual labor with high skill is available at competitive cost.
2) LEI is supported as a priority industry by Business Promotion Council
3) Labor intensive production in Bangladesh has a competitive edge.
4) Basic production skills are accumulated to meet requirements of the domestic market

(2) Weaknesses

1) Leading or core assembling companies that require parts suppliers lack.
2) Production facilities and technology are not modernized.
3) Production management skills including TQM are at low level.
4) Die-making technology is a bottleneck of LEI development in Bangladesh.
5) Technical institutions like metal testing, R&D, quality assurance, and accredited inspection lack.
6) Marketing ability is insufficient for export promotion.

(3) Opportunities

1) Market size is huge in view of import substitution for industrial machinery.
2) Labor costs are increasing in rival countries in Asia.
3) LEI will grow as a cluster at LEI accumulated areas.

(4) Threats

1) Import constitution will be fixed in the industry.
2) Domestic market may become reluctant to buy domestic products.

4.1.5 Electric and Electronics (E & E) Products

4.1.5.1 Definition

Here, commodities that come with electrical and electronic components, and their parts are taken up. This classification includes such products, but not limited to, as consumer electronics, home electrical appliance, electrical equipment, electrical machinery, telecommunication appliance, audio-related products, semiconductor, integrated circuit and parts for these products. It can be argued that some commodities in this classification can be considered a part of the Light Engineering Industry in actuality. However, as clear demarcation should be drawn between the two classifications in this Study, the Electric and Electronics Products are separated from the broader category of the Light Engineering Industry by simply conforming to the HS classification.

See Table 4.1-13. In the HS classification, most of these commodities are located in HS85 and thus all the commodities in HS85 were selected at the four-digit level. In addition, in the HS classification, electrical machineries such as air-conditioner (HS8415), refrigerator (HS8418), dish-washer (HS8422), laundry machine (HS8450), and computer (HS8471) are positioned in HS84. These commodities were also treated as electric and electronics products in the statistical analysis.

Table 4.1-13 Classification by HS 1996 Code for Electric and Electronics Products Sub-sector

HS Code	Description	HS Code	Description
8415	Air conditioning equipment, machinery	8535	Electrical apparatus for voltage over 1 kV
8418	Refrigerators, freezers and heat pumps nes	8536	Electrical switches, connectors, etc, for < 1kV
8422	Machinery for dish washing, bottle washing, filling	8537	Electrical power, etc, control and distribution boards
8450	Household, laundry-type washing machine, washer-drier	8538	Parts for electrical switches, protectors, connectors
8471	Automatic data processing machines (computers)	8539	Electric filament, discharge lamps
8501	Electric motors and generators, except generating sets	8540	Thermionic and cold cathode valves and tubes
8502	Electric generating sets and rotary converters	8541	Diodes, transistors, semi-conductors, etc
8503	Parts for electric motors and generators	8542	Electronic integrated circuits and microassemblies
8504	Electric transformers,static converters and rectifiers	8543	Electrical machinery and apparatus, nes
8505	Electro and permanent magnets, equipment using magnets	8544	Insulated wire and cable, optical fibre cable
8506	Primary cells and primary batteries	8545	Carbon electrodes, brushes and electrical items nes
8507	Electric accumulators	8546	Electrical insulators of any material
8508	Hand tools incorporating electric motors	8547	Insulating fittings for electrical equipment
8509	Domestic appliances, incorporating electric motor	8548	Electrical parts of machinery and apparatus, nes
8510	Shavers and hair clippers, electric		
8511	Ignition/starter equipment, internal combustion engine		
8512	Electric lighting, signal equipment, car electrics nes		
8513	Portable battery, magneto electric lamps		
8514	Industrial, laboratory electric furnaces, ovens, etc		
8515	Electric solder, weld, braze,hot metal spray equipment		
8516	Electric equipment with heating element, domestic etc		
8517	Electric apparatus for line telephony, telegraphy		
8518	Audio-electronic equipment, except recording devices		
8519	Electronic sound reproducing equipment, non-recording		
8520	Electronic sound recording equipment		
8521	Video recording and reproducing apparatus		
8522	Parts, accessories of audio, video recording equipment		
8523	Prepared unrecorded sound recording media (non-photo)		
8524	Sound recordings other than photographic equipment		
8525	Radio and TV transmitters, television cameras		
8526	Radar, radio navigation and remote control apparatus		
8527	Radio, radio-telephony receivers		
8528	Television receivers, video monitors, projectors		
8529	Parts for radio, tv transmission, receive equipment		
8530	Electrical signalling and traffic control equipment		
8531	Electric sound or visual signal equipment nes		
8532	Electrical capacitors, fixed, variable or adjustable		
8533	Electrical resistors and rheostats except for heating		
8534	Electronic printed circuits		

4.1.5.2 Overview

Electric and electronics industry in Bangladesh is import-dominated industry where import value amounted to US$ 627 million on annual average during 2002-2004, while that of export was to the tune of US$ 17 million (TSC: -0.95) (Source: United Nations Commodity Trade Statistics Database). Domestic production is mainly intended for domestic demand, although the supply is not sufficient to meet the demand, indicating that this industry is at the stage of the import substitution industry rather than export-oriented industry.

Domestic markets for home electric appliances, or white products such as washing machines, refrigerators, air conditioners, electric and electronic ovens, pots, rice cookers, etc., are largely dominated by imported goods. For instance, in 2002/3, electric and electronics products whose import values are relatively small are found in household electric devices, such as plug, socket, switch, fan, lamp, and battery, and in industrial electric equipment like motor meter switch gear, transformer and electric cable/wire. Among these products, the products whose export value exceeds import value are only HS8513: Portable battery, magneto electric lamps (TSC = +0.01) and HS8531: Electric sound or visual equipment (TSC = +0.02), although export values themselves are very small.

4.1.5.3 Figures

Since this sub-sector has wide range of products which are often classified in other sub-sector as parts, data and information are hardly available, especially for production statistics. Therefore, production and trade are outlined together including some estimation.

Product coverage of the production statistics of Table 4.1-14 might be small. It is, however, roughly estimated that 5% to 10% of domestic production may go for export and five times of the domestic production may be imported in terms of monetary value. Self-sufficiency is relatively high in industrial electric equipment engine, motors, switch gears, transformers and materials of wire and cable. Home electric appliances including white products and audio-visual products have low self-sufficiency rate.

(1) Production

Table 4.1-14 shows industrial production statistics of main electric and electronics (E&E) products.

Table 4.1-14 E & E Production in Bangladesh (FY 2004 and 2005)

Fiscal Year (Unit)	2004/05 (10^6Taka)	2005/06(p) (10^6Taka)	2005/06(p) (10^6US$*)
Telephone	10.4	14.1	0.212
Cables	1,782.1	2,167.7	32.65
Battery (Dry cell)	954.7	1,054.3	15.88
Radio	11.3	14.3	0.215
Television (Black & White)	374.0	386.0	5.81
Television(Colored)	1,058.7	1,299.3	19.57
Fan	1,036.6	1,128.4	16.99
Electric Lamp	470.3	522.3	7.87
Electrical apparatus & supplies	821.7	845.4	12.73
Total	-	-	111.92

* Converted by the rate of US$ 1=66.4 Taka
Source: Bangladesh Bureau of Statistics "Statistical Bulletin – Bangladesh, August 2006"

(2) Trade

Table 4.1-15 and 4.1-16 show exported and imported items of electric and electronics industry whose values exceed US$ 1 million and US$ 10 million respectively.

Table 4.1-15 Major Export Items of E & E (Value of US$ 1 million or above) (Average 2002-2004)

(Unit: US$ Million)

HS Code	Description	Export	Import	TSC
8517	Electric apparatus for line telephony, telegraphy	1.26	39.51	-0.94
8528	Television receivers, video monitors, projectors	1.80	32.37	-0.89
8531	Electric sound or visual signal equipment nes	2.81	1.54	0.29
8536	Electrical switches, connectors, etc, for < 1kV	1.36	14.56	-0.83
8538	Parts for electrical switches, protectors, connectors	3.18	5.11	-0.23
Total (Electric and Electronics Products)		17.43	626.96	-0.95

Source: United Nations Commodity Trade Statistics Database

Table 4.1-16 Major Import Items of E & E
(Value of US$ 10 million or above) (Average 2002-2004)

(Unit: US$ Million)

HS Code	Description	Export	Import	TSC
8415	Air conditioning equipment, machinery	0.01	18.15	-1.00
8418	Refrigerators, freezers and heat pumps nes	0.08	39.72	-1.00
8422	Machinery for dish washing, bottle washing, filling	0.08	28.77	-0.99
8471	Automatic data processing machines (computers)	0.11	48.78	-1.00
8502	Electric generating sets and rotary converters	0.62	65.26	-0.98
8504	Electric transformers, static converters and rectifiers	0.30	36.38	-0.98
8517	Electric apparatus for line telephony, telegraphy	1.26	39.51	-0.94
8524	Sound recordings other than photographic equipment	0.03	18.56	-1.00
8525	Radio and TV transmitters, television cameras	0.06	108.78	-1.00
8528	Television receivers, video monitors, projectors	1.80	32.37	-0.89
8535	Electrical apparatus for voltage over 1 kV	0.02	16.31	-1.00
8536	Electrical switches, connectors, etc, for < 1kV	1.36	14.56	-0.83
8537	Electrical power, etc, control and distribution boards	0.08	10.82	-0.99
8544	Insulated wire and cable, optical fibre cable	0.62	31.87	-0.96
Total (Electric and Electronics Products)		17.43	626.96	-0.95

Source: United Nations Commodity Trade Statistics Database

4.1.5.4 SWOT Analysis

(1) Strengths

1) Manual labors with high skill are available at competitive cost.
2) Manufacturers have strengths in customized production.

(2) Weaknesses

1) Market size for home electric appliances is small in terms of purchasing power of consumers.
2) The number of multinational companies is small in assembly and mass-production.
3) The competitiveness is low in comparison with imported goods.
4) Technology is not high enough to produce high quality products.
5) Ability for market development is insufficient.

(3) Opportunities

1) Domestic market has potential to expand due to the large number of population.

2) Labor intensive production in Bangladesh has a competitive edge.

(4) Threats

1) Imported goods could crowd out local manufacturers.
2) Competition with neighboring Asian countries may increase.

4.1.6 Computer Software

4.1.6.1 Definition (Software)

Computer Software (Software) industry is a part of the Information and Communication Technology (ICT) industry. In general, the ICT industry is composed of computer/network hardware, internet/networking services, IT Enabled Service (ITES)/Business Process Outsourcing (BPO)[1], telecommunications, and Computer Software. Computer Software can be defined as a program by which the computer or system network hardware can be operated through the systematic order and procedure programmed in it. In this Study, only Computer Software (and software-oriented ITES) is targeted.

Computer/network hardware is excluded from the Study target because it is tangible goods as opposed to the Computer Software which is intangible service in its nature. Also telecommunication is left out simply because it is based on the "Communication" technology, unlike Computer Software which is a typical instance of "Information" technology. Internet/networking services and BPO, which, though IT is widely utilized, is oriented more to business services in general, is omitted from the Study target so as to concentrate more on software-oriented services.

It should be noted that many software companies are engaged not only in Computer Software, but also in ITES at the same time. Hence, although target in this Study is Computer Software, analysis on this sub-sector may cover some factors inherent to the ITES. In this Study, the following Computer Software products (and ITES which are software-oriented) are taken up, based upon empirical and general usage employed in many countries (See Table 4.1-17).

[1] Examples of ITES/BPO include desktop publishing, webpage/homepage development, multimedia, animation, Geographic Information Systems (GIS), digitalization, data processing/conversion/entry, and e-commerce, call center, among others.

Table 4.1-17 Targeted Software Products and ITES

(A)	Software Products
A-1)	Operating System
A-2)	Middleware
A-3)	Device Driver
A-4)	Compiler
A-5)	Application
A-5-1)	Automation software for back-office work
A-5-2)	Web/homepage application
A-5-3)	Business software
A-5-4)	Point of Sales (POS) system
A-5-5)	Customer Relationship Management (CRM) software
A-5-6)	E-government application
A-5-6)	Mobile/wireless application
A-5-7)	Game software
A-5-8)	Others
(B)	ITES
B-1)	Animation
B-2)	CAD Services
B-3)	Data Processing/Conversion/Entry
B-4)	Desktop Publishing
B-5)	Digitalization
B-6)	E-commerce
B-7)	Geographic Information System (GIS)
B-8)	Graphic Design
B-9)	Multimedia
B-10)	Website/Homepage Design
B-11)	Others

Since the Computer Software trade is categorized as the trade in service, or intangible in its nature, it takes various modes. It is therefore necessary to identify what modes of Computer Software trade should be targeted in this Study. By referring to generally practiced modes of Computer Software trade over the world, the following four modes of Computer Software trade is undertaken in this Study:

A) In the case where a software product developed by a given company on its own is sold to another company based in the foreign country;
B) In the case where a company in a given country is commissioned by another company based in the foreign country to develop software/system (this may include consulting, operation, management and maintenance for the developed software/system) in the office and country of the former (Offshore development);
C) In the case where a company in a given country is commissioned by another company based in the foreign country to develop software/system (this may include consultancy, operation, management and maintenance for the developed software/system) in the office and the country of the latter (Onsite development); and

D) In the case where a company in a given country is re-commissioned by another company based in the foreign country to develop software/system (this may include consultancy, operation, management and maintenance for the developed software/system).

In terms of classification for statistical analysis on trade, it is not actually possible to conform to the HS classification in this sub-sector because, as stated earlier, software trade is categorized as the trade in service and the HS classification is generally involved only with the trade in goods. In substitution for it, the Balance of Payments Statistics of the International Monetary Fund (IMF) was employed in consideration that the Statistics are arguably the only data-set that offers internationally comparable figures of Computer Software trade at present. Here, the "Computer and Information Services" category in the same Statistics was taken up.

It should be noted, however, that the Balance of Payment Statistics does not cover so-called offsite development. The offsite development means the case, as an example, where a company in Bangladesh serves the Japanese companies in Japan through its subsidiary company located in Japan. Hence, the offsite business cannot be statistically included in the software trade.

4.1.6.2 Overview

As shown in the above definition, the sub-sector of ICT (Information and Communication Technology) is classified into 1) Hardware (Computer and Internet), 2) Software, 3) Other ITES (Information Technology Enabled Service), and 4) ISP (Internet Service Provider). In domestic market, the size becomes larger according to the above order. Targets of this Study are 2) Software and 3) Other ITES.

Among them, foreign multinational companies like the Microsoft, Oracle, and Sun Microsystems control packaged/licensed software and domestic companies undertake development and maintenance of customized package software and application (mostly for back-office automation).

Top ten customized software businesses in Bangladesh are as follows (Source: BASIS "Software Product Catalogue 2006"):

1) Accounting and financial management software;
2) Inventory management software;
3) Human resource management software;

4) Web site/web development application;
5) Enterprise Resource Planning (ERP) system;
6) Software implementation/integration;
7) Billing software;
8) Asset management software;
9) Point of Scales (POS) system for Retail Stores; and
10) E-commerce application.

Computer Software industry in Bangladesh has been showing robust performance for the past 10 years and both domestic sales and export earnings have been growing rapidly.

It is regarded as export of software here if Bangladeshi companies or individuals render contracted services to foreign companies. There are two types of export: One is the offshore business where jobs are done in Bangladesh and the other is the onsite business where jobs are completed in the importing foreign customer's office.

As a variation, a Bangladeshi owned company located in Japan, for example, contract with a Japanese company on software services and then the Bangladeshi company subcontracts with Bangladeshi company located in Bangladesh. This is one of offshore type exportations.

Computer Software industry has been nominated by the government as a strategic priority industry by which the industry is given preferential treatment on import duty and corporate tax. Also, the government has established equity fund for entrepreneurs, which could play a similar role to venture capital. There are two business associations: One is the Bangladesh Association of Software and Information Services (BASIS) having around 250 member companies mostly from software industry; and the other is the Bangladesh Computer Samity (BCS) which has about 490 member companies mainly from hardware sales industry. The government also established the Bangladesh Computer Council. Recently, increase in government procurement of software services has been directed, indicating possibility for the government to become the largest client for this industry.

Computer Software industry in Bangladesh probably has large potential for export growth based upon highly capable but cheap IT engineers abundantly available domestically. However, lack of project managers and its short industrial history has been hindering export growth of software industry.

4.1.6.3 Figures

(1) Supply and demand

Total market size of the ICT industry in Bangladesh (2004/5) was 11 billion Taka (about US$ 157 million) according to the BASIS's estimate in "Software Product Catalogue 2006." The following estimates on market sizes were made through interview surveys of the JICA Study Team:

Hardware:	US$ 92 million
Software:	US$ 24 million
Other ITES:	US$ 24 million
ISP:	US$ 17 million

Number of ICT companies (registered):	450
Number of BASIS members:	250
Number of ICT engineers (staffs of non-IT organizations included):	25,000
Number of annual ICT engineering graduates (both universities and vocational schools):	3,500

Many graduates from top-level national universities tend to find job opportunities abroad.

(2) Trade

Table 4.1-18 shows export/import values of software from Bangladesh for the recent years of two different sources. Two figures show different export value probably due to difference of classification. Both figures, however, indicate expanding trend of export.

According to the Bangladesh Bank, top five export destination countries from Bangladesh in 2004 were: 1) USA; 2) UK; 3) Sweden; 4) Singapore; and 5) Italy.

Table 4.1-18 Software Trade of Bangladesh (2000-2005)

(Unit: US$ Million)

International Monetary Fund			Bangladesh Bank	
Year	Export	Import	Year	Export
2000			2000/01	2.24
2001			2001/02	2.8
2002	11.40	0.80	2002/03	4.2
2003	28.50	1.00	2003/04	7.2
2004	15.10	1.50	2004/05	11.44
2005			2005/06	23.00 (Est.)

Source: International Monetary Fund "Balance of Payments Statistics Yearbook 2005"
Export Promotion Bureau "Bangladesh Export Statistics 2004-2005"

4.1.6.4 SWOT Analysis

(1) Strengths

1) Competent workforce is abundantly available.
2) English speaking people are widely available.
3) India, as a role model, exists nearby.
4) Government supports the industry (preferential treatment on taxes, etc.).
5) Less constraints to develop because raw material is indigenous human resources.

(2) Weaknesses

1) Exposure to international markets is insufficient.
2) Training curricula of academies do not meet market requirements.
3) Mid-level officers such as project managers lack.
4) Government support for incubation is insufficient including financing.
5) Government procurement is still insufficient (small domestic market).
6) Bangladesh lags behind India in the U.S. market

(3) Opportunities

1) World demand continues to widen as an ever increasing sector.
2) Engineers lack in developed countries i.e. USA, Japan and EU.
3) Lack of engineers in India will happen in near future.
4) Young generation is willing to get jobs in this Sub-sector.
5) Government has a plan to allocate 2% of ADP for outsourcing ICT.
6) There are many entrepreneurs to penetrate into this sub-sector.

(4) Threats

1) Neighbor countries rise in international markets of the software industry.
2) Bangladesh fails in penetrating in international markets.
3) Skilled engineers with advanced technology lack as technology of existing skilled engineers become obsolete.

4.2 Questionnaire Survey of Companies in Target Sub-sectors

4.2.1 Objective and Methodology

4.2.1.1 Objective of the Questionnaire Survey

The questionnaire survey is designed to analyze the six target sub-sectors (food processing, jute products, pharmaceutical products, computer software, metalworking and machining[2], and electrical and electronics products) in terms of the surrounding conditions for growth as well as constraints against export growth. Also, survey responses are converted to standardized scores (by a three-point scale of 0-3) in order to use them as one of the criteria to select two promising sub-sectors that will be covered by the Pilot Projects and the Action Programs. Furthermore, the survey results will be analyzed to provide data and information useful for designing the Pilot Projects and the Action Programs.

4.2.1.2 Selection of Surveyed Companies

The questionnaire survey covered a total of 120 randomly selected companies in two regions (Dhaka and Chittagong), 20 in each of the six sub-sectors, regardless of size (employment), operating results, and export orientation. Note that percentage share of companies by region was set according to the share of the actual number of companies in each region and sub-sector. The following table shows the breakdown of surveyed companies by region and sub-sector.

Table 4.2-1 Breakdown of Surveyed Companies by Region and Sub-sector

Sub-sector	Dhaka	Chittagong	Total
Food processing	13	7	20
Jute products	19	1	20
Pharmaceutical products	18	2	20
Computer software	20	0	20
Metalworking and machining	17	3	20
Electrical and electronics products	19	1	20
Total	106	14	120

4.2.1.3 Methodology

The survey was conducted by a local survey firm, the "Org-Quest Research Limited," with which the contract in connection with this survey was made on April 26, 2007. The firm interviewed respondents to obtain their self-assessment about a sub-sector to which their companies belonged. To ensure valid responses from 20 companies in each sub-sector,

[2] The light engineering industry sub-sector was represented by metalworking and machining sub-sector by its nature.

initially around 40 companies were randomly selected for each sub-sector. These companies were contacted one by one to check if they agree to respond to the questionnaire survey. Then, the survey was conducted for those that expressed the agreement until the number of companies in each sub-sector reached 20. As a result, the survey was able to secure the required number of responses, as planned.

4.2.1.4 Question Categories

Questions asked in the survey were roughly classified into three categories, namely corporate profile (export orientation), the surrounding conditions for growth, and constraints against export growth.

(1) Corporate profile (export orientation)

Questions in this section were primarily designed to determine export orientation of a responding company. The section consisted of three items, namely the status of growth in terms of operating results, including export indicators, the intent to expand exports, and export-to-sales ratio.

(2) Surrounding conditions for growth

This category was intended to assess the current state of the surrounding conditions for growth of each sub-sector. This survey took up five factors relating to the surrounding conditions for growth (raw material, human resource, export marketing, product development, and supply capability). As shown in Table 4.2-2 below, four questions were prepared for the five factors, to which respondents were asked to indicate their self-evaluation.

(3) Constraints against export growth

Questions under this category were designed to identify constraints against export growth in each sub-sector. For this survey, five relevant factors (finance, physical distribution, infrastructure, policy/legal regulation, and education and training/BDS) were taken up. For each factor, four questions were asked to respondents for self-assessment, as shown in Table 4.2-3.

Table 4.2-2 Questions Relating to the Surrounding Conditions for Growth

Question item	Key point to be checked
Factor 1 Raw Material	
Availability	Ease of acquiring required materials in sufficient quantity
Quality	Level of satisfaction in quality of raw material
Cost	Level of purchase cost of raw material
Delivery schedule	Trouble or problem relating to delay in delivery of raw material
Factor 2 Human resource	
Availability of skilled workers	Ease of hiring highly skilled workers
Skill level	Skill levels of employees
Labor cost	Cost for hiring and retaining employees
Education and training	Level of quality and satisfaction about the employee education and training system and program
Factor 3 Export marketing	
Growth of export markets	Current growth trend relating to export markets
Export sales channel	Level of establishment of export sales channel
Export market information	Ease of access to export market information
Export procedures	Time required for export procedures and ease of use
Factor 4 Product development	
Internal development of export products	Degree of internal development of export products
Workforce in the product development department	Number of workers in product development and related departments
Access to R&D facility	Degree of access to external R&D facilities
Collection of new product information	Frequency of information gathering activities of new product
Factor 5 Supply capability	
Production expansion plan (own)	Presence of the present and future production expansion plans within the company
Production expansion plan (other companies)	Presence of the present and future production expansion plans by other companies
New entries	Frequency of new entries in each sub-sector
Foreign investment	Foreign direct investment in each sub-sector

Table 4.2-3 Questions on Constraints against Export Growth

Question item	Key point to be checked
Factor 1 Finance	
Short-term working capital	Ease of access to short-term finance
Long-term capital investment	Ease of access to long-term finance
Interest rate	Level of interest rate
Collateral	Strictness of collateral requirements
Factor 2 Physical distribution	
Transportation and handling of raw materials	Quality and availability of the raw materials transportation/handling system
Access to port and airport	Level of access to port and airport
Cost	Physical distribution cost
Loss in physical distribution	Degree and level of loss in physical distribution
Factor 3 Infrastructure	
Road	Quality and availability of road and related infrastructure
Factory site	Geographic advantage of the company's factory
Utilities	Quality and availability of utilities (water, electricity and gas)
Telecommunications	Quality and availability of telecommunications service
Factor 4 Policy/legal regulation	
Export policy	Public support for each sub-sector based on export policy
Customs and inspection	Smoothness and promptness relating to customs clearance and inspection systems
Labor law	Adequacy of labor related laws
Taxation	Tax burdens
Factor 5 Education and training/BDS	
Management education	Quality and adequacy of education and training organizations for management skills
Worker training	Quality and adequacy of education and training organizations for technology and skills of workers
R&D support	Quality and adequacy of R&D support organizations
Export support	Quality and adequacy of export support organizations

(4) Scoring method

All questions but 4.2.2.1 (2) (intent for export expansion) and 4.2.2.1 (3) (export ratio) were answered by means of assigning a score on a three-point scale (0 – 3), i.e., the higher the score, the better the attribute (quality, level, etc.) becomes. For each question, the average score was calculated for all valid responses. Then, for each factor, the weighted average value (the sum of the average score for each question multiplied by the number of valid responses in that question divided by the total number of valid responses in all questions in the factor) was calculated for responses to component questions, i.e., four questions, in order to minimize an adverse effect of invalid responses.

4.2.2 Comparative Analysis of Surveyed Sub-sectors

The results of the questionnaire survey are analyzed by comparing the six sub-sectors. First of all, survey results relating to export orientation are analyzed, followed by those relating to the surrounding conditions for growth and constraints against export growth.

4.2.2.1 Export Orientation

(1) Operating results

Table 4.2-4 summarizes operating results of surveyed companies in the recent few years, by sub-sector. Overall, the pharmaceutical products industry shows the highest score in terms of operating performance. In particular, export growth is most notable for the sub-sector. As for sales and profits including export revenue, however, the computer software industry recorded the highest score. On the other hand, the food processing and metalworking/machining industries remained at the lowest levels.

Table 4.2-4 Operating Results of Companies by Sub-sector in the Recent Few Years

	Food processing	Jute products	Pharmaceutical products	Computer software	Metalworking and machining	Electrical and electronics products
Sales	1.80	1.90	2.00	2.15	2.05	1.65
Profit	1.60	1.65	2.05	2.15	1.55	1.70
Export revenue	1.50	1.95	2.38	1.60	1.50	2.00
Export market	1.75	2.00	2.31	1.70	1.25	2.00
Total	6.65	7.50	8.74	7.60	6.35	7.35

Note: The figures represent the average score for all valid responses to each question. Their value is three points at maximum, except for the figures in the total columns.

(2) Intent for export expansion

Table 4.2-5 summarizes survey responses concerning the intent for export expansion. Notably, all companies in the jute product sub-sector, which is the country's traditional export industry, expressed the intent to increase exports. As for other industries except electrical and electronics products, over 70% of surveyed companies showed interest in export growth. In contrast, majority of companies in the electrical/electronics industry expressed no interest in export growth.

Table 4.2-5 Intent for Export Expansion of Surveyed Companies by Sub-sector

(No. of companies)

	Food processing	Jute products	Pharmaceutical products	Computer software	Metalworking and machining	Electrical and electronics products
interest	14	20	18	17	15	8
no interest	6	0	2	3	5	12

(3) Export ratio

Table 4.2-6 compares domestic sales and overseas sales (export) reported by each subs-sector, by percentage share of total sales. The survey revealed that the jute product industry earned approximately 86% of its total sales from exports, whereas other industries depended much (over 85%) on domestic sales.

Table 4.2-6 Export Ratio of Surveyed Companies by Sub-sector

(Unit: %)

	Food processing	Jute products	Pharmaceutical products	Computer software	Metalworking and machining	Electrical and electronics products
Domestic sales	98.25	14.10	91.85	85.25	96.60	97.25
Overseas sales	1.75	85.90	8.15	14.80	3.40	2.75

4.2.2.2 Surrounding Conditions for Growth (Comparison of Sub-sectors)

(1) Overall evaluation

The results of overall evaluation on each sub-sector in terms of the surrounding conditions for growth are presented in Table 4.2-7. Note that the surrounding conditions for growth are represented by the five factors. The scores shown in the table represent the average score calculated from those given in valid responses. As measured by the overall score for the five factors, companies in the pharmaceutical products industry evaluate that their surrounding conditions are very favorable for growth. On the other hand, the

metalworking/machining and electrical/electronics products industries show scores far below the overall average for all the sub-sectors. Companies of these sub-sectors are rather reluctant to evaluate that their surrounding conditions are suitable for rapid growth. Looking at the individual factors, export marketing shows the lowest value for all the sub-sectors other than jute products. In contrast, supply capability is generally high to indicate that all the sub-sectors seem to be capable of meeting demand so far as the market supports it.

Table 4.2-7 Summary of Surrounding Conditions for Growth

Five factors	Food processing	Jute products	Pharmaceutical products	Computer software	Metalworking and machining	Electrical and electronics products	Overall Average
1. Raw material	1.95	2.03	2.01	2.19	1.48	1.55	1.87
2. Human resource	2.00	1.48	2.06	1.94	1.84	1.89	1.87
3. Export marketing	1.44	2.15	1.85	1.62	1.57	1.18	1.64
4. Product development	1.77	2.01	2.25	2.02	1.50	1.56	1.85
5. Supply capability	2.25	2.09	2.46	2.31	1.83	1.86	2.13
Overall average	1.88	1.95	2.13	2.02	1.64	1.61	1.87

Note: All the figures but those in the total columns represent scores graded by responding companies (three-point scale).

(2) Scoring of the five factors

Details of the summary table shown above are examined below. Respondents were asked to evaluate the abovementioned five factors under four questions. Their responses are compared for each sub-sector.

1) Raw materials

Table 4.2-8 summarizes responses to questions relating to raw material that constitutes the surrounding conditions for growth. It indicates that the computer software industry has less problems judged by its highest value. Raw materials of computer software industry of Bangladesh can be defined as imported computer hardware and domestic human resources. The metalworking/machining and electrical/electronics products industries fall below the overall average for all the sub-sectors. These two sub-sectors face some difficulty raw material procurement in terms of quality, quantity and/or price. As for the individual items, the “cost” element shows lower values than other elements for all but computer software

sub-sector. This means that cost burdens have negative impacts on the surrounding conditions for growth.

Table 4.2-8 Surrounding Conditions for Growth (Raw Materials)

Four question item	Food processing	Jute products	Pharmaceutical products	Computer software	Metalworking and machining	Electrical and electronics products	Overall Average
1. Availability	2.25	2.15	2.15	2.25	1.53	1.60	1.99
2. Quality	2.20	2.05	2.45	2.10	1.80	2.00	2.10
3. Cost	0.95	1.55	1.55	2.05	0.75	0.75	1.27
4. Delivery schedule	2.40	2.35	1.90	2.35	1.85	1.85	2.12
Total	7.80	8.10	8.05	8.75	5.93	6.20	7.48

Note: The figures represent the average score for all valid responses to each question. Their value is three points at maximum, except for the figures in the total columns.

2) Human resource

Table 4.2-9 presents self-assessment by respondents on the human resource factor of the surrounding conditions for growth. Notably, the jute products sub-sector shows very low scores than the rest, suggesting that human resource constitutes a major factor for impeding its growth. In particular, self-assessment by the sub-sector on education and training element is extremely low. Among the four question items, employment of skilled workers is rated lower than the remaining items to suggest presence of some bottleneck in employing skilled workers for all the sub-sectors. Companies in the food processing and computer software industries cited that the labor cost was unfavorable for growth. On the other hand, these two industries showed higher evaluation on the existing skill levels of employees in comparison to other sub-sectors.

Table 4.2-9 Surrounding Conditions for Growth (Human Resource)

Four question item	Food processing	Jute products	Pharmaceutical products	Computer software	Metalworking and machining	Electrical and electronics products	Overall Average
1. Availability of skilled workers	1.80	1.35	1.80	1.65	1.55	1.75	1.65
2. Skill level	2.35	1.75	2.05	2.35	1.90	1.90	2.05
3. Labor cost	1.75	2.05	2.30	1.75	2.10	2.10	2.01
4. Education and training	2.10	0.75	2.10	2.00	1.80	1.80	1.76
Total	8.00	5.90	8.25	7.75	7.35	7.55	7.47

Note: The figures represent the average score for all valid responses to each question. Their value is three points at maximum, except for the figures in the total columns.

3) Export marketing

Table 4.2-10 summarizes responses to questions relating to the export marketing factor. Here, the jute products sub-sector shows the highest score in total, reflecting the fact that many companies in the sub-sector believe that export marketing capability is a major factor for growth. In particular, the scores on export sales channels and export procedures of the sub-sector are far above the overall average. On the other hand, export market growth of the sub-sector is rated below the other items. This item is highly rated by the pharmaceutical products and electrical/electronics product industries, suggesting that these industries have an optimistic view on growth potential of export markets.

Table 4.2-10 Surrounding Conditions for Growth (Export Marketing)

Four question item	Food processing	Jute products	Pharmaceutical products	Computer software	Metalworking and machining	Electrical and electronics products	Overall Average
1. Growth of export markets	2.00	1.95	2.69	1.90	1.50	2.67	2.12
2. Export sales channel	1.16	2.40	1.95	1.50	1.39	1.19	1.60
3. Export market information	1.75	2.15	1.85	1.80	2.10	1.11	1.79
4. Export procedures	1.47	2.10	1.45	1.53	1.20	1.10	1.48
Total	6.38	8.60	7.94	6.73	6.19	6.07	6.99

Note: The figures represent the average score for all valid responses to each question. Their value is three points at maximum, except for the figures in the total columns.

4) Product development

Table 4.2-11 tabulates the results of self-assessment on the product development factor. Clearly, responding companies in the pharmaceutical products and computer software industries have higher confidence in product information gathering as compared to other industries. Overall, internal development of export products and the number of employees in the product development department are highly rated, making a sharp contrast to the access to R&D facilities. Thus, the surveyed companies in the target sub-sectors highly rate their internal product development capability, but they do not have good access to outside resources.

Table 4.2-11 Surrounding Condition for Growth (Product Development)

Four question item	Food processing	Jute products	Pharmaceutical products	Computer software	Metalworking and machining	Electrical and electronics products	Overall Average
1. Internal development of export products	3.00	2.95	3.00	2.91	2.63	2.50	2.83
2. Workforce in the product development department	2.40	2.89	2.45	2.30	2.45	2.30	2.47
3. Access to R&D facility	0.75	0.47	1.33	0.89	0.30	0.15	0.65
4. Collection of new product information	1.80	1.65	2.30	2.45	1.35	1.60	1.86
Total	7.95	7.96	9.08	8.55	6.73	6.55	7.81

Note: The figures represent the average score for all valid responses to each question. Their value is three points at maximum, except for the figures in the total columns.

5) Supply capability

Table 4.2-12 summarizes responses relating to the supply capability factor. Overall, respondents gave higher scores to this factor in comparison to others, in particular production expansion plans by local companies. This implies that respondents are optimistic about production expansion capacity of their own factories. On the other hand, foreign investment received lower rating, i.e., the expansion trend is weaker than investment by domestic companies. In terms of sub-sector, the pharmaceutical products, computer software and food processing industries showed higher scores than the overall average, suggesting relatively high supply capability of these industries.

Table 4.2-12 Surrounding Conditions for Growth (Supply Capability)

Four question item	Food processing	Jute products	Pharmaceutical products	Computer software	Metalworking and machining	Electrical and electronics products	Overall Average
1. Production expansion plan (own)	2.40	2.20	2.85	2.50	2.20	2.20	2.39
2. Production expansion plan (other companies)	2.70	2.21	2.70	2.30	2.45	2.45	2.47
3. New entries	2.20	1.95	2.25	2.25	1.75	1.75	2.03
4. Foreign investment	1.70	2.00	2.00	2.20	0.90	1.05	1.64
Total	9.00	8.36	9.80	9.25	7.30	7.45	8.53

Note: The figures represent the average score for all valid responses to each question. Their value is three points at maximum, except for the figures in the total columns.

4.2.2.3 Constraints against Export Growth (Comparison of Sub-sectors)

(1) Overall result

Table 4.2-13 presents the results of self-assessment on five factors comprising constraints against export growth, by sub-sector. The figures shown represent the average score for valid responses. Compared to the overall average score for the five factors, the computer software industry shows the highest value, whereas the jute products, metalworking/machining, and electrical/electronic products sub-sectors fall below. Generally, finance, policy/legal regulation, and education and training/BDS receive relatively low scores, and higher scores for physical distribution and infrastructure.

Table 4.2-13 Summary of Constraints against Export Growth

Five factors	Food processing	Jute products	Pharmaceutical products	Computer software	Metalworking and machining	Electrical and electronics products	Overall Average
1. Finance	1.76	1.68	1.76	1.58	1.85	1.90	1.76
2. Physical distribution	2.11	2.31	2.51	2.53	2.27	2.18	2.32
3. Infrastructure	2.01	2.01	2.35	2.23	1.99	1.90	2.08
4. Policy/legal regulation	1.98	1.96	1.92	1.86	1.71	1.66	1.85
5. Education and training/BDS	1.50	1.10	1.23	1.65	0.86	1.05	1.23
Overall average	1.87	1.81	1.95	1.97	1.74	1.74	1.85

Note: The figures represent the weighted average score for responses to each question

(2) Self-assessment on the five factors

Details of the summary table shown above are examined below. For each factor composing the constraints, four questions were asked. Responses to each factor are analyzed below.

1) Finance

Table 4.2-14 summarizes self-assessment of the respondents on the finance factor. Notably, respondents in the metalworking/machining and electrical/electronics products industries show high scores for short- and long-term financing, suggesting that these sub-sectors face a smaller constraint in access to finance than other sub-sectors. Also, long-term finance is generally perceived by respondents as easier to obtain than short-term finance. Finally, all the sub-sectors assign much lower scores to the interest rate, indicating that they consider high interest rate to be the most significant element of the constraint for export growth.

Table 4.2-14 Constraints against Export Growth (Finance)

Four question item	Food processing	Jute products	Pharmaceutical products	Computer software	Metalworking and machining	Electrical and electronics products	Overall Average
1. Short-term working capital	1.65	1.75	1.90	2.15	2.25	2.35	2.01
2. Long-term capital investment	2.55	2.35	2.20	1.70	2.65	2.55	2.33
3. Interest rate	1.05	0.95	1.16	1.15	0.90	1.05	1.04
4. Collateral	1.80	1.65	1.84	1.32	1.60	1.65	1.64
Total	7.05	6.70	7.10	6.32	7.40	7.60	7.02

Note: The figures represent the average score for all valid responses to each question. Their value is three points at maximum, except for the figures in the total columns.

2) Physical distribution

Table 4.2-15 summarizes responses relating to the physical distribution factor. Generally, responses to the questions under this category indicate that the constraint in regard to this factor is relatively small. In particular, loss during transportation was considered by all the sub-sectors to be a very small constraint.

Table 4.2-15 Constraints against Export Growth (Physical Distribution)

Four question item	Food processing	Jute products	Pharmaceutical products	Computer software	Metalworking and machining	Electrical and electronics products	Overall Average
1. Transportation and handling of raw materials	2.25	2.35	2.55	2.35	2.00	1.85	2.23
2. Access to port and airport Level of access	1.70	2.10	2.32	1.95	1.79	1.26	1.85
3. Cost	1.70	1.90	1.95	2.10	1.75	1.95	1.89
4. Loss in physical distribution	2.79	2.90	2.84	3.00	2.89	2.95	2.90
Total	8.44	9.25	9.66	9.40	8.43	8.01	8.87

Note: The figures represent the average score for all valid responses to each question. Their value is three points at maximum, except for the figures in the total columns.

3) Infrastructure

Table 4.2-16 summarizes self-assessment results from the respondents relating to the infrastructure factor. Similar to physical distribution, this factor, judged by the high values from the sub-sectors, is generally considered to be a less significant constraint in comparison to other factors. Looking at the individual components, utilities are recognized as a

relatively large constraint for export growth, whereas factory site and telecommunications are considered to be less significant.

Table 4.2-16 Constraints against Export Growth (Infrastructure)

Four question item	Food processing	Jute products	Pharmaceutical products	Computer software	Metalworking and machining	Electrical and electronics products	Overall Average
1. Road	1.75	2.10	2.30	2.20	2.00	1.70	2.01
2. Factory site	2.45	2.40	2.75	2.50	2.25	2.15	2.42
3. Utilities (water, electricity and gas)	1.75	1.45	1.85	1.95	1.45	1.45	1.65
4.Telecommunications	2.10	2.10	2.50	2.25	2.25	2.30	2.25
Total	8.05	8.05	9.40	8.90	7.95	7.60	8.33

Note: The figures represent the average score for all valid responses to each question. Their value is three points at maximum, except for the figures in the total columns.

4) Policy/legal regulation

Table 4.2-17 presents responses to questions relating to the policy/legal regulation factor. Overall, judged by the low score given by the sub-sectors, this factor is considered to constitute a relatively large constraint for export growth, with no significant difference among sub-sectors. On the other hand, the present labor law is perceived as a small factor for constraining export growth.

Table 4.2-17 Constraints against Export Growth (Policy/Legal Regulation)

Four question item	Food processing	Jute products	Pharmaceutical products	Computer software	Metalworking and machining	Electrical and electronics products	Overall Average
1.Export policy	2.10	1.65	1.65	1.78	1.44	1.68	1.72
2. Customs and inspection	1.65	1.95	1.60	1.50	1.56	1.47	1.62
3. Labor law	2.50	2.25	2.20	2.15	1.84	1.95	2.15
4. Taxation	1.65	2.00	2.26	2.10	2.00	1.50	1.92
Total	7.90	7.85	7.71	7.53	6.84	6.60	7.41

Note: The figures represent the average score for all valid responses to each question. Their value is three points at maximum, except for the figures in the total columns.

5) Education and training/BDS

Table 4.2-18 summarizes self-assessment on the education and training/BDS factor made by respondents in the sub-sectors. Generally, this factor is considered by all the sub-sectors as a very large constraint. In particular, the pharmaceutical products industry regards this factor as a large constraint for export growth, showing a very low score in comparison to high scores under other factors. Especially, the industry recognizes the poor

access to R&D support organizations, which is perceived as a major obstacle to export growth.

Table 4.2-18 Constraints against Export Growth (Education and Training/BDS)

Four question item	Food processing	Jute products	Pharmaceutical products	Computer software	Metalworking and machining	Electrical and electronics products	Overall Average
1.Management education	1.90	1.05	1.75	1.90	1.10	1.40	1.52
2. Worker training	1.65	0.90	1.25	1.90	1.10	1.20	1.33
3. R&D support	1.15	1.15	0.80	1.67	0.55	0.50	0.97
4. Export support	1.30	1.30	1.17	1.10	0.70	1.10	1.11
Total	6.00	4.40	4.97	6.57	3.45	4.20	4.93

Note: The figures represent the average score for all valid responses to each question. Their value is three points at maximum, except for the figures in the total columns.

4.2.3 Analysis of Surrounding Conditions and Constraints by Sub-sectors

Major characteristics of each sub-sector in terms of the surrounding conditions for growth and constraints against export growth, as obtained from survey results, are analyzed and described below. Note that the figures shown in the following tables are indicated on a three-point scale, as adjusted on the basis of the number of valid responses.

4.2.3.1 Food Processing

(1) Surrounding conditions for growth

In terms of the surrounding conditions for growth, the food processing industry gave the lowest score to the export marketing factor, implying that the export marketing conditions are not favorable for its growth. As seen in Table 4.2-10, the industry's self-assessment on the export sales channel was lowest among other sub-sectors, seemingly reflecting the fact that most of food processing companies in the country serve the domestic market only and have not established sufficient export capability.

On the other hand, the human resource factor received the relatively high score, in particular high evaluation on the skill level as seen in Table 4.2-9. Also, high rating of education and training can be read from the table. Thus, the food processing industry shows a positive association between the employee education/training level and the skill level.

As for raw material, the industry, judged by the high scores, shows satisfaction in availability, quality, and delivery schedule of raw materials, whereas a low score is given to the cost, indicating that companies in the industry consider the cost a high burden. (Table 4.2-8)

(2) Constraints against export growth

As responded by other sub-sectors, the food processing sub-sector gives a low score to education and training/BDS, suggesting that there is a general lack of business support organizations in the country.

Also, the industry gives a low score to finance. While low evaluation is also given by other sub-sectors to the finance factor, the food processing sub-sector perceives a large constraint relating to short-term finance. (Table 4.2-14)

Finally, in the area of physical distribution, the industry considers loss during transportation (an inherently important factor for the industry) as a small constraint against export growth.

Table 4.2-19 Surrounding Conditions for Growth and Constraints for the Food Processing Sub-sector

Surrounding conditions for growth			Constraints against export growth		
Rank	Five factors	Average	Rank	Five factors	Average
1	Supply capability	2.25	1	Physical distribution	2.11
2	Human resource	2.00	2	Infrastructure	2.01
3	Raw material	1.95	3	Policy/legal regulation	1.98
4	Product development	1.77	4	Finance	1.76
5	Export marketing	1.44	5	Education and training/BDS	1.50
Overall average		1.88	Overall average		1.87

4.2.3.2 Jute Products

(1) Surrounding conditions for growth

Unlike other industries, the jute products industry gives the highest score to export marketing. In particular, the export sales channel receives a very high score in comparison to other sub-sectors, as shown in Table 4.2-10. This indicates that the industry has advantages in terms of experience and the export system, which were established over a long history of export. The same table also indicates that the industry gives a lower score to the expansion of export market than others. Thus, companies in the jute products industry appear to recognize limitation for the present market size in the world.

As for the raw material factor, the industry perceives that the raw material cost is high, as seen in the food processing industry. Other elements in this factor receive high evaluation. (Table 4.2-8)

Finally, the industry gives a very low score to the human resource factor. In particular, it recognizes the difficulty in employing skilled workers and the lack of employee education and training, as seen in Table 4.2-9. As in the case of the food processing industry, the industry shows a positive association between the employee education/training level and the skill level.

(2) Constraints against export growth

The industry considers education and training/BDS to be the strongest constraint for export growth. In particular, evaluation on vocational training and management education organizations is fairly low. (Table 4.2-18) Coupled with poor evaluation on the human resource factor of the surrounding conditions for growth, the result indicates that the lack of human resource is one of the industry's weaknesses.

Also, the evaluation score of the finance factor by the industry falls below the overall average. As seen in the food processing industry, the industry appears to face difficulty in obtaining short-term funds. (Table 4.2-14)

Loss during transportation is not perceived to be a major concern for the jute products industry. The survey results indicate that the industry dose not consider constraints relating to physical distribution to be significant, including loss during transportation. (Table 4.2-15)

Table 4.2-20 Surrounding Conditions for Growth and Constraints for the Jute Products Sub-sector

Surrounding conditions for growth			Constraints against export growth		
Rank	Five factors	Average	Rank	Five factors	Average
1	Export marketing	2.15	1	Physical distribution	2.31
2	Supply capability	2.09	2	Infrastructure	2.01
3	Raw material	2.03	3	Policy/legal regulation	1.96
4	Product development	2.01	4	Finance	1.68
5	Human resource	1.48	5	Education and training/BDS	1.10
Overall average		1.95	Overall average		1.81

4.2.3.3 Pharmaceutical Products

(1) Surrounding conditions for growth

For the pharmaceutical products industry, supply capability is rated highest among other factors of the surrounding conditions for growth. Table 4.2-12 suggests that local companies in the industry vigorously plan for production expansion. Production of pharmaceutical products, especially medicines, is governed by economies of scale. Thus, expansion of production to an adequate level is expected to produce favorable results for the industry.

As for raw material, quality is highly rated, while cost and delivery schedule receive low rating. (Table 4.2-8) Note that around 80% of raw materials for pharmaceutical products is imported.

Finally, export marketing receives the lowest rating. From Table 4.2-10, it can be read that pharmaceutical products manufacturers in the country recognize growth potential for export markets. At the same time, however, they appear to recognize the shortage of marketing capability that is required to take advantage of opportunity offered by the growth potential of the export markets.

(2) Constraints against export growth

As in the case of other sub-sectors, the pharmaceutical products industry does not feel that physical distribution and infrastructure are significant constraints. In particular, transportation of raw materials, access to ports and airports, and factory site are considered to be small constraints. (Tables 4.2-15 and 4.2-16) As these elements are inter-related, the industry appears to have sufficient infrastructure for physical distribution.

As also in the case of other sub-sectors, the industry feels a large constraint relating to the education and training/BDS factor. In particular, Table 4.2-18 indicates that the industry feels difficulty in access to R&D support organizations. As the pharmaceutical products industry relies on R&D activity for its growth, the lack of R&D resources is a major constraint for export growth.

Table 4.2-21 Surrounding Conditions for Growth and Constraints for the Pharmaceutical Products Sub-sector

Surrounding conditions for growth			Constraints against export growth		
Rank	Five factors	Average	Rank	Five factors	Average
1	Supply capability	2.46	1	Physical distribution	2.51
2	Product development	2.25	2	Infrastructure	2.35
3	Human resource	2.06	3	Policy/legal regulation	1.92
4	Raw material	2.01	4	Finance	1.76
5	Export marketing	1.85	5	Education and training/BDS	1.23
Overall average		2.13	Overall average		1.95

4.2.3.4 Computer Software

(1) Surrounding conditions for growth

In terms of the surrounding conditions for growth, the computer software industry gives the highest score to the supply capability factor, as in the case of other sub-sectors. This suggests that the industry has recognizes growing trends in domestic production of software products. Also, evaluations on the raw material and product development factors exceed the overall average score.

On the other hand, the industry gives a lower-than-average score to the human resource factor, which is considered to be the primary input for the computer software industry. Within the human resource factor, employment of skilled workers and the labor cost receive low rating. (Table 4.2-9) This suggests that the industry feels difficulty in employing highly experienced engineers.

Similarly, the export marketing factor receives very low rating, especially the export sales channel and export procedures. (Table 4.2-10) As computer software exports involve the movement of intangible products and people, it is difficult to find an export channel consisting of traditional trading companies. Note that most of export procedures involve regulations related to the reception of foreign currency and the movement of people.

(2) Constraints against export growth

As in the case in other sub-sectors, the industry feels only small constraints in the areas of physical distribution and infrastructure. Note that movement of people is considered to be physical distribution for the computer software industry, and thus, access to ports/airports and the transportation (travel) cost are expected to be more important than other items. Table 4.2-15 indicates, however, that the industry does not evaluate conditions of these items favorably.

As for infrastructure, the constraint relating to water/gas/electricity supply is considered to be large, as seen in Table 4.2-16. For the computer software industry, only electricity supply is important among these utilities. On the other hand, the table indicates that telecommunications, which is the most important infrastructure for the computer software industry, is considered to be a relatively small constraint.

On the other hand, finance is viewed as a major constraint for export growth. In particular, the industry gives a low score to the collateral element[3] (Table 4.2-14).

Table 4.2-22 Surrounding Conditions for Growth and Constraints for the Computer Software Sub-sector

Surrounding conditions for growth			Constraints against export growth		
Rank	Five factors	Average	Rank	Five factors	Average
1	Supply capability	2.31	1	Physical distribution	2.53
2	Raw material	2.19	2	Infrastructure	2.23
3	Product development	2.02	3	Policy/legal regulation	1.86
4	Human resource	1.94	4	Education and training/BDS	1.65
5	Export marketing	1.62	5	Finance	1.58
Overall average		2.02	Overall average		1.97

4.2.3.5 Metalworking/machining

(1) Surrounding conditions for growth

The metalworking/machining industry gives relatively high scores to human resource and supply capability. In particular, the labor cost (human resource factor) and production expansion plans by local companies (supply capability factor) are highly rated. (Tables 4.2-9 and 4.2-12) The low labor cost constitutes a favorable condition for growth of the labor-intensive metalworking/machining industry in the country.

On the other hand, three factors - raw material, product development, and export marketing – fall over the overall average score. This has an implication that the industry is not export-oriented, or rather an import substitution industry that imports the raw materials of relatively high costs.

[3] Although it is out of scope of this analysis, the results of interview surveys conducted by the JICA study team suggest that the computer software industry does not have valuable assets (land and factory) that can be used as collateral. Although computer software companies have intangible assets (expertise and technology), many pointed out that financial institutions in Bangladesh were not capable of appraising their value and accepting them as collateral.

(2) Constraints against export growth

Similar to other industries, the metalworking/machining industry does not consider physical distribution and infrastructure to be major constraints for export growth. In the finance factor, short- and long-term finance is relatively highly rated. (Table 4.2-14) The industry perceives financial access as a small constraint, with low evaluation on other factor.

On the other hand, education and training/BDS is considered to be a very large constraint. In fact, all components of this factor show low scores. (Table 4.2-18) Thus, it is suggested that the lack of business support organizations constitutes a major constraint for export growth.

Table 4.2-23 Surrounding Conditions for Growth and Constraints for the Metalworking/machining Sub-sector

Surrounding conditions for growth			Constraints against export growth		
Rank	Five factors	Average	Rank	Five factors	Average
1	Human resource	1.84	1	Physical distribution	2.27
2	Supply capability	1.83	2	Infrastructure	1.99
3	Export marketing	1.57	3	Finance	1.85
4	Product development	1.50	4	Policy/legal regulation	1.71
5	Raw material	1.48	5	Education and training/BDS	0.86
Overall average		1.64	Overall average		1.74

4.2.3.6 Electrical and Electronics Products

(1) Surrounding conditions for growth

A scoring pattern for the surrounding conditions for growth by the electrical and electronics product industry is similar to that by the metalworking/machining industry. This is partly because both industries are dominated by small enterprises of labor-intensive type and their production process is similar to each other.

The industry gives relatively high scores to the human resource and supply capability factors. As seen in the metalworking/machining industry, the labor cost (human resource factor) and production expansion plans by local companies (supply capability factor) are highly rated. (Tables 4.2-9 and 4.2-12) On the other hand, low scores were given to the raw material and export marketing factors.

(2) Constraints against export growth

Again, a scoring pattern for constraints is similar to that for the metalworking/machining industry. Education and training/BDS receives low rating. As

seen in Table 4.2-14, the financing of both short- and long-term funds is considered to be a smaller constraint than other elements. This is also similar to the metalworking/machining sub-sector.

Table 4.2-24 Surrounding Conditions for Growth and Constraints for the Electrical/Electronics Products Sub-sector

Surrounding conditions for growth			Constraints against export growth		
Rank	Five factors	Average	Rank	Five factors	Average
1	Human resource	1.89	1	Physical distribution	2.18
2	Supply capability	1.86	2	Finance	1.90
3	Product development	1.56	3	Infrastructure	1.90
4	Raw material	1.55	4	Policy/legal regulation	1.66
5	Export marketing	1.18	5	Education and training/BDS	1.05
Overall average		1.61	Overall average		1.74

4.2.4 Summation and Overall Evaluation

Table 4.2-25 shows the average scores for the surrounding conditions for growth and the constraints against export growth, by sub-sector (the highest possible score is 3.0 for both). Ranked by the sum of the average scores for the surrounding conditions for growth and constraints against export growth, the pharmaceutical products sub-sector comes first, followed by computer software, jute products, food processing, metalworking/machining, and electrical and electronics products. They are then divided into three groups according to the overall score: the top-tier group consisting of pharmaceutical products and computer software; the second-tier group consisting of jute products and food processing, and the third-tier group comprising of metalworking/machining, and electrical and electronics products. Clearly, knowledge/information-intensive industries surpass labor-intensive ones.

Table 4.2-25 Overall Evaluation by Sub-sector

	Food processing	Jute Products	Pharmaceutical products	Computer software	Metalworking and machining	Electrical and electronics products
Surrounding conditions for growth	1.88	1.95	2.13	2.02	1.64	1.61
Constraint against export growth	1.87	1.81	1.95	1.97	1.74	1.74
Total	3.75	3.76	4.08	3.99	3.38	3.35
Ranking	4	3	1	2	5	6

4.3 Selection of Two Priority Sub-sectors

This section selects two sub-sectors that were to be targeted by the present Study from the six candidate sub-sectors. First of all, a method used for evaluation of the candidate sub-sectors in the selection process is described, followed by the workshop-based scoring method and its results.

4.3.1 Method of Scoring by Four Criteria

To select the two promising sub-sectors from the six candidates, the following four criteria were used for measuring the degree of prospect of each sub-sector.

A: Level of international competitiveness (Competitiveness)
B: Effective export market size (Potential market)
C: Surrounding conditions for growth (Growth potential)
D: Possibility to eliminate constraints against export expansion (Constraints)

The six candidate sub-sectors were scored for each of the four factors and the results were tabulated to determine relative ranking as shown in Table 4.3-1 below. Note that each score was on a four-point scale, from 0 to 1, 2 and 3.

Table 4.3-1 Evaluation Scoring Table for Candidate Sub-sectors

Evaluation item	Candidate six sub-sectors					
	1	2	3	4	5	6
A. Level of international competitiveness						
B. Effective export market size						
C. Surrounding conditions for growth						
D. Possibility to eliminate constraints against export expansion						
Total score						

(A) Level of international competitiveness (Competitiveness)

Among various indices that measure the current level of international competitiveness, "Trade Specialization Coefficient (TSC)" was used for the purpose of the Study, for required data are easily obtainable from trade statistics. Data for export and import were obtained from the "United Nations Commodity Trade Statistics Database" of the United Nations Statistics Division.

Trade Specialization Coefficient (TSC)

This index is calculated by the following formula on a value basis:

$$TSC = \frac{Export - Import}{Export + Import}$$

"1" denotes perfect export specialization (the product item is exported with no import), while "-1" indicates perfect import specialization (a product item is entirely imported with no export), and "0" means complete horizontal division of labor (export equals to import). TSC is widely used as a key index to measure the level of comparative advantage in export markets and is generally rated according to the following standard. Note that the value of export/import used for calculation of TSC in this Study is the cumulative total in recent three years (2002-2004).

1 – 0.6 : Very strong comparative advantage (most competitive in export markets)
0.6 – 0.2 : Strong comparative advantage
0.2 – -0.2 : Export and import in balance
- 0.2 – -0.6 : Weak comparative advantage
-0.6 – -1 : Very weak comparative advantage (least competitive in export markets)

Then, in the present Study, the TSC score was converted to the four-point scale score, as follows. For instance, "1" in TSC is equivalent to 3 points and "-1" as zero point.

Formula of Marks (y)
y=1.5x+1.5
Where:
y: Evaluation score
x: TSC score

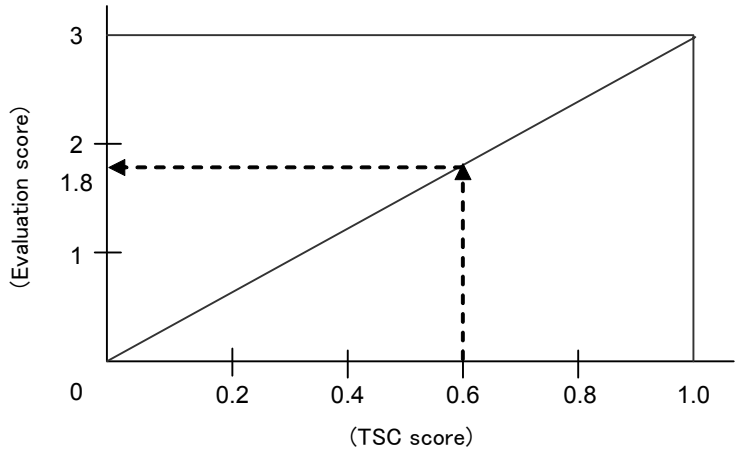


Figure 4.3-1 Score Conversion

(B) Effective export market size (Potential market)

To measure a possible export market size for the sub-sector in Bangladesh, the top three export destination countries of each sub-sector for Bangladesh were first selected from trade statistics. Secondly the import value of the three countries, namely import from Bangladesh plus other countries, was summed up. It is called the "Effective Export Market Size (EMS)" for the sub-sector in this Study.

Table 4.3-2 presents the results of the effective market size for three sub-sectors as a sample. The sub-sector B has the largest effective market size and sub-sector C has the smallest.

Table 4.3-2 Effective Export Market Size (Sample)

Sub-sector	Top three destinations of export from Bangladesh	Import value of the destination country (Million US$)
Sub-sector A	1) India	19,382.4
	2) Philippines	8,265.7
	3) Nepal	104.9
	Effective Export Market Size (EMS)	**27,753.0**
Sub-sector B	1) Brazil	30,746.9
	2) Belgium	1,784.8
	3) Pakistan	171.5
	Effective Export Market Size (EMS)	**32,703.2**
Sub-sector C	1) Iran	164.6
	2) Turkey	46.7
	3) Pakistan	31.6
	Effective Export Market Size (EMS)	**242.9**

Finally the EMS score was converted, giving the full mark of the point 3 to such sub-sector that has the largest EMS value and the point 1 to such sub-sector that has the smallest EMS. Then the other sub-sectors were computed in the proportion of the EMS value as follows.

Formula of EMS score

$x = 2.0 \times (P - q)/(Q - q) + 1$

Where:

- Q: The highest EMS value among all the sub-sectors
- q: The lowest EMS value among all the sub-sectors
- P: EMS value of the sub-sector
- x: EMS score for the sub-sector

(C) Surrounding conditions for growth (Growth potential)

The level of international competitiveness in "A" above reflects the past records and does not necessarily suggest a future prospect. Information contained in section 4.2 of the current Report was given to evaluators or participants in the sub-sector selection workshop. Surrounding conditions for growth are scored as the criterion (C) on the basis of the following five factors.

1) Sufficient availability and ease of purchasing raw materials of high quality **(raw material)**
2) Sufficient stock of skilled workforce in the sub-sector, together with the sub-sector's popularity for workers **(labor force)**
3) Availability of established export channels and efficient distribution **(marketing)**
4) Presence of R&D organizations and universities relating to the sub-sector **(product development capability)**
5) Extent of new investment in the sub-sector **(increasing investment)**

They were scored in a single figure by giving point 0 to 3 to each sub-sector with reference to the following criteria. Scoring is allowed to use a decimal point e.g. 2.5.

Point 3: Surrounding conditions are very good for growth
Point 2: Surrounding conditions are fairly good for growth
Point 1: Surrounding conditions are unfavorable for growth

Point 0: No possibility to growth

(D) Possibility to eliminate existing constraints against export expansion (Constraints)

The JICA Study Team identified five serious constraints against export promotion of the six sub-sectors as attached in Table 4.3-3. Scoring was made in a single figure by giving point 0 to 3 to each sub-sector on the basis of the following criteria. It was allowed to use a decimal point in scoring e.g. 2.5.

The scoring standard is set as follows, provided that it may be divided further as required to reflect actual conditions.

Point 0: Constraints based on natural conditions, culture, and religion
Point 1: Constraints requiring significant investment and long-term effort to eliminate
Point 2: Constraints requiring relatively small investment and short-term effort
Point 3: No significant constraints or few constraints easy to eliminate

Table 4.3-3 Constraints against Export Expansion for Six Sub-Sectors

No.	Food Processing	Pharmaceutical Products	Jute Products	Light Engineering Products	Electrical and Electronics Products	Computer Software
1	Shortage of primary food products limits raw material availability for processed food export.	API is imported and main production is limited to formulation of generic drugs.	State-own jute mills are inefficient and half of them is now closed.	Production facilities and technologies are outdated, thus product quality being inferior to imported goods.	Imported goods have competitiveness much more than those locally manufactured.	Access to international markets have not been well established and Bangladesh lags behind India in securing USA market.
2	There is a lack of high-grade processing facility, leading to using primitive processing technologies.	R&D for new drug is quite low and thus formulation of generic drugs remains as main business.	There is limitation of raw jute cultivation area due to competition with cash crops including rice production.	Most raw materials are imported.	As for home electric appliances, domestic market is too small for foreign companies to invest in Bangladesh.	There is need for specific language skills in entering non-English speaking markets.
3	Cold chain/cold storage for loss minimization and freshness keeping is not easily available.	Foreign multinational companies are unwilling to produce their patented drugs in Bangladesh, due to WTO/TRIPS preferential treatment.	Production facilities are outdated and production management technology is low.	There is a lack of large assembly companies that has forward/backward linkages with supporting industries.	There is a lack of capability in developing new products by domestic companies themselves.	Business relations with foreign system integrators have not been well established.
4	Sanitation control standards do not meet export requirements.	Meeting import standards/regulations in export markets is difficult, due largely to lack of Drug Testing Laboratory (DTL) facilities.	Progress has not been really made in developing new usage and application of jute products.	Industrial standard and testing facilities are yet to be sufficiently established to meet international standards.	Ability to develop export market is very low.	Human resources like project manager, who plays a leading role in securing a business order, are in short of supply.
5	Export marketing ability is very low.	Domestic drug price is controlled at low levels, resulting in unwillingness for foreign companies to enter the market.	Jute is in intensive competition with synthetic fibers whose product development advances way ahead of jute.	Mold- and die-making technology is at low level.	Precision and high-tech E & E products are hardly produced in Bangladesh, lacking advanced technologies.	Access to finance is not easy because software companies do not possess credible collaterals.

4.3.2 Scoring

(A) Level of international competitiveness (Competitiveness)

Prior to discussion on a general outline of the candidate six sub-sectors, each sub-sector was defined according to the classification table sourced from the United Nations Commodity Trade Statistics Database by HS code. By using the same classification and the database, TSC was calculated for each sub-sector and was converted to a score on a four-point scale (0 – 3 points). The result is shown in Table 4.3-4 below.

Table 4.3-4 Competitiveness: Criterion (A)

(full marks = 3.0)

Sub-sector		1. Food Processing	2. Pharmaceutical Products	3. Jute Products	4. Light Engineering Products	5 Electrical and Electronics Products	6. Computer Software
Trade	Export	404.9	10.8	323.1	37.3	17.4	18.3
	Import	1,505.8	90.7	11.6	819.3	627.0	1.1
TSC		-0.58	-0.76	0.93	-0.91	-0.95	0.89
Score		0.63	0.32	2.90	0.14	0.08	2.84
Rank		3	4	1	5	6	2

Note: Average of 2002-2004 in Million US dollars.
Source: Computation by the JICA Study Team using United Nations Commodity Trade Statistics Database

Naturally, jute products and computer software industries with high export ratios ranked first and second, respectively, by scoring close to three points. The remaining sub-sectors show their TSC below 0, indicating a significant import surplus. Among them, the food processing sub-sector shows a relatively high TSC score (-0.58) as supported by firm exports of frozen shrimps/pawns. The pharmaceutical products sub-sector represents companies that make pharmaceutical products by using imported raw materials. While pharmaceutical exports have been growing steadily, the domestic market still constitutes the mainstream consumer, which is reflected to a low TSC of -0.76.

(B) Effective Export Market Size (EMS: Potential market)

As in (A), the EMS calculation results from using the classification table and the database are summarized in Table 4.3-5. As opposed to (A), jute and software show relatively small effective market sizes, whereas electric and electronic products (E&E) and light engineering products (LEI) represent larger effective markets. One reason for this is the difference in delineation of these sub-sectors. The E&E and LEI sub-sectors make and sell a large variety of products and their potential market thus tends to become relatively large.

On the other hand, jute and software are limited in a variety of offerings, and together with a relatively small volume of global trade, their EMS values are relatively small.

Table 4.3-5 Potential Market: EMS, Criterion (B)

(full marks = 3.0)

Sub-sector	1. Food Processing	2. Pharmaceutical Products	3. Jute Products	4. Light Engineering Products	5 Electrical and Electronics Products	6. Computer Software
EMS*	23,670	19,836	283	78,921	221,965	7,965
Score	1.21	1.18	1.00	1.71	3.00	1.07
Rank	3	4	6	2	1	5

Note * : Average of 2002-2004 in Million US dollars
Source: Computation by the JICA Study Team using United Nations Commodity Trade Statistics Database

(C) Surrounding Conditions for Growth (Growth Potential)

The criteria (A) and (B) were calculated directly from the United Nations Commodity Trade Statistics Database. On the other hand, the criteria (C) (growth potential) and in (D) (constraints against export growth) are represented by the average value of scores (0 – 3) given by personal evaluation of related persons. Evaluation was asked in two occasions in order to reflect views of as many people as possible. One was the sub-sector selection workshop, and the other was the questionnaire survey conducted for 20 companies in a sub-sector, as discussed in section 4.2 of the current Report.

(1) Evaluation at the workshop

A Workshop for selection of the two most potential sub-sectors was held on June 3, 2007 at a conference room of EPB. The agenda is shown as Table 4.3-6. Items 1), 2), 3) and 4-1 of the agenda were explained by the JICA Study Team prior to scoring by participants in the agenda 4-2).

A total of around 40 participants in the workshop were grouped into six groups for scoring of (C) and (D) as follows. Note that there were two groups that were composed of the middle management of the EPB because the number of participants from the EPB's middle management was large

Group A: Directors of EPB or higher ranked persons
Group B: Middle management of EPB-Group 1
Group C: Middle management of EPB-Group 2
Group D: ITC consultants and others

Group E: Japanese ODA Task-Force

Group F: The JICA Study Team

Table 4.3-6 Agenda for Workshop for Sub-sector Evaluation cum Selection

1)	Definition and Classification of Sub-sectors
	1-1 Definition and Classification
	1-2 Table for Sub-sector Classification by HS 1996 Code
2)	Current States and SWOT Analysis of Six Sub-sectors
	2-1 Current States – Summary of Six Sub-sectors
	2-2 SWOT Analysis
	2-3 Surrounding Conditions for Growth in Six Sub-sectors
	2-4 Constraints against Export Expansion in Six Sub-sectors
3)	Selection Method
4)	Scoring and Ranking
	4-1 Marks for Trade Specialization Coefficient (TSC) and Effective Export Market Size (EMS)
	4-2 Final Marks and Ranking for Six Sub-sectors

A group presented one mark for each six-sub-sector for (C) and (D) after discussion among group members by following the scoring method mentioned in 4.3.1. Table 4.3-7 shows results of evaluation for (C).

Table 4.3-7 Growth Potential: Criterion (C) – Workshop

(full marks = 3.0)

Group	1. Food Processing	2. Pharmaceutical Products	3. Jute Products	4. Light Engineering Products	5 Electrical and Electronics Products	6. Computer Software
A	1.75	1.19	1.97	0.89	0.24	1.94
B	1.70	2.20	2.20	1.60	0.90	2.40
C	2.20	2.10	2.20	2.10	1.60	1.60
D	1.20	1.60	2.40	1.10	1.20	2.50
E	1.40	1.20	2.10	0.50	0.20	1.80
F	1.40	1.60	1.80	1.30	1.30	2.30
Average	1.61	1.65	2.11	1.25	0.91	2.09
Rank	4	3	1	5	6	2

Source: Sub-sector Selection Workshop on June 3, 2007

Note that people in Groups A through F were not stakeholders, such as representatives of trade associations and individual companies in the six sub-sectors. The resultant ranking is mostly the same as that under Criterion (A) (competitiveness, using TSC), except that ranks 3 and 4 are reversed in the two results.

(2) Scoring by the Questionnaire Survey

The results of the questionnaire survey discussed in section 4.2 show somewhat different scoring patterns. The average scores representing the surrounding conditions for growth (subjective evaluation by 20 companies in the sub-sector) are presented below. Refer to details in section 4.2 of the current Report.

Table 4.3-8 Growth Potential: Criterion (C) – Questionnaire

(full marks = 3.0)

Group	1. Food Processing	2. Pharmaceutical Products	3. Jute Products	4. Light Engineering Products	5 Electrical and Electronics Products	6. Computer Software
Average	1.88	2.11	1.95	1.64	1.61	2.02
Rank	4	1	3	5	6	2

Source: Questionnaire survey of the JICA Study Team (via a local consulting company)

Among the candidate sub-sectors, people in the pharmaceutical products industry believe in their growth potential most strongly, followed by those in computer software and jute products industries. Note that this question does not represent evaluation on possibility of export expansion but merely asks about growth potential of the sub-sector as a whole. In other words, respondents in the LEI and E&E industries give lowest scores to the growth potential element, ranked fifth and sixth. This means that they do not have a bright prospect for future of their sub-sectors.

(D) Possibility to eliminate existing constraints against export expansion (Constraints)

The same way was taken for criterion (D) as explained in the previous section (C) by using the scoring method mentioned in section 4.3.1.

(1) Evaluation at the workshop

In Tables 4.3-9 and 4.3-10, the figures mean “the higher score the lesser constraints” for the sub-sector. The rank of sub-sectors in Table 4.3-9 shows exactly the same results as those for the growth potential (Table 4.3-7).

Table 4.3-9 Constraints: Criterion (D) – Workshop

(full marks = 3.0)

Group	1. Food Processing	2. Pharmaceutical Products	3. Jute Products	4. Light Engineering Products	5 Electrical and Electronics Products	6. Computer Software
A	1.00	0.80	1.40	0.50	0.45	1.00
B	1.50	2.00	2.00	1.50	1.00	2.00
C	2.00	1.50	3.00	1.50	1.00	3.00
D	1.50	1.80	2.32	1.30	1.40	2.45
E	1.50	1.25	1.63	0.70	0.60	1.70
F	1.30	1.50	1.90	0.90	0.80	1.90
Average	1.47	1.48	2.04	1.07	0.88	2.01
Rank	4	3	1	5	6	2

Source: Sub-sector Selection Workshop on June 3, 2007

(2) Scoring by the Questionnaire Survey

The jute products sub-sector faces more serious constraints (Rank 4) than those expected by others/non-stakeholders (Rank 1) in Table 4.3-9. People engaged in software and pharmaceutical products seem to have confident for growth (see Table 4.3-8) and also feel less constraints for export expansion (refer to Table 4.3-10). The difference, however, is not very large in terms of the averaged score itself.

Table 4.3-10 Constraints: Criterion (D) – Questionnaire Survey

(full marks = 3.0)

Group	1. Food Processing	2. Pharmaceutical Products	3. Jute Products	4. Light Engineering Products	5 Electrical and Electronics Products	6. Computer Software
Average	1.87	1.95	1.81	1.74	1.74	1.97
Rank	3	2	4	5	5	1

Source: Questionnaire survey of the JICA Study Team (via a local consulting company)

4.3.3 Summary of Score, Ranking and Selection

First, the results obtained in section 4.3.2 were summarized and ranked and finally two promising sub-sectors were selected in this section. Table 4.3-11 shows the total scores and the total score-based ranking of the sub-sectors made at the workshop and through the questionnaire survey made to 20 enterprises of the said sub-sector.

Table 4.3-11 Grading of Six Sub-sectors by Criteria ABCD

(full marks = 3.0)

		1. Food Processing	2. Pharmaceutical Products	3. Jute Products	4. Light Engineering Products	5 Electrical and Electronics Products	6. Computer Software
A. Export competitiveness		0.63	0.32	2.90	0.14	0.08	2.84
B. Effective market size		1.21	1.18	1.00	1.71	3.00	1.07
A + B		1.84	1.50	3.90	1.85	3.08	3.91
Workshop	C. Growth potential	1.61	1.65	2.11	1.25	0.91	2.09
	D. Lesser constraints	1.47	1.48	2.04	1.07	0.88	2.01
	C + D	3.08	3.13	4.15	2.32	1.79	4.10
	Total marks	4.92	4.63	8.05	4.17	4.87	8.01
	Rank	3	5	1	6	4	2
Questionnaire	C. Growth potential	1.88	2.13	1.95	1.64	1.61	2.02
	D. Lesser constraints	1.87	1.95	1.81	1.74	1.74	1.97
	C + D	3.75	4.08	3.76	3.38	3.35	3.99
	Total marks	5.59	5.58	7.66	5.23	6.43	7.90
	Rank	4	5	2	6	3	1

Table 4.3-12 Priority Ranking of Six Sub-sectors by Score

Sub-sector	Workshop	Questionnaire
	Score (Rank)	Score (Rank)
1) Jute products	8.05 (1)	7.66 (2)
2) Computer software	8.01 (2)	7.90 (1)
3) Food processing	4.92 (3)	5.59 (4)
4) Electric and Electronic products	4.87 (4)	6.43 (3)
5) Pharmaceutical products	4.63 (5)	5.58 (5)
6) Light engineering industry	4.17 (6)	5.23 (6)

Source: The JICA Study Team study

The scoring by the two channels gave jute products and computer software the first and the second places respectively with a great margin to the third place and below. With this fact, the both parties, the JICA Study Team and the Ministry of Commerce, agreed to select the jute products and computer software as two priority sub-sectors for the present Study.

Implementation of Pilot Projects and the development of the comprehensive action programs were to be carried out for the selected two sub-sectors.

Selected two sub-sectors

- Jute products

- Computer software

Table 4.3-13 shows the ranking of the six sub-sectors according to the four criteria for reference.

Table 4.3-13 Ranking of Six Sub-sectors by Four Evaluation Criteria

	1. Food Processing	2. Pharmaceu-tical Products	3. Jute Products	4. Light Engineering Products	5 Electrical and Electronics Products	6. Computer Software
A. Competitiveness	3	4	1	5	6	2
B. Potential market	3	4	6	2	1	5
C. Growth potential						
- Workshop	4	3	1	5	6	2
- Questionnaire	4	1	3	5	6	2
D. Constraints						
- Workshop	4	3	1	5	6	2
- Questionnaire	3	2	4	5	5	1