Preparatory Study of Private Sector Development Programme in Bangladesh (Industrial Development, Trade & Investment Promotion) Final Report

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Japan International Cooperation Agency

Mitsubishi UFJ Research and Consulting Co.,Ltd. World Business Associates Co.,Ltd.



Acronym

ADB	Asian Development Bank
ADP	Annual Development Programme
API	Active Pharmaceutical Ingredient
APO	Asian Productivity Organization
APSCL	Ashuganj Power Station Company Limited
ASEAN	Association of South East Asia Nations
BAPEX	Bangladesh Petroleum Exploration & Production Company
BASIS	Bangladesh Association of Software & Information Services
BB	Bangladesh Bank
BBS	Bangladesh Bureau of Statistics
BCC	Bangladesh Computer Council
BDS	Business Development Service
BEIOA	Bangladesh Engineering Industry Owners' Association
BEPZA	Bangladesh Export Processing Zones Authority
BEST	Better Work and Standard Programme
BEZ	Bangladesh Economic Zone
BEZA	Bangladesh Economic Zone Authority
BFCCI	Bangladesh Federation of Chambers of Commerce and Industry
BFTI	Bangladesh Foreign Trade Institute
BICF	Bangladesh Investment Climate Fund
BIFFL	Bangladesh Infrastructure Finance Fund Limited
BIFT	Bangladesh Institute of Fashion Technology
BIM	Bangladesh Institute of Management
BITAC	Bangladesh Industrial Technical Assistance Center
BMOGC	Bangladesh Mineral Oil & Gas Corporation
BIWTA	Bangladesh Inland Water Transport Authority
BIWTC	Bangladesh Inland Water Transport Corporation
BOI	Board of Investment
BOP`	Bottom of the Pyramid
BPDB	Bangladesh Power Development Board
BQSP	Bangladesh Quality Support Programme
BSCIC	Bangladesh Small and Cottage Industries Corporation
BTC	Bangladesh Tariff Commission
BSTI	Bangladesh Standards and Testing Institution
BTMA	Bangladesh Textile Mills Association
BWTG	Better Work in Textile and Garments
CBA	Collecting Bargaining Agent
CCI	Chamber of Commerce and Industry

CEPZ	Chittagong Export Processing Zones
CIDA	Canadian International Development Agency
СРІ	Consumer Price Index
CSR	Corporate Social Responsibility
CWASA	Chittagong Water Supply and Sewerage Authority
DFID	Department for International Development in UK
DoT	Deed of Transfer
DSE	Dhaka Stock Exchange
DWASA	Dhaka Water Supply and Sewerage Authority
EN	Exchange Note
EPB	Export Promotion Bureau
EPZ	Export Processing Zones
ERD	Economic Relation Department
ETP	Effluent Treatment Plants
EU	European Union
EZ	Economic Zone
FBCCI	Federation of Bangladesh Chamber of Commerce and Industry
FDI	Foreign Direct Investment
FS	Feasibility Study
FTA	Free Trade Agreement
GDP	Gross Domestic Product
GNI	Gross National Income
GNS	Gross National Saving
GoB	Government of Bangladesh
GSP	Generalized System of Preferences
GTI	Gross Total Investment
GTZ	Deutsche Gesellshaft Fur Technische Zusammenarbeit
ICT	Information and Communications Technologies
IFC	International Finance Corporation
ILO	International Labour Organization
IMF	International Monetary Fund
INSPIRED	Integrated Support to Poverty and Inequality Reduction through Enterprise
	Development
IOT	Input-output Table
ISCID	International Center for the Settlement of Investment Dispute
ISO	International Organization for Standardization
ISP	Internet Service Provider
IT	Information Technology
JBCCI	Japan Bangladesh Chamber of Commerce and Industry
JBIC	Japan Bank for International Cooperation
JCIAD	Japan Commerce & Industry Association in Dhaka
JV	Joint Venture

KEPZ	Korean Export Processing Zones
L/C	Letter of Credit
LCG	Local Consultative Group
LDC	Least Developed Countries
LFMAB	Leather goods & Footwear Manufacturer Association of Bangladesh
LEPBPC	Light Engineering Product Business Promotion Council
LFS	Labor Force Survey
MDGs	Millennium Development Goals
MES	Monitoring of Employment (Labour Force) Survey
MFA	Multi Fiber Agreement
MIGA	Multilateral Guarantee Investment Agency
MOC	Ministry of Commerce
MOF	Ministry of Finance
MRT	Mass Rapid Transportation
NBR	National Board of Revenue
NCLS	National Child Labor Survey
NGO	Non-Governmental Organization
NORAD	Norwegian Agency for Development Cooperation
NPO	National Productivity Organization
NWPGCL	North West Power Generation Company Limited
ODA	Official Development Assistance
OEM	Original Equipment Manufacturer
OPIC	Overseas Private Investment Corporation
PCB	Polychlorinated biphenyl
PEZ	Private Economic Zone
PLCE	Post Literacy and Continuing Education
PPP	Public-Private-Partnership
PRSP	Poverty Reduction Strategy Paper
PSDSP	Private Sector Development Support Project
PVC	Polyvinyl Chloride
RMG	Ready-Made-Garments
SAARC	South Asia Association for Regional Cooperation
SAFTA	South Asia Free Trade Agreement
SCBs	State-owned Commercial Banks
SCITI	Small & Cottage Industry Training Institute
SDC	Swiss Agency for Development and Cooperation
SEDF	South Asia Enterprise Development Facility
SIDA	Swedish International Development Cooperation Agency
SME	Small and Medium-sized Enterprise
SMEF	Small and Medium-sized Enterprise Foundation
SPA	Specialty Store Retailer of Private Label Apparel
ТА	Technical Assistance

ТОТ	Training of Trainers
TPSP	Trade Policy Support Programme
TQM	Total Quality Management
TSL	Two Step Loan
TRIPS	Trade-Related Aspects of Intellectual Property Rights
TVET	Technical and Vocational Education and Training
UD	Utilization Declaration
UNIDO	United Nations Industrial Development Organization
VAT	Value Added Tax
WB	World Bank
WTO	World Trade Organization
WZPDCL	West Zone Power Distribution Company Limited

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Executive Summary

Chapter 1. Introduction: Outline of Study

(1) Background of the Study

- Bangladesh has achieved high economic growth at the pace of 6% annual rate since 2004, and firm economic development continues to be expected by the driving force of export of garments, knitted products and overseas worker remittance. As of the end of financial year 2010, while service industry represents about 50% and the agriculture, forestry and fisheries industry represent about 20% of the GDP, mining and manufacturing industry occupies approximately 30%, among which the manufacturing industry represents 18%.
- In manufacturing industry, garment products export has been growing every year, and according to the long-term economic strategy of the current administration, it is aimed to increase the share of the manufacturing industry in GDP to 30% by the 2021 fiscal year. According to the 6th five-year plan (the 2011 to 2015 fiscal year), the government has set a target to increase the above share to over 20%.
- However, in order to achieve the above target, Bangladesh has to overcome various problems in respect of environment of trade, investment and human resources, etc.
- Firstly, although cheap garment products occupy about 80 % of export value and most of the products are exported to Europe and the US, it is in an opaque situation how far the current cost competitiveness can be maintained, given the recent situation of raising the minimum wages or active industrial actions. Therefore, diversification of export products and export countries as well as strengthening competitiveness by the added value of garment products is critical for the sustainable economic growth.
- Secondly, as far as investment is concerned, it is still low standard in terms of contribution to GDP (about 24%). Among others, the issues of investment climate include: a) improvement of infrastructure such as electric power, energy, transportation, and communication; b) the land acquisition of Export Processing Zone and Special Economic Zones; c) improvement of investment rules and procedures; d) improvement of legal certainty; and e) improvement of long and medium term financial access needed for manufacturing companies in particular for small and medium enterprises.
- Thirdly, with related to human resources, since most of domestic workers are unskilled workers in informal sector such as garment industry, they have not mastered skills needed for formal sector. Therefore, it is urgently needed to upgrade human resources in private sector in order to generate employment, diversify industries and increase value addition.
- Taking the above mentioned situation into account, JICA has decided to conduct the Preparatory Study of Private Sector Development in Bangladesh (hereinafter referred to as "the Study") to organize and propose prioritized issues, high potential industrial sectors and assistance strategies in future cooperation in private sector development in Bangladesh. JICA has assigned the Consortium of Mitsubishi UFJ Research and Consulting Co., Ltd. and World Business Associates Co., Ltd. (hereinafter referred to as "the Study Team") to conduct the Study.

(2) Objective of the Study

The objectives of the study can be summarized as in the following three points:

To review and organize current situation and issues with regard to private sector in Bangladesh through interviews and questionnaire survey with the relevant authorities and private companies in both Bangladesh and overseas as well as the review of the relevant materials made by the government, international donors and various research institutes.

While comparing global competitiveness and export potential through industrial value chain analysis of the major industries which have been recognized by the relevant policies, domestic and foreign investors and companies, to summarize the constraints and issues towards industry development and trade & investment promotion.

To examine and propose long term strategies of private sector development in Bangladesh and analyze the important issues to be addressed by the government of Bangladesh by taking into



account the and above and intentions of the government. In addition, the contents of the future JICA's cooperation programs and candidate projects shall be organized and proposed.

Chapter 2. Current Investment Environment in Bangladesh

(1)Trend of macro economy and financial conditions

- Bangladesh's GDP reached approximately USD 100 billion and the country is ranked at the 58th largest economy in the world. It's GDP has grown 5 to 6% per year in the last decade. It can be said that Bangladesh is growing sustainably.
- Along with Bangladesh's economic growth, investment and savings also is growing. Those amount occupies 20 to 25% of GNI. (The ratio varies depending on investment and savings)
- Currency exchange rate of taka has been decreasing through almost in all the period even before 20003 when Bangladesh introduced floating exchange rate regime.
- · Amounts of import, export and other major indices are growing a lot.
- Regarding the breakdown of GDP for the Primary, the Secondary and the Tertiary industry is 20%, 30% and 50% respectively.

(2)Trend of labor market

- Labor population in Bangladesh is about 57 million out of 140 million, its total population. The total population is still growing.
- The average age of labor population is still young, but gradually coming higher.
- About 50% of total population is engaged in the Primary industry.
- Labor cost still keeps one of the lowest levels in Asia, but has been increasing at more than 10% after 2007.
- Unique situation in Bangladesh is inward remittance from Bangladeshi workers in overseas countries. The remittance amount reached USD 10 billion a year in 2010.
- There are some issues in labor market such as child labor, labor dispute from increasing wages. Another issue is very large size of informal sector.

(3)Trend of export and import

- Both of import and export becomes almost four times from 2000 to 2010. However, the problem is continuous trade deficit.
- In 2010, the major destination of Bangladeshi export is western countries; US: about 25%, Germany 14%, Great Britain 9% among the total amount. Export to Japan occupies only about 2%.
- Major export products is garments and textile, Jute, and frozen food (including prawn). Especially garment and textile is the largest export sector by far and occupies about 70% of the total export.
- In 2010 much of imports come from Asian countries such as China (16%), India (14%) and Singapore (7%). The import from Japan occupies about 4% of the total import.
- The major import products are petro products, cotton and edible oil.

(4)Trend of investment and investment environment

- FDI has grown from 2001 to 2009, even though there is some fluctuation of growth rate. The amount of FDI has become three times larger in 2008 compared to 2001's. Recently the investment from Asia and Middle East has been increasing.
- The domestic investment is approximately Taka 500 billion in 2010. There is a decrease of FDI in 2007 and 2008, and 2009's figure is around Taka 200 billion after its peak in 2006 at Taka 400 billion. In 2006, FDI in textile industry was the largest, but in 2010, it was replaced by service industry and followed by agro industry and chemical industry.
- In power sector, Bangladesh Development Board (BPDB) which was established in 1972 has been in charge of power supply in terms of planning, constructing, operating generation and transmission equipment. After 1996 it is under the process of separation of generation and transmission and has been preparing to become a public corporation.
- In drinking water sector, Dhaka Water Supply and Seweage Authority(DWASA) and Chittagong Water Supply and Seweage Authority(CWASA) supply to household, commercial facility and manufacturing plants. But tap water system has not been developed in rural area



and 97% of its population relies on underground water.

- The road system has not been sufficiently developed. Although major road system to Dhaka from other cities has been developed there is heavy traffic jam in the city and its road condition is very rough. There are eleven airports in Bangladesh and international airports are located in Dhaka, Chittagong and Syrhet.. River transportation is well developed and is operated in about 250 major rivers from north to south in Bangladesh. Major ports are located in Chittagong and Mongla.
- Regarding telecommunication, although fixed telephone has been spread below 1% of population, the usage of cell phone is very high at around 30%. In addition, wireless internet connection service, WiMAX has already started.
- Regarding investment from foreign business companies, there are three types of business establishments: local subsidiary company; branch office; and representative office. According to "Doing Business 2012" by World Bank, Bangladesh is ranked at the 86th in 183 countries in terms of easiness of the procedure of establishing legal entity. The number of procedures and necessary period are at the average among Asian countries.
- There are many issues in investment environment perceived by foreign companies and institutions. One of the most serious constraints is underdevelopment of infrastructure such as shortage of industrial land, shortage of utility (electricity, gas and water). Other constraints are related to governance issues such as red tape, complicated and time consuming licensing requirement. Further issues are regarding financial matters such as late L/C clearance and failure of remittance.

(5)Structure of industries

- Bangladeshi government has taken policies of relatively free trade and aspired for world market.
- Recently its industry ranges widely starting from traditional and low cost labor intensive industries to knowledge and high tech base industries such as ICT.
- Commerce and services occupies about 50% of GDP. However, almost 50% of labor population is still engaged in agriculture and other Primary industries.

Chapter 3. Policy and institutional analysis on the private sector development in Bangladesh

(1) Industrial development policy, programs and institutions

- Setting as a issue the promotion of ICT-related products and ICT-related services as well as the development of SMEs, the National Industrial Policy(2010-2015) has identified initiatives of the private sector as the engine for the realization of various programs. It focuses on the economic development through the promotion and diversification of export. Agro-processing industry and labor-intensive industries are expected to play a key role for industrial development. The export is indispensable factor for the realization of industrialization programs. To be more specific, those programs contribute to a sound trade balance by the functions of import-substitution, and create competitive advantages based on experiences in domestic market. It is also expected to provide employment opportunities to those who left from the primary sector by the promotion of agro processing industry.
- This policy has identified 31 industries for key strategic industry, but the prioritized industries are too many, and differ from policy by policy. Moreover, action plans for each policy have not been formulated yet. Some associations evaluate critically Ministry of Industry pay attention to the interests of public companies rather than promotion of SMEs.
- SME Foundation, BSCIC, BITAC and BSTI exist under the supervision of the Ministry of industry. However, these serve as a vertical organization, so that horizontal cooperation and coordination among them is so weak.

(2) Trade promotion policy, programs and institutions

The Ministry of Commerce is responsible for the delineation of trade policy, and the EPB is functioning as one of its implementation agencies. The trade promotion policy has been



developed in close coordination with other related ministries and introduced in September 2009. The major objectives of this policy may be summarized as: the promotion of free-trade policy in conformity with the rules and regulations set by WTO and the phenomena of economic globalization taking in recent years; promotion of labor-intensive industries and development of export-oriented commodities; development of higher-end quality products capitalizing on the most-modern technologies and designs; diversification of international markets; promotion of backward and forward linkage for the development of new products for Export, and so on.

- Export promotion programs contain project finance with a low interest rate, cash incentive, exemption of corporate tax, a bonded factory for prioritized industries. However, those programs should be improved because they are not catered for potential industries for export, while executed only for RMG sector which has already good track record..
- EPB does not have sufficient number of specialists capable to analyze promising products in each sector, target market trends, competition situation, demanded quality standard and design, data for consumer's preference. As a result of this, EPB cannot show an effective strategy for each market to private sector.

(3) Investment promotion policy, programs and institutions

- Based on Foreign Private Investment Act in 1980 regulates the following matters: the opening of permanent premises by foreign invest in Bangladesh and its procedures; details on various investment incentives; monitoring and control of foreign exchanges; provision of fair and equitable treatment to foreign investors; and so on. The Act further defines various investment incentives to Bangladesh as follows: tax holidays; concessionary duty on imported capital machinery; tax exemption on intellectual property rights; tax exemption on export-oriented companies. As a matter of fact, tax incentive is applied to 24 industries, which is not consistent with industrial policy and export promotion policy.
- The BOI, BSCIC, BEPZA, BEZA and PPP office are functioning as agencies of investment promotion policy. As these agencies have their own permission authority, it is not clear for foreign investors about who controls of the entire investment matters and how one controls with responsibilities.
- The most important function of BOI is the "one-stop service" concerning investment permission. It is true that BOI provides the "one-stop service" for application procedures within BOI, but "one-stop service" in overall investment procedures doesn't work well, since important services such as licenses controlled by other related ministries and work permission have been out of this service.

(4) SME development policy, programs and institutions

- The SME development policy has been introduced in 2005 by the initiatives of the Ministry of Industries (MOI), focusing on the objectives on various Poverty Reduction Strategies stated in the Millennium Development Goals set by the United Nations. This strategic policy defines that the SMEs are indispensable entities required for the development of subsistent economies and reduction of poverty in Bangladesh, and various assistances are extended to SMEs in the fields of technology development, human resource development, and modernization of production plants including the development of industrial estates.
- The manufacturing industry is under the custody and administration of MOI and international trade, distribution and service industries are under the custody and administration of the Ministry of Commerce. There is neither government organization nor authority that administrates and manages the whole categories of SMEs ranging from manufacturing industries to service industries in integrated way. Two organizations substantially supporting SME development make and execute SME policy under the MOI are Bangladesh Small & Cottage Industries Corporation(BSCIC) and SME Foundation. However, cooperative relations between these two organizations are weak. There is no independent law or act regulates the activities of SMEs. The definition and classification of industry are stipulated in the "Industry policy-2010" set by MOI. Linkage programs between large companies and SMEs as well as the programs for developing cluster have not been formulated yet.





(5) Development and issues of Economic Processing Zone (EPZ) and Economic Zone (EZ)

- Bangladesh has limited land, and agricultural area occupies lots. Industrial estate is short. The Government has built 8 EPZs in Bangladesh nationwide. At present, 5 EPZs of Chittagong, Dhaka, Comila, Karnaphuli and Adamjee have been fully occupied by existing investors and there is no available land for new investment. On the other hand, there is a plenty of vacancy available for new investors in the 3 EPZs of Mongla, Ishwardi and Uttara, where there are less investors and tenants due to far distance from Chittagong and Dhaka with poor traffic conditions in inland transportation.
- The Government enacted the Economic Zone Act in August 2010. In this Act, it is decided to stop the new construction of EPZ because of difficulty of land acquisition situated between Dhaka and Chittagong and to construct newly 20 EZs in nationwide so as to diversify and strengthen the linkage between export-oriented and domestic-oriented 5 EZs have been authorized to be established by PPP method and another 15 industries. EZs will be planned. The difference on system of EPZ and EZ is illustrated as follows:

EPZ	EZ			
Currently garments, textile and related	The investment on new industries and heavy			
industries account for major share.	industries and diversified industries are			
	desirable.			
As it is now, tenants are export oriented	The duty free areas and custom duty areas			
industries invested by overseas and local	are separated and the linkage of export			
industries.	industries and industrial clusters and			
	domestic industries are expected.			
Investment by the Government and the	To make much of utilizing private sector			
capital of government. The Government	and/or public private partnerships. (Legally,			
acquires and provides land to develop	development by government is feasible.)			
industrial zones.				
Various incentives are given. BEPZA /	In the EZ Act, it is regulated that the same			
EPZ makes a one stop service by one	service is provided as EPZ with various			
window, simplifying various procedures.	incentives and a one stop service in			
	procedures. Concrete conditions and			
	details are now under study (assisted by			
	IFC)			

• The delay of K-EPZ development has a cause in lack of consistency of government policy. It may significantly damage the credibility of the country's investment policy. It is important for future development of EZ to perform with transparency regarding development rules, permission procedures, management standard and detail rules.

Chapter 4. Donors' Cooperation Activities related to Private Sector Development in Bangladesh

- (1) Assistance in Private Sector Development Programs by JICA
- JICA's assistance for private sector development in Bangladesh centers on Yen Loan projects, Development Studies such as master plans and feasibility studies as well as the technical cooperation scheme as dispatch of experts. Although the concrete areas are sub-sector studies of export promotion, small business financing, industrial development, regional industrial development master plan, dispatch of experts in investment promotion and bank sector, comprehensive programme that covers the private sector overall has not yet been conducted.
- Policy support in advancement and promotion of industry, investment and trade is Japan's area of specialty, which emphasized export-oriented industrial policy. As shown in the examples of Indonesia and Kenya, the strength can be observed in restructuring of export promotion policy and system, and formulation of promotion plan and action plan by specific sector. Also, as seen in case examples of Vietnam and Myanmar, there were cases of assisting transition to market economy in wide area such as finance, banking, agriculture, industrial trade, small and medium-sized enterprise and reform of state-owned enterprises, and assisting



economic structure adjustment policy.

- Measures for JICA's individual private sector assistance take the approach of legal systems development and capacity building of legal system enforcement and implementation. As for the maintenance of legal systems, JICA targets customs policy, competition policy, industry property right etc. in ASEAN Countries such as Malaysia, Indonesia and Vietnam, and advice drafting legal systems and maintenance of detailed rules for operation, mainly sharing experiences from Japan.
- For capacity building of enforcement and implementation of legal systems, JICA engages in technical transfer of customs system improvement, counter-measures for violation of intellectual property right, capacity building of legal system enforcement related to industrial property right utilization, with a focus on Indonesia and Thailand.
- As shown in the figure above, the trade and investment facilitation assistance is the area that Japan has numerous assistance tools. Among them are trade insurance, export finance, trade human resource development, measurement standardization, trading business. In particular, the grant aid and technical cooperation project of trade training center in Indonesia are highly appreciated by Indonesian counterparts as effective for trade human resource development in small and medium-sized enterprises and promotion of participation to export market, and also as sound and comprehensive trade training centre.
- Additionally, in private corporate management and technical assistance, JICA provides technical assistance of Japanese management techniques, productivity improvement, technical cooperation of supporting industries of molding and die technique, as well as technical cooperation of export products development in agricultural products, processed food, light industry products and handicrafts.
- In Maintenance support of basis conditions for the promotion of trade and investment, JICA assists in four areas: 1) maintenance of legal systems for commercial transactions, 2) development of economic infrastructure, 3) improvement of business environment in domestic industry, and 4) human resource development.
- As for development of economic infrastructure, JICA has conducted study on development of hard infrastructure including power plant, energy and transportation and assist in the maintenance of soft infrastructure including production statistics, industrial standardization, measurement, inspection, quality management and intellectual property right.
- Major assisting project in improvement of business environment in domestic industry is the development of exhaustive master plan on SME promotion policy, SME finance, supporting industry development and export promotion in Vietnam, in the midst of transfer to market economy, and Thailand and Indonesia, after Asian financial crisis.
- In industry human resource development, JICA provides management improvement of higher education administration, Japanese language education and management practical education through Japan Human Resource Development Centre, improvement of curriculum of vocational training and technical advice such as capacity building of trainers to vocational training technical schools.

(2) Cooperation Activities on Private Sector Development by Other Japanese Government Institutions

- The cooperation activities on private sector development by other Japanese government institutions are focused on Japan External Trade Organization (JETRO) and Overseas Human Resources and Industrial Association (HIDA).
- The JETRO's main services include the support of overseas business development for Japanese SMEs, promotion of foreign investment in Japan, research and consulting activities. As far as the cooperation of private sector in developing countries are concerned, there are four types of cooperation programs: 1)Export business development support (Ex. "One Village One Product"); 2)Institutional development support; 3)Supporting industry development support; 4)BOP business support.
- In Bangladesh, JETRO has been supporting the export of natural soap and bean sprout seed to Japanese market as Experimental Project of Development Import. In addition, JETRO has organized Business Investment Mission comprised of SME manufacturers in Bangladesh and Myanmar in February 2012





- HIDA was established in March 2012 by the merger between the Association for Overseas Technical Scholarship (AOTS) and Japan Overseas Development Corporation (JODC) to contribute the enhancement of economic development and friendship between Japan and overseas countries. Currently, AOTS Department is engaged in training whereas JODC Department is engaged in dispatching technical experts.
- In Bangladesh, as social problem solution for BOP, HIDA has conducted "the experimental project of computerization of micro credit towards the establishment of social foundation" and "the experimental project of the feasibility of water supply market for simplified water filter for BOP strata". Furthermore, HIDA has been conducted overseas training of production management and quality management for garment industry for a long time.
- (3) Cooperation Activities on Private Sector Development by Other International Donors
- More than 50 donors including multilateral and bilateral aid agencies and NGOs provide assistance to Bangladesh. In Bangladesh, Local Consultative Group (LCG), whose members are Economic Relation Department (ERD) of the Ministry of Finance, Bangladesh, 39 bilateral donors and multilateral donors such as the World Bank (WB), International Monetary Fund (IMF), Asian Development Bank, and the United Nations, hold meetings periodically to promote assistance coordination among donors. This meeting provides opportunities to coordinate assistance among donors and information sharing at practical officer level. The LCG general meeting has ERD director general and WB country director as co-chairs and discusses topics including national development strategy and status of the achievement of Millennium Development Goals (MDGs).
- In private sector development assistance area of Bangladesh, comprehensive cooperative programme "Private Sector Development Support Project (PSDSP)" has been prepared by donor cooperation since 2004, and with DFID and WB's initiative and having regulation reform for private sector development, EZ development and capacity building of governmental organizations as major issues, concrete cooperation was initiated with a parallel issue for cooperation, sub-sector assistance and trade promotion.
- Followed by the PSDSP, Bangladesh Investment Climate Fund (BICF), which is financed by DFID and EU and managed by IFC, is specialized for regulatory reform and EZ development. Also, in market facilitation using Business Development Service (BDS), Katalyst has been central, which DFID, SDC and CIDA have been implementing.

Project	Objective	Donors		
Bangladesh Investment Climate Fund (BICF)	Relaxation of regulations of private sector, maintenance of legal systems of special EZ	DFID, EU, IFC		
Katalyst	Improve competitiveness of small to medium-sized companies in selected sectors through improving market access, management and technical skills, quality control and production method.	DFID, SDC, CIDA		
Better Work and Standard Programme (BEST)	Contribute to economic development and poverty mitigation of Bangladesh by improving quality of fishery products, fiber and garment to expand export to the world market.	EU, UNIDO, NORAD, GTZ		
Post Literacy and Continuing Education(PLCE)II	Focus on training of employment and employment possibility skill in the framework of literacy rate and informal education in response to demand of the local community.	SDC/ ADB/ DFID/ GoB		

The major on going cooperation programmes are mentioned in the following chart:





South Asia Enterprise Development Facility (SEDF)	Assistance in small to medium-sized financial organizations, access improvement to business service and business environment improvement in South Asian region (Bangladesh, Bhutan, North East India, Maldives, Nepal, Sri Lanka), with special focus on agriculture, RMG, light industry and IT sector.	IFC, DFID, NORAD
Technical and Vocational Education and Training (TVET)	Establish market-oriented and flexible technical vocational education training system to provide skills that match the needs from modern industry and to respond the needs of underprivileged young working population.	ILO/ EU

Source: Prepared by the Study Team based on "Private Sector Development Donor Mapping 2009" of IFC

Chapter 5. The Result of Investment & Trade Demand Survey

(1)Purpose and method

- The Study Team has conducted questionnaire survey for domestic and foreign investors to grasp investment and trade needs, perception and issues regarding investment climate. The questionnaires were distributed to: 1.Asian companies other than Japanese companies; 2. Japanese companies; and 3. Companies which have been already invested in Bangladesh by both domestic and foreign companies.
- The numbers of distribution and collection in each category are mentioned as follows:
 - ▶ 1. 306 were distributed, 83 collected (Collection rate: 27.1%)
 - ➢ 2. 160 were distributedt, 28 collected (Collection rate: 17.5%)
 - ➤ 3. 610 were distributed, 274 collected (Collection rate: 45%)
- The target industries below are selected by taking into account the potentiality of investment in Bangladesh and the contribution of export.
 - Textile and garment, Agro-processed, Light engineering (including auto-parts and bicycles), Footwear and leather, Pharmaceutical, Software and ICT, Home textile, Ship building, Toiletries and Others(Electronics, Papers, etc)
- Basically large and public listed companies in each industry have been selected. But some adjustment has been made to increase collection rate. The Questionnaires were distributed by postal mail, fax and e-mail.

(2) The Result of Overseas Questionnaire Survey

- The questionnaires were sent to the companies which have not yet invested but have potential to invest in Bangladesh.
- In overall, Japanese companies are not so interested in investing in Bangladesh. Rather they feel attractiveness to invest in other Asian countries such as Vietnam, India, Indonesia, Thailand, and Myanmar etc.
- Other Asian countries, compared with Japanese companies, have more intentions to invest and do business in Bangladesh.
- Japanese companies regard Bangladesh as cheap manufacturing location. On the other hand, other Asian countries pay attention to Bangladeshi market potential.
- There are several challenges such as shortage of manufacturing location, shortage of infrastructure, unclearness of governance, and lack of business information of Bangladesh.

(3) The Result of Domestic Questionnaire Survey

- The questionnaires were sent to foreign companies which have already invested in Bangladesh.
- The ratio of foreign and domestic companies are approximately 40: 60. The ratio of companies in EPZ and out side EPZ is around 45: 55.
- They are quite positive to increase investment and trade to expand business.



- The factors of low satisfaction by investors are logistics; infrastructure and so on.
- SMEs tend to require assistances of human resource development, technology, finance. •

< Summary >

Segment		Perception for Bangladesh		Eagornoss of	Issues				
		ufacturing loca	Market	invest	Transparancy , Fiarness	Infrastructur e	On site assistance	Lack of information	
Foreign companies (not yet invested)	Japanese companies	Yes	No	Low	Strongly	Strongly		Strongly	
	Other Asian companies	Yes	Yes	Middle	Strongly	Strongly		Strongly	
Domestically operating business companies	Large and Foreign companies	Yes	Yes	High		Strongly			
	Middle and small companies	Yes	Yes	High		Strongly	Strongly		

Chapter 6. Results of Issue Analysis and Development Strategy of the Strategic **Manufacturing Industries**

(1) Distribution of the Industries and Situations of Industrial Clusters

- According to the Survey Results conducted by BSCIC, total number of the registered entity in Bangladesh as of October 2011, was 67,018, distributions of which are 10,457 entities in Dhaka, 7,000 entities in Sirajganji, 6,600 entities in Jessore, 6,425 entities in Narayangonj, 5,120 entities in Tangail, 5,070 entities in Munshigonj, 4,831 entities in Comilla, 3,460 entities in Bogra, 2,760 entities in Chittagong. The Study Team has conducted site surveys to the Foundry Industrial Cluster in Bogra and Relocation Project of Footwear and Leather Industry from Old Dhaka to Suburban Dhaka as typical case studies on the performance of Industrial Cluster in Bangladesh.
- With regard to the Foundry Cluster in Bogra, it is said that the development of a large scale Foundry Plant in the era of East Pakistan Administration staged Bogra to be known as the Foundry Engineering Center in Bangladesh, although Bogra has been well known as an accumulation of Foundry Shops which were run as family business.
- At present, approximately 60 foundry industries are operated in the industrial estate being developed by BSCIC in 1980s. However, foundry practices in Bogra is differed from that of Japanese industrial clusters; each foundry shop works alone from its initial melting processes to casting and assembling its parts as a final product by himself for fabric plants, jute mills and other industries, and not sharing certain processes of the works by and among various numbers of foundry shops. Currently the melting processes at the foundry shops are undertaken by cupola furnaces, thus introduction of induction furnace is recommended in order to attain higher quality of the foundry products. Also, there are many spaces to be improved in the working conditions and welfare environment at the foundry shops.
- Footwear and Leather Industries have a long history in Bangladesh. The industry has commenced its initial operations in Old Dhaka area where now became the center of city life. Relocation project of those footwear shops has commenced in order to dissolve environmental issues at that area. In May 2011, several numbers of footwear shops were relocated into Jatrabari district, one of the suburban districts of Dhaka, taking the advantage of Corporate Social Responsibility (CSR) Funds from the Bangladesh Bank and major commercial banks, in close cooperation with EPB and BPC. Although those footwear products produced by the footwear shops are designed for overseas markets in addition to the domestic one according to the project, it seems difficult to be competitive in an international market both in quality and production capability. Meantime, relocation of Tannery Industry to Savar district at suburban Dhaka has also been commended but no relocation has been realized until today, due to lack of Common Effluent Treatment (CET) Plant at the industrial estate. This relocation project is commenced in 2003 by BSCIC and is designed to provide 195 plots in 200 acres of industrial estate.

(2) Evaluation and Selection of the Priority Industries

Firstly, selected the top fifty (50) Industries in its Gross Outputs shown in the Statistics of the Report on Bangladesh Survey of Manufacturing Industries (SMI) 2005 - 2006 which was conducted by Bangladesh Bureau of Statistics (BBS). This statistics applied the classification systems along with Bangladesh Standard Industrial Classification (BSIC). Then these industries are grouped by the similarity of its business characteristics and those grouped industries have been evaluated along with the productivity indicators such as gross added values, ratio of added value against the gross output, gross assets and number of employees per firm, added value per employee, and added value against total asses used.

- Then such emerging industries which are falling out of these top fifty (50) major industries list but are considered to be contributing remarkably to the national economy, are listed. The third evaluation criteria are to check the conformity with the policies stated in superior planning papers, magnitude of the employment opportunity provided, impact of national resources utilization, connectivity with upper and lower industries in the national economic value chain, magnitude of foreign currency earning, and other elements.
- Finally, the prioritized ten (10) industries are to be selected by reflecting the results of the questionnaire surveys conducted in Bangladesh and Japan. Considering all those results of evaluation, the Study Team has finally selected those ten (10) industries as Ready-made Garment & Home Textile Industry, Agro-processing Industries, Light Engineering Industry, Footwear & Leather Industries, Pharmaceutical Industry, Ship-building Industry, Plastic Industry, Furniture Industry, Ceramic Industry, Software & ICT-Service Industry.

(3) Results of Fact-finding Survey and Issues faced by the Priority Industries

- Further to the identification of those 10 priority industries, profiles, performances (export and import, employees engaged, etc), major manufacturers in the industry, managerial environmental analysis, competitiveness analysis in the overseas markets, future development strategies, and issues to be overcame by the industries to achieve those strategies are surveyed.
- In analyzing managerial environment of those priority industries, the Study Team has analyzed internal managerial environment (Strength and Weakness) and external managerial environment (Opportunity and Threat) by applying a SWOT analysis format. As to the competitiveness analysis in the overseas markets, the Study Team has identified the present position of Bangladesh Industry and the position to be located in the future in the overseas markets, and these results were illustrated in the formats of positioning map for each Industry.
- As the results of these exercises, 52 specific industry development strategies were delineated. Then, the Study Team tried to identify the matters deemed to be challenge for the industries to realize their specific development strategies and these elements were summarized in the matrix along with the production elements of Quality (Technology), Cost, Market Development, Human Resources Development, and Procurement of Raw Materials. Also, these challenges on 10 priority industries were summarized along with the three distinguished types of industry. These factors were eventually summarized as inter-industrial challenges and needs for future assistance.

Domestic Resource Based Industries: Agro-processing Industry, Footwear & Leather Industries, and Furniture Industry.

Imported-materials Processing Industries: Ceramic Industry, Plastic Industry, Home Textiles Industry, Ship-building Industry, and Light Engineering Industry.

Knowledge Based Industries: Pharmaceutical Industry, and Software/IT-based Services Industries.

(4) Challenges that the Bangladesh Industries face in implementing their Development Strategies The inter-industrial challenges for realizing various industry development strategies are as follows;

Quality (Technology)

- · Improvement of Quality and Productivity by modernization of Production Plants
- Establishing Own Band and Improvement of Design Capability
- Improvement of Quality Certification Systems
- Improvement of Quality Inspection and Testing Technologies
- Improvement of Environmental Protection Technologies (Waste-water Treatment and Energy-efficiency Technologies in particular)



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- Improvement of International Tel-communications and Domestic Trunk Lines
- Procurement of Raw Materials
- Diversification of the source of Raw Material Supply by developing a Procurement Data Base
- Development of Steel-manufacturing Industry, Petrochemical-based Raw Materials Industries
- · Enrichment of Incentives on the Import Duties of Imported Materials for those Re-exported (Bonded Warehouse, Banded Factory and Refund of Import Duty, etc)

Cost

- Further Reduction of the Production Costs
- Introduction of Cost Management Systems
- Improvement of Domestic Logistic Systems
- Closer Linkage with Back-ward Industries for better Cost Competitiveness

Market Development

- Reduction of Import Duties
- Improvement of Market Research Capability
- Capability Development on the delineation of Market Penetration Strategy
- Strengthen the Linkage between Large Industries and SMEs ٠
- Support for Development of Distribution Channel in the Overseas Markets

Human Resources Development

- **Development of Skilled Labors**
- Development of Business Persons for International Trade
- Development of Qualified Human Resources in the fields of IT/Environment, etc ٠
- Development of Managers (Quality Management/Management Systems, etc)
- Development of Vocational Schools for Major Industries
- Matching between the Bangladesh Industries and those Bangladesh Business Persons working abroad

Financial Support Systems

- Introduction of Loans with Low-rated Interest and Long-repayment Period for Capital Outlays
- Improvement of Financial Services related to the Foreign Trades (Loans for Export/Import, Foreign Investment, etc)
- Introduction of Credit Guarantee Systems for SMEs

Chapter 7. Value Chain Analysis on Promising Products

Based on competitiveness analysis of major industries, the value chain analysis is conducted to clarify more concrete issued to be improved. Agro-processing industry and foundry industry are selected as an object of value chain analysis due to the following reasons;

i) Agro-processing industry

- Agro-processing industry is a "Domestic Resource Oriented Industries", and easy to \geq grasp issues of SMEs.
- \triangleright Development of this industry could create employment opportunities for farmers and is highly expected to strengthen export competitiveness of Bangladesh.

ii) Foundry Industry

- \triangleright Foundry industry is a "Imported-materials Oriented Industries", and supporting to other industries such as automobile, industrial machinery and ship-building.
- \geq Development of this industry suggests how to develop cluster in Bangladesh and is greatly expected to contribute to the development of industries mentioned above.
- (1) Agro-processing industry
- Bangladesh is a country not blessed with industrial natural resources. The agro-processing industry is one of a few one indentified as a "Domestic Resource Oriented Industries".



SMEs are sparsely scattered for every agricultural area spread all over the country. Thus, the connectivity among them and industrial cluster effects are restrictive.

- The domestic market is greatly expanded in response to change of national consumer expenditure patter and diversification of food. A domestic production has not fulfilled the growth of demand so that the import goes on increasing. The height of abandonment rate of the mango post-harvest (more than 50%) is one of the main causes. Only 7 days serve mango after harvest. An installation of cold-storage could lead to improve the abandonment rate. A smoother financing is also required to install these equipments.
- A good taste of mango and its price has been competitive in international market. The improvement of processing technologies, quality control and productivity could bring about an accelerating export expansion. Its cost competitiveness would be further increased by the installation of cold storage equipments and by tightening industrial, administrative and academic cooperation.
- Another factor to increase global competitiveness is to improve the efficiency of a value chain. Many intermediates intervene without contributing to add value of products. This structure is similar to that of raw material supply. Processors purchase raw materials not from farmers but from intermediates. As intermediates increase, cost is higher and a lead-time also becomes longer.

(2) Foundry industry

- The domestic market has an expansion tendency. The foundry companies manufacture mainly used-products of agricultural apparatus and auto-parts. Bangladeshi products have high cost competitiveness in the domestic market, comparing with foreign products including Indian ones. However, the price down pressure has become stronger because of the rise of products amount of supply accompanying increase of number of company and improvement of production capacity.
- Furthermore, Bangladeshi foundry companies could not shift to export because of insufficient quality level of their products. The low quality of raw material and old production equipment (cupola) cause low quality of their products.
- It is imperative to develop the technology level through the installation of newer machinery such as induction furnace. The installation of induction furnace makes it possible to manufacture a product of high quality with its intensity becomes 4 times stronger. Such a product could be supplied also to new auto-parts of high value added.
- Marketing to international market is required so as to expand export. "Export" may mean to deal with global companies. In this case, Bangladeshi companies will face the challenges to improve not only product quality but also labor environment of manufacturing site and to reduce negative impact to environment.

Chapter 8. The International Competitiveness Analysis and the Issues on the Industries in **Bangladesh**

- The international comparison and competitive advantages were quantitatively analyzed based on "World Economic Forum - The Global Competitiveness Report (2011-2012)". Further, qualitative analysis also was made by utilizing the outcome of the direct research in Bangladesh and the questionnaire survey to the investors in both Bangladesh and overseas. Consequently, the potentials and issues in industry in Bangladesh were summarized and abstracted.
- According to the said report, the competitiveness of Bangladesh is evaluated to be 108^{th} out of 142 countries in ranking and 3.7 points in score (1-7 maximum) which shows very low. Bangladesh is ranked far behind ASEAN countries as below:

Advanced group -	Malaysia	(ranking 21 st score 5.08)
	Thailand	(ranking 39 th score 4.52)
Subsequent group -	Indonesia	(ranking 46 th score 4.38)
Late developed group	- Vietnam	(ranking 65 th score 4.24)
	Cambodia	(ranking 97 th score 3.85)



- However, Bangladesh has potentials in terms of large-sized market and human resources. In case that the potentials should be utilized fully and the issues and bottleneck in Bangladesh should be improved and overcome, then the international competitiveness in the industries would be strengthened, being led to the future development of the industries.
- (1) Potentials in Bangladesh
 - Market
 - Bangladesh has a big population of 160 million people. Middle income group has expanded rapidly as the economy has grown, causing the enlargement of consumer market. For instance, the mobile phones are prevailing nationwide. Number of super market stores for wealthy class is increasing in city. The number of cars has been increasing in recent years.
 - Investor protection is strong. Legal framework in challenging is efficient. Judicial independence is maintained comparatively. Foreign Direct Investment (FDI) is less strictly regulated than ASEAN countries.
 - Bangladesh is geopolitically strategic place located between India/SAFTA and ASEAN in latter of which economic integration will be achieved among member countries in 2015. There could be potentials of economic development in Bangladesh if the economic alliances in the region are more activated and achieved well.
 - Middle East countries, Malaysia and Indonesia are the same Islamic state as Bangladesh, having the common religion and culture. Those countries will become the potential market to Bangladesh.

Managerial resources in the industries

- Human resources: Wages in Bangladesh is cheaper than in China, India, ASEAN (except Myanmar). Bangladesh has cost competitiveness in labor wages in labor-intensive industries. There are abundant labor forces with young population and Bangladesh can sustain stable supply of labor forces. Labors have diligent and good nature in character generally. In the field of traditional academy, eminent human resources have been provided.
- Capital and investment: Gross national savings are high. Financing through local equity market is well developed. There are dynamism and drive in investment in private sector. Middle income class is becoming larger.
- There are 7 million of Bangladesh people living overseas countries including overseas workers of Bangladesh. If the human networks of overseas Bangladesh people are well organized and utilized, trade promotion and development of industries to those countries will be more feasible.
- The agriculture is the key industry in Bangladesh. Agro processing industries have huge potentials, if marketing management and technology make more progress.
- (2) Common issues and bottlenecks among Bangladesh manufacturing industries.
- Managerial resources in major industries
 - Modern manufacturing such as metal processing and machinery has been under development. The technology, the skill and the machinery are old and deteriorated, while the low quality products are produced. Modern production management systems are not popular. Quality control management systems are not implemented.
 - As to human development, the contents educated in Universities and vocational schools are out of date, while the knowledge and ability the graduates have do not meet the practical requirements of the industries. In some cases, it is reported that workers who start working newly are neither well educated nor trained at elementary school level. This requires the industry to educate very basic knowledge to the new employers, which brings the invisibly additional cost of education.
 - The standard of measures and the inspection criteria are not prepared sufficiently. There are shortages in inspection personnel, knowledge for inspection method, testing instruments and the system for the inspection and test.
 - Capacity building of the managements and middle managers in the industries are also important tasks for industries. In particular, those who are capable of export business and overseas marketing are less than the demand in the industry. ICT is not sufficiently implemented throughout the industries.



• It is hard for SME manufacturing company to borrow loans from the banks.

Infrastructure

- In Bangladesh the land for the industry is in shortage. The electric power is supplied unstably less than the demand. They are becoming the bottle necks that disturb the industrial development. Behind the above, there is neither a grand design nor a road map nor an action plan for a comprehensive development plan, in which economic policy, improvement of infrastructure and land development policy should be integrated all together.
- Traffics are heavily jammed particularly in cities. Road and railways are deteriorated. The international sea port and International airport are not improved in facility and operation. All of them together caused the inefficiency; the longer time and less quality in transportation.
- The international port of Chittagong is a river port, where the draft is shallow. Only small vessel can enter the port for loading and discharging cargoes. Consequently, the export containers are loaded on small feeder container vessel to transship at Singapore or Colombo on the larger vessel for final destination of EU, USA and Japan & China. This transshipment service require longer period of transport and higher sea freight costs. The larger vessels carrying coals and/or LNG cannot enter the port for discharging the cargoes. In case that a large thermal power station should be constructed, it definitely needs a deep sea port near the power station.
- At "Free Port" in other country, the international sea port, seashore industrial area, economics zone, accommodation space & community facilities and sometimes tourist facilities are constructed jointly and integrally. There can be seen no vision on such a total area development in Bangladesh.
- Internet access in local area is poor and slow. There is a big gap in the internet environment between Dhaka and rural areas.

Policies and institutions

- There are so many government organizations of separate and small units in Bangladesh as well as bureaucracy in chimney (vertical organizations), which cause inefficiency. Thus total optimization is missing. Dialogue between government and industry may be made but it is seldom that the outcome of dialogue is reflected to the policy change.
- Foreign Direct Investment (FDI) Policy and preferential treatment in Bangladesh are rather flat and uniformed but in other countries differentiated treatment is applied to FDI of the strategic key industry or priority industry case by case. This gives more impact on promotion of FDI.
- There is no slot for sales at EPZ which is preferable for FDI on export oriented factory. New Economic Zone is developed very slowly. Under the circumstances the progress of new FDI is halted. The keen competition on inducing FDI is now progressing among the countries in the region. The delayed development of Economic Zone will cause opportunity loss to Bangladesh.
- The disturbance and the delay in Korean EPZ development possibly bring foreign investor the mistrust towards Bangladesh government.
- As to tax systems, in Bangladesh, corporate tax rate, personal income tax rate, import custom tariff, withholding tax rate on dividends to overseas and Value added tax are rather high than in ASEAN countries.
- One stop service in Board of Investment is not one stop service literally and is not favorable to foreign investors.
- There are less bonded factories and bonded warehouses outside EPZ, excluding RGM industries.
- There are shortage of capacity, staffs and organizational functions in Export Promotion Bureau.
- There is neither big project to accelerate FDI from global anchor industry nor vision and plan on development of supporting industry in Bangladesh.

Chapter 9. Conclusions and Recommendations

(1) Recommendation for Long-term Strategy for Private Sector Development

- In the Outline of Perspective Plan (OPP), Bangladesh aims to join middle income countries by 2021, which requires the country to strengthen its international competitiveness by upgrading technical quality, followed by promotion of foreign direct investment. At the same time, the country needs to enhance value addition and productivity by strengthening backward & forward linkage. Furthermore, it is needed to formulate concrete strategies to shift enormous agricultural population manufacturing industries.
- In order to formulate the long-term industrial strategy for the next 10 years, it is indeed very important to study the industry policies of ASEAN countries such as Thailand, Malaysia and Indonesia in the 1980s and 90s. In particular, it is critical to select strategic industries which can become the foundation and driving force of economic development and to support the development of such industries with high priority. At the same time, it is also crucial to attract foreign investment in the strategic industries, enhance productivity of SMEs, support cluster development to strengthen industrial linkage as well as export promotion measures such as bonded warehouses and bonded factories.
- As it has been mentioned in Chapter 6, this study report has classified Bangladeshi strategic industries as: 1) Domestic Resource Based Industries; 2) Imported-materials Processing Industries, 3) Knowledge Based Industries, and it has attempted to analyze the issues of each industrial type. As it has been illustrated in the following figure, most of the industries belong to infant industry except RMG, leather & shoe, pharmaceutical industries. Therefore, it is needed to have effective strategies and policy measures by public private partnership to promote those infant industry to growing industry.



Most of Bangladeshi industries except RMG and leather & shoe industries supply mainly for domestic market. In this regard, in the medium term, it is critical how to strengthen international competitiveness by enhancing productivity, quality and marketing, and developing skills of workers, followed by attracting foreign investment and technical transfer. In the longer term, it is needed to shift to Integrated Production Model by the promotion of material industry such as steel and chemical industries, enhancement of industrial linkage by cluster development, developing supporting industries and financial deepening.



The above progressive development model is simplified the change of industrial model from Labor Intensive one to Labor Intensive + Capital Intensive model, based on time axis and international competitiveness axis. However, on the other hand, if the rapid domestic market growth is taken into account driven by 30 million middle income people, domestic market and overseas market should be simultaneously taken care as two wheels of a cart.

- In this regard, the most critical factor to develop both domestic and international market by strengthening competitiveness of Bangladeshi private sector is to <u>how to effectively attract</u> <u>foreign investment in Bangladesh</u>. Thanks to the effective foreign investment promotion policies since 1980s, in the advanced ASEAN countries like Thailand, Malaysia and Indonesia, it can be observed that economic development caused by export competitiveness has brought about beneficial expansion of domestic consumption.
- Therefore, as the following figure illustrates, it is indeed very crucial to strengthen international competitiveness by improving soft economic infrastructure such as institutional development of Economic Zone, one stop service, various business licenses and industrial human resource as well as physical infrastructure such as industrial estate, power, gas, water, road, railway, and port.



(2) Challenges for Realization of Long-term Strategies

Based on the past arguments, strength and weakness of overall investment climate of Bangladesh will be the followings as the JICA Study Team summarizes.

<Strength and Potentials of Bangladesh in Investment Climate>

- The first strength is the **cheap and abundant labor**. Wages in Bangladesh are generally cheaper than those of China, India, and ASEAN countries, thus Bangladesh obtains cost competitiveness among labor-intensive industry. In addition, the labor population is young so they have strength of a long-term stable supply of labor.
- The second strength is the high potential domestic market. As mentioned earlier, the population of Bangladesh exceeds 160 million people, and it has become a huge market with the expansion of middle income people and their consumption due to its economic growth. In particular, accompanied with income improvement, expansion of markets will be expected in such consumer products area as processed agricultural product, automobile, motorcycle, mobile phone, and retailing.
- The third strength is the existence of **domestic resources that can be procured at low cost**. Especially for processed agricultural products, Bangladesh has superiority that they can procure raw materials abundantly inside the country. In addition, in metal processing industry such as foundry, Bangladesh has strength to procure scrap irons abundantly and cheaply from broken ships since ship breaking industry is popular in Bangladesh.
- The forth strength is the networking power of overseas workers. About 7 million overseas workers are said to be actively involved in Bangladesh, and since there are some skilled workers and entrepreneurs in the areas such as IT and automobile component industries, development of trade, investment, and business will be possible by using their network.

<Weakness and Problems of Bangladeshi Investment Climate>

- The first weakness is **the bottleneck of infrastructure**, especially the chronic **lack of** electricity caused by the shortage of energy, and shortage of serviced industrial lands. Difficulty of new connection to national grid has been a major barrier of stable production. Power cuts from April to October; with the highest demand of electricity; have been lowering productivity. In addition, EPZ between Dhaka and Chittagong is full and serviced industrial sited are lacking at this point. Although Bangladeshi government has decided on development of SEZ, it needs to develop as quickly as possible.
- The second problem is the low quality and productivity of domestic industries. Although the core of manufacturing industry is supporting industry, namely machinery and metal material and processing (moulding, machining, junction, and heat treatment, etc.), they have not been developed in Bangladesh, thus improvement of technology and productivity, which are the bases of these industries is needed. In addition, Bangladesh needs to improve its standard specification since industrial standards and quality levels have not reached the global standard. Moreover, because most of the enterprises that are involved in supporting industry are SMEs, human resource development to improve productivity and quality of SMEs is crucial.
- The third weakness is **the underdevelopment of industrial cluster** that is supposed to deepen industrial linkage. There are no medium-term master plans for Bangladesh to develop industrial clusters in processing of agricultural products and supporting industries (foundry industry), which need to be strategically developed. There are no concrete supporting plans as well.
- The fourth is the weakness of trade promoting systems. EPB is lacking marketing strategies (both product-based and market-based) and capacity to gather various information of export markets. In addition, there are many operational and institutional issues such as the Duty Drawback and bonded factory system for promotion of export for promising industries other than RMG.

<Proposal for Action Plans>

Based on strength and weakness in investment climate mentioned above, the JICA Study Team



proposes action plans for Bangladeshi government to catalyze and facilitate dynamic development of private sectors as follows:

1. Maintenance of Infrastructure to Improve Investment Climate

Due to the lack of industrial sites, inferior infrastructures of transportation and distribution such as roads, railways, harbors and lack of electricity and energy have impeded industrial development, immediate maintenance for these infrastructures and reduction of the bottlenecks are necessary.

Strengthen Soft Infrastructure to Improve Quality and Productivity 2.

Bangladesh needs to improve its industrial and examination standards among BSTI, and strengthen examination system by keeping machines in repair and improving ability of the staff. In addition, it needs to strengthen the training system of industrial human resource by servicing equipments of BITAC and improving ability of the staff. Moreover, it needs to conduct training of the presidents of SMEs and capacity building of institutions to improve productivity.

Establishment of Industrial Clusters 3.

Based on industrial policies, Bangladesh has to draw up a master plan for development of industrial clusters. Especially for industries with high priority such as agro-processed products and foundry industries, it needs to develop infrastructure such as industrial estates and human resource while formulating cluster development master plan.

4. **Strengthening of Trade Promoting System**

Improvement of incentive system and operation for export promotion other than RMG is urgently needed. In addition, while conducting capacity building of EPB to support export marketing for SMEs, it needs to decide an action plan for strategic expansion of export goods (including strategies to strengthen trade linkage with overseas workers).

5. **Others (Environmental Technology)**

Legislation to disseminate environmental technologies of enterprises such as energy conservation, effluent treatment, waste disposal, and recycling is needed. These technologies can be demonstrated and disseminated through Economic Zone.

(3) Recommendations for JICA's Future Cooperation Programs and Projects

The JICA Study Team proposes future JICA's private sector development interventions through the following technical cooperation as well as financial cooperation programmes, aiming at solving the major problems that are explained in the previous section.

1) Economic Zone Development Support Program to Improve Investment Climate Master Plan and Feasibility Study (Development Plan Study Type Technical Cooperation) Infrastructure Development Project in Chittagong Economic Zone (Financial Cooperation)

2) Program of KAIZEN in Productivity and Quality Management for SME Manufacturing Industries

Preparatory Study of KAIZEN in Productivity and Quality Management for SME Manufacturing Industries (Development Plan Study Type Technical Cooperation)

Capacity Development Project for Business Development Support Institutions (Technical **Cooperation Project**)

Dispatch of SME Policy Advisor (Expert Dispatch)

3) Industry Cluster Development Support Program

Nationwide Industrial Cluster Development Master Plan and Feasibility Study (Development Plan Study Type Technical Cooperation)

Dispatch of Industry Cluster Development Experts (Expert Dispatch)

Infrastructure Development Project for Foundry Cluster Development (Financial Cooperation)

Technical Cooperation Project for Foundry Cluster Development (Technical Cooperation Project)

Infrastructure Development Project for Agro Processing Cluster Development (Financial

Cooperation)

Technical Cooperation Project for Agro Processing Cluster Development (Technical **Cooperation Project**)

4) Strengthening Export Competitiveness Program

Export Promotion Strategy Formulation Study (Development Plan Study Type Technical Cooperation)

Capacity Development of Trade Promotion Institutions (Expert Dispatch)

Trade Human Resource Development Centre (Technical Cooperation Project)





1. Introduction: Outline of Study

1.1. Background of the Study

Bangladesh has achieved high economic growth at the pace of 6% annual rate since 2004, and firm economic development continues to be expected by the driving force of export of garments, knitted products and overseas worker remittance.

As of the end of financial year 2010, while service industry represents about 50% and the agriculture, forestry and fisheries industry represent about 20% of the GDP, mining and manufacturing industry occupies approximately 30%, among which the manufacturing industry represents 18%.

In manufacturing industry, garment products export has been growing every year, and according to the long-term economic strategy of the current administration, it is aimed to increase the share of the manufacturing industry in GDP to 30% by the 2021 fiscal year. According to the 6th five-year plan (the 2011 to 2015 fiscal year), the government has set a target to increase the above share to over 20%.

However, in order to achieve the above target, Bangladesh has to overcome various problems in respect of environment of trade, investment and human resources, etc.

Firstly, although cheap garment products occupy about 80 % of export value and most of the products are exported to Europe and the US, it is in an opaque situation how far the current cost competitiveness can be maintained, given the recent situation of raising the minimum wages or active industrial actions. Therefore, diversification of export products and export countries as well as strengthening competitiveness by the added value of garment products is critical for the sustainable economic growth.

Secondly, as far as investment is concerned, it is still low standard in terms of contribution to GDP (about 24%). Among others, the issues of investment climate include: a) improvement of infrastructure such as electric power, energy, transportation, and communication; b) the land acquisition of Export Processing Zone and Special Economic Zones; c) improvement of investment rules and procedures; d) improvement of legal certainty; and e) improvement of long and medium term financial access needed for manufacturing companies in particular for small and medium enterprises.

Thirdly, with related to human resources, stagnation of world economy in the aftermath of "Lehman Shock" and aggravation of the Middle East's political situation, since the number of labor population rapidly increases in accordance with the growth of younger generation while the number of overseas workers stagnate, the employment generation is critical issue.

However, since most of domestic workers are unskilled workers in informal sector such as garment industry, they have not mastered skills needed for formal sector. Therefore, it is urgently needed to upgrade human resources in private sector in order to generate employment, diversify industries and increase value addition.

Japanese government has attached great importance to private sector development in the "economic growth" which is highly prioritized area for economic cooperation. Japan International Cooperation Agency (JICA) has implemented study such as "Chittagong Area Industrial Development Plan" (1994 - 95) and "Project Formation Study of Private Sector Development" (2004-05), and "Sub Sector Growth Support Plan for Diversification of Export Industry" (2007-2009). In addition, JICA has also implemented Technical Cooperation through the dispatch of experts (1990s to the first half of 2000s) to the Board of Investment and provided financial assistance by the projects such as "Financial Center for Promotion of Small-and-Medium Enterprises" (loan agreement execution in 2011). On the other hand, the number of investment by the Japanese companies has been increasing recently.

Taking the above mentioned situation into account, JICA has decided the policy to strengthen the support for promoting the development of the private sector in Bangladesh through the industrial development, export promotion, and diversification of export destination as well as increase of foreign direct investment. In this regard, JICA has also decided to conduct the Preparatory Study of





Private Sector Development in Bangladesh (hereinafter referred to as "the Study") to organize and propose prioritized issues, high potential industrial sectors and assistance strategies in future cooperation in private sector development in Bangladesh. JICA has assigned the Consortium of Mitsubishi UFJ Research and Consulting Co.,Ltd. and World Business Associates Co.,Ltd. (hereinafter referred to as "the Study Team") to conduct the Study.

1.2. Objectives of the Study

The objectives of the study can be summarized as in the following three points:

- . To review and organize current situation and issues with regard to private sector in Bangladesh through interviews and questionnaire survey with the relevant authorities and private companies in both Bangladesh and overseas as well as the review of the relevant materials made by the government, international donors and various research institutes.
- . While comparing global competitiveness and export potential through industrial value chain analysis of the major industries which have been recognized by the relevant policies, domestic and foreign investors and companies, to summarize the constraints and issues towards industry development and trade & investment promotion.
- . To examine and propose long term strategies of private sector development in Bangladesh and analyze the important issues to be addressed by the government of Bangladesh by taking into account the and above and intentions of the government. In addition, the contents of the future JICA's cooperation programs and candidate projects shall be organized and proposed.

1.3. Schedule of the Study

The overall schedule of the Study is shown in the following figure.

				FY2011					FY2012				
	Position	Name	Organization	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Work	Team Leader/Industry Policy	Takuji Kameyama	MURC		14	17			30		9	9	
	Industrial Analyst	Junichiro Motoyama	WBA		14	27			30			7	
in B	Industrial Analyst	Satoru Kubodera	MURC		10				19			9	
angl	Industrial Analyst	Y uya N akane	MURC			20			21	_	9	9	
ades	Export Compatitiveness	Tetsuo Yasui	WBA		14	23			30			7	
h	Investment & Trade Promotion	Masakazu Aono	MURC		11	17							
									Subtotal 11.90				
	Team Leader/Industry Policy	Takuji Kameyama	MURC		4		12		8				
Wo	Industrial Analyst	Junichiro Motoyama	WBA		4		8				7	7	
rk in	Industrial Analyst	Satoru Kubodera	MURC		4	8				7	6		
Jap	Industrial Analyst	Y uya N akane	MURC				6			7	7		
an	Export Compatitiveness	Tetsuo Yasui	WBA		4		12		6 □		7		
	Investment & Trade Promotion	Masakazu Aono	MURC		4	— ⁸	⁶ 🗆						
											Subtotal	6.70	
	Report	Subission Time (Name of Repor	t)		(Inception) (Interim)				(Draft Final) (Final)				(Final)
Work in Bangladesh Work in Japan													

Figure 1.1 Overall Schedule and Personnel Plan

Note: MURC: Mitsubishi UFJ Research and Consulting Co.,Ltd. WBA: World Business Associates Co.,Ltd.

1.4. (Composition and Tasks for the Study Team
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Figure 1.2 Tasks for Individual Members										
Name	Position	Tasks								
		Overall quality control								
		Presentation representing team								
		Review of industrial policy								
Takuji Kameyama	Team Leader / Industrial	Donor related survey								
	Policy	Plan for questionnaire survey								
		• Plan for wrap up seminar								
		Formulate final recommendations								
		Review of industrial structure								
		• Review of trade promotion policy								
		• Analysis of trade promotion institutions								
Junichiro Motoyama	Industrial Analyst	 Review of follow up for private sector's 								
2		requests for improving investment climate								
		• Analysis of competitiveness of main								
		industries								
		Review of Macro economy, economic								
		policy(public finance, forex), GDP, import								
		and export structure								
	T 1 . 1 1 .	Design of questionnaire survey								
Satoru Kubodera	Industrial Analyst	• Value chain analysis of selected products								
		Analysis of competitiveness of main								
		industries								
		Organize seminar								
		Analysis of Import and export structure								
		• Review of SMEs policy, institutions								
Yuya Nakane	Industrial analyst	• Review of HRD policy, institutions								
		• Analysis of questionnaire survey								
		• Value chain analysis of selected products								
		• Analysis of investment and labor market trend								
		Review of investment promotion policy								
		Analysis of investment promotion								
	Trade & Investment	institutions								
Masakazu Aono	Promotion/Strengthening	• Analysis of other policy								
	institutions	Review of follow up for private sector's								
		requests for improving investment climate								
		• Analysis of questionnaire survey								
		Review of manufacturing industries								
		Analysis of trade and logistic environment								
	Export competitiveness	Analysis of EPZ and SFZ								
Tetsuo Yasui	analyst	• Analysis of competitiveness of main industries								
		 Jesue analysis on strengthening international 								
		competitiveness of main industries								
		competitiveness of main industries								

Tools for Individual M T. .



Current Investment Environment of Bangladesh 2.

2.1. **Macroeconomic Trend and Financial Overview**

2.1.1. Economic Growth Rate

The nominal GDP of Bangladesh in 2010 was approximately US\$100 billion, ranking it the 58th according to the World Bank. On the other hand, its population, as estimated by the World Bank in 2011, was 148 million, the 8th biggest in the world. Consequently, GDP per capita is US\$675, making it one of the poorest countries in the world, although it has improved considerably from the level of US\$80 in 1972.

The trend of Bangladesh GDP shall be examined based on its currency, the Taka.

The GDP in Bangladesh grew significantly: by 190 percent from FY20001 to FY2010 in nominal terms and by 70 percent since FY1995 in real terms. GDP per capita also grew by 150 percent in the last decade in nominal terms. Although the growth rate is less than that of the entire country due to population growth, it remains high. According to the Bangladesh Bureau of Statistics (BBS) in 2011, GDP per capita was US\$755.

Although the annual growth rate in real terms is less than that of rapidly growing India, it has remained high at around six percent since FY2004.

Figure 2.1 Frend of GDP (in Taka)											
	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
GDP at current price (Tk.in billion)	2370.9	2535.5	2732.0	3005.8	3329.7	3707.1	4157.3	4724.8	5458.2	6167.9	6923.8
GDP at constant price (Tk.in billion)	2049.3	2157.4	2252.6	2371	2519.7	2669.7	2846.7	3029.7	3217.3	3402.0	3600.5
Growth rate of GDP at constant price (%)	5.9	5.3	4.4	5.3	6.3	6.0	6.6	6.4	6.2	5.7	5.9
Per capita GDP(Tk.) at current price	18,511	19,525	20,754	22,530	24,628	27,061	29,955	33,607	38,330	42,628	47,405

Figure	2.1	Trend	of GDP	(in Taka)
LIGUIC	* • 1	II Chu	U UDI	(III Iana)

Source: Ministry of Finance (MOF)



Comparison of GDP Growth Rates of Bangladesh and India Figure 2.2

Source: Sixth Five-Year Plan 2011-2015

2.1.2. Trend of Investment and Savings and Public Finance and Investment

(1) Investment and Savings

As shown in Figure 2.3 on investment and savings, the amount of investment to GNI exceeded that of savings as a percentage of GNI from FY1974 to FY2001. However, in the most recent decade, the trend reversed. The Bangladeshi economy was dependent on industrial production by state-owned enterprises, national license and price controls and trade protection and subsidies until the 1980s, while private investment and production supported by money transfers from overseas



The fiscal year of Bangladesh starts in July in the previous year and ends in June in the following year. FY2000 refers to one year from July 1999 to June 2000.

and exportation have been the catalysts behind economic growth since the 1990s2. In addition, the liberalization of the economy stimulated private sector and drived economic growth. The remittance from foreign countries also prompted private industry, such as construction and housing.



Figure 2.3 Amounts of Savings and Investment in Percentage of GNI (FY1974-2010)

The trend of the last decade shall be examined here in detail.

The amount of savings has exceeded total private and public investment since FY2000, which is mainly due to the transfer of money from Bangladeshi overseas workers, as mentioned in the Sixth Five-Year Plan above. However, when the ratio to GDP is examined, the percentage of investment has remained stable between 23 and 25 percent, while the fluctuation of savings as a percentage of GDP has been relatively significant. The ratio of savings began to increase from FY 2004, exceeding 32 percent in FY2008 and then dropping to around 28 percent in FY2009.

Figure 2.4 Amounts of Savings and Investment and Those in Percentage of GDP (FY1999 to 2009)

										(Tk.in billion)
	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Savings (National)	547.6	568.1	640.4	734.9	847.2	958.0	1150.4	1354.2	1649.1	1818.1	1990.7
Total Investment	545.9	585.4	632.4	703.5	799.9	909.2	1024.8	1155.9	1321.3	1498.4	1728.3
Public	175.7	183.8	174.0	186.3	206.2	230.1	249.3	257.3	270.4	288.9	330.1
Private	370.1	401.5	458.4	517.2	593.7	679.2	775.5	898.6	1050.9	1209.4	1398.2
·											
											(% / GDP)
Savings (National)	23.1	22.4	23.4	24.9	25.4	25.8	27.7	28.7	30.2	32.4	28.8
Total Investment	23.0	23.1	23.1	23.4	24.0	24.5	24.7	24.5	24.2	24.2	25.0
Public	7.4	7.2	6.4	6.2	6.2	6.2	6.0	5.5	4.9	4.6	4.7
Private	15.6	15.8	16.8	17.2	17.8	18.3	18.7	19.0	19.3	19.6	20.2

Source: MOF

In its Sixth Five-Year Plan, the Government of Bangladesh acknowledges that the ratio of savings and investment to GDP is low when compared with those of rapidly growing China and India, although their amounts have grown steadily. In the plan, it hopes to increase the ratio of investment to GDP from the current 24 to 32 to 33 percent by FY2015 through efforts in areas such as tax reform, investment in infrastructure, reform of state-owned enterprises, and improvement of incentives for private investment (deregulation, PPP promotion and reform of the financial sector, etc.).



Source: Sixth Five-Year Plan 2011-2015, Planning Commission, Ministry of Planning

² Page 40 in the Sixth Five-Year Plan 2011-2015

Figure 2.5 Savings and Investment as Percentages of GDP in China, India, Vietnam, and Bangladesh (4-year average from FY2006 to 2009)



Source: Sixth Five-Year Plan 2011-2015

According to the prediction of savings and investment in IMF's Bangladesh 2011 Article IV Consultation, investment is likely to increase while savings are unlikely in relation to GDP and the amount of investment will exceed that of savings in FY2013.

(2) Public Finance and Investment

Both revenues and expenditures have grown significantly. Revenues increased by 270 percent and expenditures grew by 220 percent from FY2000 to 2010.

When the amounts are examined as percentages of GDP, revenues increased from 8.5 to 11.1 percent and expenditures increased from 14.5 to 15.9 percent during the same period. However, the increase in revenues was slow while expenditures fluctuated relatively significantly, reaching 17.3 percent in FY2008 and then dropping to the 15-percent level.

For the last decade, fiscal deficits have been marked as expenditures have exceeded revenues. However, when the figures are seen as percentages of GDP, the fiscal deficits declined from 6.1 to 4.5 percent. The fiscal deficits in the Bangladesh Economic Updates, as reported by the World Bank (September 2011), were expected to be 4.2 percent in FY2011.

According to the Ministry of Finance, one of the causes of the fiscal deficits is the redistribution by government subsidies for the Bottom of the Pyramid (BOP) for redistribution of income. About 30 percent of the population remains in poverty, needing social assistance, and spending is expected to promote consumption.

	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Total Revenue	200.7	243.4	278.9	311.2	354.0	392.0	448.7	494.7	605.4	691.8	764.8
Total Expenditure	344.6	374.0	407.6	437.0	493.7	556.3	610.6	668.4	936.1	941.4	1100.2
Budget Balance (except grants)	-143.9	-130.6	-128.6	-125.8	-139.7	-164.3	-161.9	-173.6	-330.7	-249.6	-310.4
											(% / GDP)
Total Revenue	8.5	9.6	10.2	10.4	10.6	10.6	10.8	10.5	11.1	11.2	11.1
Total Expenditure	14.5	14.8	14.9	14.6	14.8	15.0	14.7	14.1	17.3	15.3	15.9
Budget Balance (except grants)	-6.1	-5.1	-4.7	-4.2	-4.2	-4.4	-3.9	-3.7	-6.2	-4.1	-4.5

Figure 2.6 Trend of Revenues and Expenditures as Percentages of GDP

Source: MOF

According to the Ministry of Finance (MOF), revenues will continue to increase steadily. The Sixth Five-Year Plan says that the country is one of those where the ratio of tax revenues to GDP is the



(Tk.in billion)

lowest and the situation has not improved, despite the GDP increase. Although tax revenues increased after the introduction of value-added tax (VAT) in 1991, the momentum was not maintained. The country plans to modify its structure to avoid excessive dependence on tariffs by raising awareness for tax payment, measuring tax avoidance activities, and improving the ratio of direct tax. It also plans to modernize the system of collection for VAT and income tax, which includes the introduction of computerized tax collection systems, to increase the ratio of tax collection.

	Share as % of NBR Re								
	Indicator/RevenueMain Head of	FY10	FY11	FY 12	FY13	FY14	FY15		
1	Taxes on Income and Profit	28.0	29.1	29.8	31.5	33.2	34.5		
a)	Taxes on Personal Income	10.0	11.4	12.4	13.4	14.9	15.6		
b)	Taxes on Corporate Profit	17.9	17.7	17.4	18.1	18.3	18.9		
2	Taxes on Domestic Production	36.0	35.7	36.5	36.3	36.1	36.3		
a)	Domestic VAT	21.1	22.8	23.9	24.2	24.6	25.2		
b)	Supplementary Duty	13.2	11.7	11.4	10.9	10.4	10.0		
c)	Excise Tax	1.3	0.5	0.5	0.5	0.4	0.4		
3	Other Taxes	0.3	0.7	0.7	0.7	0.7	0.7		
4	Taxes on International Trade	40.2	35.2	33.7	32.2	30.7	29.2		
a)	Custom Duty	17.5	14.8	13.1	12.2	11.4	10.5		
b)	Import VAT	17.1	15.7	15.5	15.0	14.4	13.9		
c)	Supplementary Duty (Import)	5.7	4.7	5.1	5.0	4.9	4.8		
NBR	Revenue (In billion on Tk.)	6943.2	7875.0	8999.2	10245.3	11685.4	13352.2		
	NBR Revenue Growth (%)	18.1	25.3	25.0	15.7	19.2	19.4		
	Income Tax Growth (%)	24.3	31.8	24.8	26.9	26.4	25.4		
	Domestic VAT Growth (%)	37.0	36.9	27.8	21.6	22.0	23.6		

Figure 2.7 Breakdown of Gross Revenues (%)

Source: Sixth Five-Year Plan 2011-2015

As for expenditures, the Sixth Five-Year Plan discloses total investment and the order of priority for areas of investment. The total of five years of investment is scheduled to be approx. 2.6 trillion Taka, based on the price standards of 2011. Investment in measures related to urban issues, energy, transportation and education will account for more than 10 percent of the five-year total. This shows that the government is exerting efforts in private sector development, as investment in the first three areas directly helps improve the efficiency of business activities of private corporations.

Figure 2.8	Investment Plan in the Sixth	Five-Year Plan (2011	prices, unit:	10 m	illion)
			(0	m 1	TH 10044

					(Crore T	aka; FY20	11 price)
Broad Sectors	FY11	FY12	FY13	FY14	FY15	Total	%Totalof
						SFYP	
Agriculture, Water and Rural Development	3623	4121	4535	5184	5756	23220	8.7
Manufacturing and Trade	702	755	776	857	919	4009	1.5
Energy	6075	7983	8932	10539	12127	45656	17.3
Transport	5370	7153	8147	9670	11172	41512	15.7
Urban	8578	9381	9950	10972	11776	50656	19.1
Knowledge Economy	434	483	517	575	621	2631	1.0
Education, Training, Sports, Culture and Religion	5544	6659	7578	8918	10240	38940	14.7
Population, Health and Nutrition	3473	4185	4698	5570	6439	24364	9.2
Social Inclusion and Social Protection	444	462	500	564	615	2586	1.0
Environment, Climate Change and Disaster Management	1667	2013	2070	2322	2516	10588	4.0
Public Administration and Others	3704	3913	4129	4487	4779	21012	7.9
Grand Total:	39615	47108	51832	59659	66960	265174	100

Source: Sixth Five-Year Plan 2011-2015

2.1.3. Financial Market and Exchange Policy

(1) Exchange and foreign reserve

Although the Bangladeshi central bank intervenes to stabilize the currency, the nation has adopted a floating exchange rate from the point of view of international economic situation and promortion of investment and export since its introduction in May 31, 2003. The Bangladesh Bank (BB), the central bank, issues the currency, maintains currency values and regulates foreign exchange. In an





effort to improve investment and productivity, it promotes the deregulation of foreign exchange in accordance with a reform agenda; based on the government's macroeconomic policy. Guidelines for foreign exchange trading by foreign investors are defined in the Foreign Exchange Act 1996 and in publications issued irregularly by the BB.

The exchange rate of the local Taka currency has declined continuously since 1971 even before the introduction of the floating exchange rate system. As for the last decade, the Taka has weakened against the dollar at 50.3 Taka to US\$1 in FY2000 to 69.1 Taka to US\$1 in FY2010. Since FY2007, it has remained stable at 68 to 69 Taka to US\$1. The Taka exchange rate in 2011 correlated to the long-term equilibrium point, according to the 2011 Article IV Consultation published by the IMF.

However, partly because the Government of Bangladesh controls overseas money transfers to stop the depreciation of local currency, private corporations such as pharmaceuticals have demanded deregulation. (March 21, 2010, Bangladesh Business News: http://banbiz.jp/news/2010/03/post-112.html)

According to the latest World Bank economic report (Bangladesh Economic Update "September 2011"), the Taka depreciated by 6.6 percent against the US\$ in 2011 despite intervention including the sale of US\$925 million to stop the depreciation by BB. According to the BB website, the exchange rate dropped to approx. 81.7 Taka to US\$1 as of July 31, 2012.

FY	Taka-Dollar average exchange rate						
1971-72	7.3000	1981-82	20.0652	1991-92	38.1453	2001-02	57.4347
1972-73	7.8763	1982-83	23.7953	1992-93	39.1395	2002-03	57.9000
1973-74	7.9664	1983-84	24.9437	1993-94	40.0009	2003-04	58.9353
1974-75	8.8752	1984-85	25.9634	1994-95	40.2005	2004-05	61.3939
1975-76	15.0541	1985-86	29.8861	1995-96	40.8365	2005-06	67.0797
1976-77	15.4260	1986-87	30.6294	1996-97	42.7008	2006-07	69.0318
1977-78	15.1168	1987-88	31.2422	1997-98	45.4563	2007-08	68.6019
1978-79	15.2231	1988-89	32.1399	1998-99	48.0644	2008-09	68.8012
1979-80	15.4900	1989-90	32.9214	1999-00	50.3112	2009-10	69.1848
1980-81	16.2586	1990-91	35.6752	2000-01	53.9592		

Figure 2.9 Trend of the Taka Exchange Rate Against the US\$

Source: MOF

Foreign reserves have increased more or less steadily since 1981.

Over the last decade, they grew significantly by 570 percent from US\$1,602 million in FY1999 to US\$10,750 million in FY2009. However, according to the IMF 2011 Article IV Consultation, the foreign reserves of Bangladesh remain insufficient when compared with other Asian LICs, despite the long term increase.

Foreign reserves dropped to US\$9,386.5 million in January 2012, partly due to the intervention of selling dollars by BB mentioned above. Bangladesh's current account balance structure is payments balance such as transfer of remittances from overseas workers accounted for supplement of trade deficit, deficit of balance of payments services, and deficit of income balancet. As for foreign exchange reserves, which have grown almost consistently since 1981. The reason for this is that the government of Bangladesh tends to prefer cheap Taka for promoting export, which stimulates selling Taka and buying U.S. dollar.



FY	Million US dollar	FY	Million US dollar	FY	Million US dollar
(June balance		(June balance		(June balance	
1981-82	121	1991-92	1608	2001-02	1583
1982-83	358	1992-93	2121	2002-03	2470
1983-84	540	1993-94	2765	2003-04	2705
1984-85	395	1994-95	3070	2004-05	2930
1985-86	476	1995-96	2039	2005-06	3484
1986-87	715	1996-97	1719	2006-07	5077
1987-88	856	1997-98	1739	2007-08	6149
1988-89	913	1998-99	1523	2008-09	7471
1989-90	520	1999-00	1602	2009-10	10750
1990-91	880	2000-01	1307		

Figure 2.10 Trend of Foreign Reserves

Source: MOF

Figure 2.11 Comparison of Foreign Reserve Sufficiency Level with Other Countries



Source: IMF, 2011 Article IV Consultation

(2) Financial policy and stock market

The repo rate, namely the policy rate, remained stable at a level of eight- to nine percent, until the third quarter of 2009, before then plummeting to four percent due to the impact of the global economic recession. Since this drop, it has been gradually risen. According to the Monetary Policy Statement (January–June 2012) issued by the BB, however, the crisis was overcome and monetary relaxation is no longer required.

In its 2011 Article IV Consultation, the IMF says that BB adopted a stance of "mild expansion" in 2011, meaning it needed to control inflation although it would support the growth trend of the government.






Meanwhile, the stock market prices fell significantly after the DSE 20, the index of the Dhaka Stock Exchange (DSE), hit a record high at the end of 2010. Although it has remained relatively stable since the drop, there are no signs of it rising again to the highest level. Although the Sixth Five-Year Plan regards the stock market boom as favorable, it says overheating must be avoided and the market function must be improved. More specifically, strengthening and monitoring the market by the SEC, and improving corporate reporting, and training of professionals should be encouraged.





Source: Sixth Five-Year Plan 2011-2015

(3) Balance of trade

Both imports and exports have also grown significantly, although there are some exceptional years in value terms. Both values increased by approx. 290 percent in the decade from FY1999 to FY2010. The ratio of import and export values to GDP increased from 17.8 to 23.7 percent and from 12.2 to 16.2 percent, respectively, which shows that the impact of trade on the nation's economy has increased.

However, when imports and exports are compared, the former has always exceeded the latter, meaning a trade deficit has been posted. The percentage of the trade deficits to GDP has fluctuated significantly from year to year. It was around 7 to 8-percent midway through the first decade in the 21st century and has since declined to around 5-percent since FY2008.



Mitsubishi UFJ Research and Consulting



Source: BB, Monetary policy statement (January to June 2012)

	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Imports	421.3	503.7	490.5	559.2	642.6	808.9	892.2	1345.1	1336.5	1396.0	1642.2
Exports	288.2	348.6	343.7	379.2	448.1	532.3	698.4	962.7	970.8	1072.1	1121.0
Trade Balance	-133.1	-155.1	-146.8	-127.8	-136.7	-276.6	-193.8	-382.4	-365.7	-323.9	-356.4

Figure 2.14 Trend of Import and Export Values as a Percentage of GDP

											(% / GDP)
Imports	17.8	19.9	18.0	18.6	19.3	21.8	21.5	28.5	24.5	22.7	23.7
Exports	12.2	13.7	12.6	12.6	13.5	14.4	16.8	20.4	17.5	17.4	16.2
Trade Balance	-5.6	-6.1	-5.4	-4.3	-4.1	-7.5	-4.7	-8.1	-7.0	-5.3	-5.2

Source: MOF

2.2. Trend of Gross Domestic Product and Current Structure

2.2.1. Ratio and Trend by Industry

As mentioned earlier, the Bangladeshi GDP has grown steadily, already reaching nine trillion Taka, or approx. nine trillion JPY, at current-price GDP.

When the GDP is examined by industry -- primary industry (agriculture, forestry and fisheries), secondary industry (mining and manufacturing) and tertiary industry (including service, electricity, gas and water, and construction) -- the tertiary industry (including distribution and service) accounts for approx. 19%, 29%, and 53% each.

When the ratio is examined over the long term since the 1970s, the percentage of primary industry has decreased while that of the other two sectors has risen. Because the production values of agriculture, forestry and fisheries have grown in absolute terms, the smaller percentage does not mean a decline of agriculture. The growth of secondary and tertiary industries has contributed to the GDP increase.

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	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
GDP at current price (Tk.in billion)	2370.9	2535.5	2732.0	3005.8	3329.7	3707.1	4157.3	4724.8	5458.2	6167.9	6923.8
GDP at constant price (Tk.in billion)	2049.3	2157.4	2252.6	2371	2519.7	2669.7	2846.7	3029.7	3217.3	3402.0	3600.5
Growth rate of GDP at constant price (%)	5.9	5.3	4.4	5.3	6.3	6.0	6.6	6.4	6.2	5.7	5.9
Per capita GDP(Tk.) at current price	18,511	19,525	20,754	22,530	24,628	27,061	29,955	33,607	38,330	42,628	47,405

Figure	2.15	Trend	of GDP	(relisting)
riguit	4.10	IIUIU	\mathbf{U}	(ICHSUNE)

Source: MOF

Figure 2.16 Real Values and Ratios of Primary, Secondary and Tertiary Industries in FY2011

	Ratio
Agriculture, Forestry and Fisheries	18.59%
Mining	28.64%
Service	52.96%

Source: Bangladesh Bureau of Statistics (BBS)

Figure 2.17 Trend of Ratio of GDP by Industry (Primary, Secondary and Tertiary)



Source: Sixth Five-Year Plan 2011-2015



(Tk in billion)

(3) Breakdown by Industry

When the GDP is categorized into smaller industrial sectors, manufacturing is the biggest industry, followed by agriculture and forestry, wholesale and retail trade, and transport, storage and communication. All four sectors each account for more than 10 percent of GDP.

As for the annual growth rate of the major industries, this fluctuates significantly between five to 10 percent in manufacturing and between below zero to the 5 percent level in agriculture, which is due to the impact of climate conditions. It remains stable at around six to eight percent in wholesale and retail trade as well as in transport, storage and communications.

As seen in the percentage drop in agriculture and forestry, the growth rate has remained below the overall GDP growth rate. Meanwhile, the growth rate of the other three sectors has exceeded that of total GDP, and been the main contributor to the nation's GDP growth in terms of its scale and growth potential.

Sector/Sub-sector	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10 (r)
1. Agriculture and Forestry	40551	40300	41627	43450	44230	46545	48730	50157	52215	54760
a. Crops & horticulture	30548	29819	30676	31988	32034	33644	35133	36072	37520	39445
b. Animal farmings	6124	6412	6701	7035	7543	8008	8447	8653	8954	9252
c. Forest and related services	3879	4070	4250	4427	4653	4894	5150	5132	5741	6064
2. Fishing	11458	11713	11986	12356	12807	13308	13850	14429	15029	15626
3. Mining & Quarrying	2225	2326	2493	2684	2909	3178	3443	3751	4120	4534
a. Natural gas & crude	1311	1376	1498	1633	1780	1949	2106	2280	2488	2723
petroleum										
b. Other mineral resources	914	951	995	1051	1129	1229	1337	1471	1632	1811
4. Manufacturing	32398	34174	36481	39069	42269	46820	51372	55077	58754	62122
a. Large & medium scale	23130	24194	25781	27572	29861	33268	36507	39157	41735	44030
b. Small scale	9267	9980	10700	11497	12409	13552	14865	15920	17019	18091
5. Electricity, Gas & Water	3035	3267	3529	3849	4192	4513	4608	4919	5210	5568
a. Electricity	2561	2760	2962	3234	3511	3773	3813	4068	4287	4578
b. Gas	338	360	392	426	464	508	545	587	637	688
c. Water	136	146	175	189	216	233	249	264	286	302
6. Construction	16796	18243	19719	21347	23120	25042	26796	28318	29931	31682
7. Wholesale & Retail	28021	29868	31687	33770	36155	38596	41700	44543	47309	50194
Trade										
8. Hotel & Restaurant	1335	1427	1527	1635	1751	1881	2023	2176	2341	2519
9. Transport, Storage &	19579	20863	22292	23676	25552	27592	29809	32357	34949	37464
Communication										
 a. Land transport 	13947	14886	15874	16830	17545	18272	19037	19901	20931	22068
 b. Water transport 	2332	2340	2342	2346	2392	2438	2480	2544	2606	2635
c. Air transport	364	303	299	302	309	325	332	352	378	415
 Support transport 	848	809	800	789	812	862	939	1018	1116	1248
services, storage										
e. Post & tele-	2088	2525	2977	3411	4495	5695	7022	8542	9917	11099
communication										
10. Financial Intermediations	3270	3489	3722	3983	4338	4707	5139	5596	6099	6604
a. Monetary intermediation										
(Bank)	2498	2636	2792	2980	3251	3517	3846	4168	4545	4895
b. Insurance	636	714	788	851	922	1007	1089	1199	1299	1428
c. Other financial intermediate.	136	139	142	152	165	183	204	229	255	285
11. Real Estate, Renting &	18096	18715	19374	20068	20801	21569	22381	23221	24106	25033
other Business Activities										
12. Public Administration	5322	5637	5932	6351	6860	7420	8044	8543	9142	10024
and Defence										
13. Education	4651	5004	5384	5798	6256	6822	7433	8013	8658	9463
14. Health and Social	4548	4789	5059	5371	5768	6217	6693	7163	7678	8300
Work										
15. Community, Social	16538	17073	17640	18340	19082	19863	20773	21731	22753	23834
and Personal Services										
GDP at Constant Price	215735	225261	237101	251968	266974	284673	302971	321726	340197	360047
Growth Rate (%)	5.27	4.42	5.26	6.27	5.96	6.63	6.43	6.19	5.74	5.83

Figure 2.18 Trend of GDP	by Industry (real GDP, based	on FY1995 figures)
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Source: MOF



0							J		(In Per	centage)
Sector/Sub-sector	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
										(r)
1. Agriculture and Forestry	5.53	-0.62	3.29	4.38	1.80	5.23	4.69	2.93	4.10	4.87
a. Crops & horticulture	6.18	-2.39	2.88	4.27	0.15	5.03	4.43	2.67	4.02	5.13
b. Animal farmings	2.81	4.70	4.51	4.98	7.23	6.15	5.49	2.44	3.48	3.32
c. Forest and related services	4.85	4.91	4.43	4.18	5.09	5.18	5.24	5.47	5.69	5.63
2. Fishing	-4.53	2.22	2.33	3.09	3.65	3.91	4.07	4.18	4.16	3.98
3. Mining & Quarrying	9.75	4.53	7.17	7.66	8.38	9.26	8.33	8.94	9.84	10.05
a. Natural gas & crude	13.99	4.93	8.91	8.98	9.02	9.52	8.03	8.26	9.15	9.44
petroleum										
b. Other mineral resources	4.19	3.96	4.66	5.68	7.40	8.84	8.80	10.01	10.90	10.97
4. Manufacturing	6.68	5.48	6.75	7.10	8.19	10.77	9.72	7.21	6.68	5.73
a. Large & medium scale	6.55	4.60	6.56	6.95	8.30	11.41	9.74	7.26	6.58	5.50
b. Small scale	7.02	7.69	7.21	7.45	7.93	9.21	9.69	7.10	6.90	6.30
5. Electricity, Gas & Water	7.40	7.63	8.02	9.09	8.90	7.67	2.10	6.77	5.91	6.87
a. Electricity	7.60	7.78	7.29	9.19	8.58	7.45	1.08	6.68	5.39	6.78
b. Gas	6.05	6.53	8.77	8.81	8.87	9.37	7.37	7.72	8.42	8.15
c. Water	7.05	7.52	20.01	8.00	14.44	7.55	7.08	6.00	8.39	5.29
6. Construction	8.65	8.61	8.09	8.25	8.31	8.31	7.01	5.68	5.70	5.85
7. Wholesale & Retail Trade	6.43	6.59	6.09	6.57	7.06	6.75	8.04	6.82	6.21	6.10
8. Hotel & Restaurant	7.00	6.92	7.00	7.05	7.12	7.45	7.52	7.55	7.58	7.62
9. Transport, Storage &	7.92	6.56	6.85	6.21	7.97	7.98	8.03	8.55	8.01	7.20
Communication										
 a. Land transport 	6.37	6.73	6.64	6.02	4.25	4.14	4.18	4.54	5.17	5.43
b. Water transport	0.57	0.34	0.07	0.16	1.95	1.95	1.73	2.54	2.46	1.09
c. Air transport	4.62	-16.84	-1.35	0.84	2.49	5.25	2.01	6.20	7.38	9.64
d. Support transport	18.10	-4.62	-1.17	-1.35	2.92	6.13	8.93	8.45	9.64	11.77
services, storage										
e. Post & tele-	26.92	20.93	17.89	14.56	31.79	26.70	23.29	21.64	16.11	11.92
communication										
10. Financial Intermediations	5.54	6.70	6.67	7.02	8.92	8.50	9.18	8.89	8.99	8.35
a. Monetary intermediation										
(Bank)	4.01	5.42	5.91	6.73	9.11	8.19	9.34	8.38	9.05	7.69
b. Insurance	13.46	12.35	10.29	8.06	8.34	9.16	8.21	10.03	8.38	9.92
c. Other financial intermediate.	-0.03	2.05	2.32	6.91	8.51	10.94	11.62	12.47	11.13	11.98
11. Real Estate, Renting &	3.41	3.42	3.52	3.58	3.65	3.69	3.76	3.75	3.81	3.84
other Business Activities										
12. Public Administration	5.88	5.92	5.24	7.06	8.02	8.15	8.41	6.21	7.01	9.64
13 Education	7.11	7 58	7.60	7 69	7.90	9.05	8 96	7.80	8.05	9.29
14. Health and Encial	4.02	5 30	5.63	6.17	7.90	7 70	7.64	7.00	7 30	9.29
Work	4.92	5.30	3.03	0.1/	7.40	7.79	7.04	7.02	7.20	0.10
15 Community Social and	3.15	3.24	3,22	3.07	4.05	4.09	4 59	4.62	4.70	4.75
Personal Services	3.13	3.24	3.32	3.97	4.05	4.09	4.30	4.02	4.70	4.75
Growth Rate (%)	5.27	4.42	5.26	6.27	5.96	6.63	6.43	6.19	5.74	5.83
Source: MOF										

Figure 2.19 Trend of GDP Growth Rate by Industry

2.2.2. Degree of Contribution to GDP Growth by Industry

(1) Overview by Industry

When the degree of contribution to overall GDP growth is examined, it is classified by industry.

Total GDP increased to 1.451 trillion Taka in the decade to FY2009. The following industrial sectors accounted for more than 10 percent of the total growth value:

- Manufacturing \triangleright
- ≻ Wholesale & Retail Trade
- \triangleright Transport, Storage & Communication
- \triangleright Construction
- \triangleright Agriculture and Forestry



	1 billion Taka	%
1. Agriculture and Forestry	145.7	10.0%
2. Fishing	41.9	2.9%
3. Mining & Quarrying	22.6	1.6%
4. Manufacturing	301.7	20.8%
5. Electricity, Gas & Water	25.5	1.8%
6. Construction	149.3	10.3%
7. Wholesale & Retail Trade	220.7	15.2%
8. Hotel & Restaurant	11.8	0.8%
9. Transport, Storage & Communication	180.6	12.4%
10. Financial Intermediations	35.4	2.4%
11. Real Estate, Renting & other Business Activities	69.5	4.8%
12. Public Administration and Defense	45.8	3.2%
13. Education	48.1	3.3%
14. Health and Social Work	37.5	2.6%
15. Community, Social and Personal Services	72.9	5.0%
GDP at Constant Price	1451.1	100.0%

Figure 2.20 GDP Increase by Industry and Percentage in total GDP (FY2000 - 2009)

Note: The total of each of the industries and the GDP total are inconsistent. Source: compiled by the Study Team based on a report by BBS, MOF

(2) Overview of Manufacturing Industries

The Sixth Five-Year Plan says that the growth of manufacturing sector was slow in the 1970s and 1980s, partly due to the inefficient management of state-owned enterprises. Following deregulation of investment, trade liberalization, favorable exchange control and an improved financial sector in and after the 1990s, the growth trend took off. The plan refers to the significant growth of Ready Made Garments (RMG) as an export industry. However, the five-year plan also cites concern over excessive dependence on RMG and certain other export items, saying that the manufacturing sector as a whole has yet to grow sufficiently compared to that of other East Asian countries, even though RMG is an example of success.

When the scale of corporations is examined, that of manufacturing accounted for 17.9 percent of GDP in FY2010, large and medium-scale corporations accounted for 12.7 percent and small corporations for 5.2 percent. Corporations of both sizes have grown over the last few decades. However, the percentage of small corporations in the manufacturing sector has remained rather flat at around 70 percent in 1981 and 2010. (\rightarrow No data on the private and governmental/state-run corporations as percentages of GDP was obtained. It is also difficult to obtain data of GDP of informal sectors.) In addition, as the ratio of exports to GDP has been expanding and percentage RMG exports accounted for 80%, it is assumed that development of manufacturing industry has been driven by the RMG.



	FY81	FY91	FY01	FY10
Size				
Total (% of GDP)7	13.7	13,4	15,6	17.9
Of which				
- Large and Medium Scale	9.7	9.4	11.1	12.7
- Small Scale	4.0	4.0	4.5	5.2
Growth Rate (% annual average over the decade ending)8				
Total	2.0	5.0	6.9	7.6
- Large and Medium Scale	2.9	4.9	7.0	7.5
- Small Scale	1.0	5.1	5.8	7.9
Employment				
Share of total employment	8.7	10.1	9.9	12.0
Exports				
Percent of GDP	4.1	6.8	10.6	17.2
Percent of Total Exports	65.5	78.9	92.1	90.9
RMG (% of Total Exports)	0.1	38.9	56.1	77.1

Figure 2.21 GDP Increase in Value Terms by Industry and Percentage (FY2000-2009)

Source: Sixth Five-Year Plan 2011-2015

(3) Service and Other Sectors

An overview of the Sixth Five-Year Plan shows the service sector with superior business performance to agriculture and industry, which has significantly boosted GDP growth. Professional services, finance, transport, and public administration in particular have made key contributions to the growth of the service sector, the sophistication of which is reflected in the growth of professional and financial services since the beginning of the 21st century. However, employment in this sector is mainly informal (88 percent)3, which may hinder efforts to make the labor more efficient and productive.

While agriculture and industry remain in transition to export- and high-added-value-oriented sectors, the service sector remains for domestic demand. Future growth of IT industry, as is happening in India, may be a key to the exportation of the service sector, according to the plan.

It also says that construction, public utilities, and mining contributed to the nation's economic growth since the 1990s. The construction sector in particular is highly appreciated as one that generates employment of skilled and semi-skilled workers. (In the Sixth Five-Year Plan, construction, public utilities, and mining are categorized and analyzed as Others in "Service and Others" not as service industry or mining in the table.)



³ Page 39 in the Sixth Five-Year Plan 2011-2015

(Share of GDP %)	FY81	FY91	FY01	FY10
Services	47.4	47.9	50.0	52.9
Of which:				
Wholesale and Retail Trade	12.9	12.4	12.2	14.8
Transport, Storage and Communication	10.7	9.7	9.0	10.7
Housing Services	8.1	8.6	8.7	6.8
Public Administration and Defense	1.5	2.1	2.3	2.8
Other Services (professional services, finance, etc	14.2	15.1	15.0	17.8
Others (Construction, Public utilities, Mining)	7.2	8.3	10.4	10.6
Of which: Construction	6.0	5.9	8.0	8.4
Growth Rate (% annual average over the decade)				
Services (annual average)	4.0	3.7	5.8	7.3
Of which:				
Wholesale and Retail Trade	5.0	3.6	5.0	6.9
Transport, Storage and Communication	4.0	4.3	4.4	7.5
Housing Services	3.0	3.2	3.4	3.7
Public Administration and Defense	4.6	6.7	7.1	7.3
Other Services (professional services, finance, etc)	6.3	4.8	6.5	7.0
Others (Construction, Public utilities, Mining) (annual average)	6.5	5.4	7.2	7.2
Of which: Construction	6.5	5.4	8.3	6.0
Source: Sixth Five-Year Plan 2011-2015				

Figure 2.22 GDP	Value Increase l	oy Industry	and their	Ratio			
(FY2000-2009)							

(4) Comparison of the industrialization ASEAN countries

The progress of industrialization is one of the keys for the expansion of GDP, how ever, as Figure 2.23 shows, Bangladesh is following the other ASEAN countries. Bangladesh's currently manufacturing share of GDP has remained 17.2% in 2008, which is slightly lower the percentage of Malaysia, and Thailand, in 1980. In addition, Vietnam, who shows almost the same ratio in 1980, exceeded 20 % in 2008. The industrialization in Vietnam is slightly more developed than Bangladesh.

	1980	1990	2000	2008				
	Manufacturing Share as % of GDP							
Malaysia	21.5	24.2	30.9	28.0				
Thailand	21	27	34	35				
Vietnam	10.5	12.3	18.6	21.1				
S. Korea	25	27	28	28				
China	30.2	32.7	32.1	32.9				
Bangladesh	10.8	12.7	14.7	17.2				

Figure 2.23 Cross-Country Comparison of Manufacturing Performance

Source: Sixth Five-Year Plan 2011-2015

2.2.3. Future Challenges

The Sixth Five-Year Plan describes the growth strategy with the following goals:

- Reach an annual average growth rate of 7.3 percent by FY2015. \triangleright
- Increase the ratio of manufacturing to over 20 percent of GDP by FY2015. (17.6% in 2011) \triangleright
- \geq Increase the employment of manufacturing to 15 percent by FY2015. (12.3% in 2010)



As measures to achieve these goals, it cites the assistance of women's entry into society by improving education to utilize sufficient labor force and also improving labor productivity; not only in terms of volume.

By industrial sector, it cites the transition from an agriculture-oriented economy to one mainly led by modern manufacturing and service sectors.

The following is a summary of each industry:

- \geq Improved agricultural production efficiency
 - Targeting high-value addition rather than volume expansion
 - Diversification of crops by promoting crops of high cashability other than the current main crop of rice
- Improved manufacturing performance \geq
 - Development of industry with export competitiveness to follow RMG
 - Enhancement of the service sector
 - Transition from informal employment to more formal and productive labor
 - Transition to more advanced sectors including IT and finance

2.3. Labor Market Trends

2.3.1. Working Environment

(1) Worker Population

 \triangleright

1) Male-female ratio of workers

According to BBS, the national population is 142.319 million (March 2011) and the annual average growth rate is 1.34 percent (2011). The worker population is 57.1 million, of whom 40.2 million are male and the remaining 16.9 million female. This means that the male worker population is by far the larger.

Characteristics	1995-96	1999-2000	2002-03	2002-03	2010(P)
Labour force composition (million):					
Civilian labour force	 56.0	40.7	46.3	49.5	57.1
Male	 34.7	32.2	36.0	37.3	40.2
Female	 21.3	8.5	10.3	12.1	16.9
Employed population	 54.6	39.0	44.3	47.4	54.5
Male	 33.8	31.1	34.5	36.1	38.6
Female	 20.8	7.9	9.8	11.3	15.9
Unemployed population	 1.4	1.8	2.0	2.1	2.6
Male	 0.9	1.1	1.5	1.2	1.6
Female	 0.5	0.7	0.5	0.9	1.0
Not in civilian labour force (million) :	 65.8	33.50	34.5	35.1	37.4
Household work	 12.0	13.0	25.0	24.2	-
Other inactives	 18.4	1.6	9.5	10.9	-
Children (0-9 years)	 35.4	18.9	35.7	33.2	-

Figure	2.24	Workforce	of Bangladesh
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Source: Statistical Yearbook of Bangladesh -2010 issued by BBS

Note: 1999-2000: Labour Force Survey, 2002-2003, 2005-06 : Labour Force Survey, The definition of statistical data may differ.

2) Worker population by age group

The total worker population (aged 15 or over) declined from 53.512 million in 2000 to 49.461 million in 2005. By age group, the number of workers aged between 15 and 44 in 2000 exceeded that in 2005, while that of workers aged between 45 and 50 and those aged 55 or over in 2005 exceeded those in 2000. The male worker population aged between 25 and 29 was the largest sector in 2003, while that of the 35 to 39 year group was the largest in 2005. The female worker population aged between 25 and 29 was the largest in 2000, 2003 and 2005. By gender, the total male and female worker populations were 37.331 and 12.13 million in 2005, with a 3:1 male-female ratio.

Figure 2.25 Worker Population Ratio by Age Group in Bangladesh (aged 15 or over)



Note: Unit: The vertical axis indicates age and the horizontal axis indicates 10,000 people Source: compiled based on LABOSTA Internet 1999-2008 issued by the ILO





Note: Unit: The vertical axis indicates age and the horizontal axis indicates 10,000 people Source: compiled based on LABOSTA Internet 1999-2008 issued by the ILO

3) Worker population ratio by industry

As for the worker population ratio by industry in 2010, the population engaged in agriculture, forestry and fisheries accounts for 47 percent, followed by the service industry, including trade, hotel and restaurants, accounting for 14.68 percent, and then manufacturing, 12.29 percent. The ratios of agriculture, forestry and fisheries declined from 2002 to 2010 and that of manufacturing increased.

Sector	LFS	LFS	LFS	LFS	MES
	1999-00	2002-03	2005-06	2009	2010(P)
Agriculture, Forestry and fishery	50.77	51.69	48.10	43.53	47.0
Mining & Quarrying	0.51	0.23	0.21	0.20	0.18
Manufacturing	9.49	9.71	10.97	13.53	12.29
Power, gas & water	0.26	0.23	0.21	0.20	0.18
Construction	2.82	3.39	3.16	3.92	4.40
Trade, hotel & restaurant	15.64	15.34	16.45	15.29	14.68
Transport, maintenance & communication	6.41	6.77	8.44	8.24	8.26
Finance, business & services	1.03	0.68	1.48	2.35	1.83
Communities & Personal Services Other	13.08	5.64	5.49	5.69	6.06
Public administration and defence	-	6.32	5.49	7.06	5.13
Total	100.00	100.00	100.00	100.00	100.00

Figure 2.27	Worker	Population	Ratio b	y Industry
0		1		

Source: Labour Force Survey 1995-96 1999-00 2002-03 & 2005-06 BBS

BBS, Statistical Yearbook of Bangladesh -2010"

Note: LFS: Labor Force Survey; MES: Monitoring of Employment (Labour Force) Survey

4) Worker population by occupation

By occupation, the largest population, or 25.2 million, was engaged in agriculture, forestry and fisheries, followed by 83 million in production and transport and then service industry and professional and technical.

Figure 2.20 Worker Fopulation Ratio by Occupation										
Characteristics		1995-96	1999-2000	2002-03	2002-03	2010(P)				
Employment in major occupation (Million) :										
Total		54.6	39.0	44.3	47.4	54.5				
Professional, Technical		1.8	1.6	1.7	2.2	2.7				
Administrative, Managerial		0.2	0.2	0.1	0.2	0.7				
Clerical workers		1.2	1.2	1.5	1.0	1.2				
Sales workers		6.2	5.8	6.5	6.7	8.3				
Service workers		1.9	2.2	2.0	2.8	2.8				
Agri. Forestry, Fisheries		34.9	19.9	22.8	23.0	25.2				
Production, Transport		8.5	8.1	9.7	11.5	13.6				
Not adequately defined		-	-	-	-	-				

Figure 2.28 Worker Population Ratio by Occupation

Source: BBS, "Statistical Yearbook of Bangladesh -2010"

5) Worker population ratio by division

The Sylhet division has the highest worker population ratio at 61.56 percent, while the Dhaka division has the largest worker population at 15.621 million. By city, Dhaka has the largest number of workers, 3.498 million, followed by 2.908 million in Chittagong. When the total workers of both cities are combined, they account for 12.9 percent of the national worker population.

Figure 2.29 Worker Population Ratio by Division (Unit: 1,000)

Division/ District	P	opulation 15	n 15+ Economically active Pop.				Pa	rticipation r	ate
	Total	Male	Female	Total	Male	Female	Total	Male	Female
BANGLADESH	84586	43006	41580	49461	37330	12131	58.47	86.8	29.17
Chittagong division	16921	8551	8372	9661	7254	2405	57.09	84.83	28.73
Chittagong	5063	2574	2489	2908	2128	780	57.43	82.68	31.32
Dhaka division	26693	13475	13214	15621	11657	3967	58.52	86.51	30.02
Dhaka	6712	3370	3341	3498	2758	741	52.12	81.82	22.17
Khulna division	9995	5095	4902	5722	4451	1271	57.25	87.36	25.93
Khulna	1729	881	848	924	768	156	53.46	87.14	18.46
Rajshahi division	19321	9952	9370	11282	8784	2500	58.39	88.26	26.68
Bogra	1908	957	951	1013	822	191	53.09	85.89	20.06
Barisal division	5774	2971	2803	3554	2583	970	61.55	86.94	34.61
Barisal	1634	837	797	890	698	191	54.43	83.41	23.98
Sylhet division	5882	2964	2919	3621	2603	1019	61.56	87.82	34.91
Sylhet	1977	990	987	1052	817	235	53.19	82.45	23.82

Source: BBS, "Statistical Yearbook of Bangladesh -2010"





(2) Human Resources

1) Characteristics of workers

The following is a summary of interviews with Japanese companies in Dhaka:

(i) Apprentice level

Although they are earnest, innocent, and easy to work with, sometimes they can also be stubborn. They are not geared up for independent work and must be trained and understand corporate philosophy. Many have not received primary education and need to be taught basic daily habits (washing hands before work, etc.).

(ii) Skilled worker level

Because the garment business is thriving, many workers in the sector are skilled and change jobs due to their skill and experience. The turnover ratio is 100 percent at some companies. Because the employers do not need to train these workers, it is a workers' market. In other sectors, there is a lack of skilled workers as the market is small and human resources are in short supply for both foreign and local companies.

(iii) Managerial level

Although there are few candidates with management capacities, there are some excellent individuals who graduated from Dhaka University, Bangladesh University of Engineering and Technology (BUET), and BRAC University, who are in big demand. Candidates at this level have considerable pride and are unwilling to work on site.

2) Problem of technical capacities

(i) Low productivity

Bangladesh, which provides a cheap labor force, is compared with Myanmar and China. According to Japanese corporations in Bangladesh, workers in Myanmar are good with their hands and the product quality exceeds that of Bangladesh. Although the people of Bangladesh can learn work faster than Chinese, this does not mean that they understand the reason behind the work.

According to a Japanese company worker who has also worked in China, the productivity of Bangladeshi workers is lower than that of Chinese. Generally speaking, they are poor at taking initiative and working proactively.

(ii) The Bangladesh Industrial Technical Assistance Center (BITAC) provides technical training. Every year, 2000 students graduate from this Center

The Bangladesh Industrial Technical Assistance Center, operated under the umbrella of the Ministry of Industry, provides basic technical training to improve skills. Two thousand trainees complete the program every year. The BITAC also operates the Bangladesh Institute of Management, Textile Engineering University, and Vocational School. Although it aims to send out human resources to corporations, the machines tools they have are old, the quality inspection system is poor, and they lack the capability to introduce new technologies, meaning world class competitive skills are not acquired.

2.3.2. Labor Cost

(1) CPI Rise

The CPI rose by 7.3 percent in FY2010 from the previous year according to the figure below. Tenants of CEPZ (Chittagong EPZ) are required to promise wage rise on a year-on-year basis. For example, non-manufacturers such as Japanese trading firms also raised the base salary in tandem with the Consumer Price Index (CPI). The CPI of food, byerage and tabacco rose by 8.5 percent, while CPI of other products rose by 5.4 percent.



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		0			0			· ·		
		Food					of which			
Period	General	beverage and tobaco	Non-food	Clothing and footwear	Gross Rent, fuel & lighting	Furniture furnishing household equipment s and operation	Medical care and health expenses	Transport and communic ation	Recreation entertainm ent, education and cultural services	Misc. goods and Services.
		•	•						•	
2000-01	126.72	130.30	122.25	121.94	119.41	120.92	129.82	135.92	121.69	119.29
2001-02	130.26	132.43	127.89	124.62	124.95	126.07	136.22	144.36	131.03	123.47
2002-03	135.97	137.01	135.13	130.55	131.20	132.33	145.25	159.52	136.94	129.40
2003-04	143.90	146.50	141.03	136.25	136.19	137.95	154.36	170.79	141.31	133.82
2004-05	153.23	158.08	147.14	142.15	141.43	143.18	162.67	179.94	150.24	137.78
2005-06	164.21	170.34	156.56	148.35	152.02	151.21	169.62	191.66	165.42	143.25
2006-07	176.06	184.18	165.79	156.79	162.32	162.61	178.49	201.15	171.47	151.44
2007-08	193.54	206.79	176.26	164.53	174.70	178.56	185.66	211.01	174.86	166.69
2008-09	206.43	221.64	186.67	173.10	184.46	194.75	189.25	222.12	181.44	188.84
2009-10	221.53	240.55	196.84	181.29	191.49	215.04	199.22	234.09	192.46	208.40
Source: Pr	rice & Wage	es Section, I	National Acc	counting Wi	ng, BBS					

Figure 2.30 CPI in Bangladesh (1995-96 = 100)

Source: BBS, "Statistical Yearbook of Bangladesh -2010"

(2) Labor Cost Increase

As shown below, the wage increase rate has exceeded 10 percent since 2007. The construction sector showed the highest growth at 21.47 percent in 2008-2009 from the previous year, while the growth rate in the manufacturing sector has also been high, at the 10-percent level since 2007.

The growth rate of FY2010 to FY2011 is 14.8 percent and exceeded the inflation rate (approx.10%) according to the Survey of Business Activities of Japanese Companies in Asia and Oceania (2012) issued by JETRO. As it exceeds the inflation rate rose 10.5% from FY2011 to FY2012, there is concern that it may have a major impact on the investment environment for Japanese corporations in the mid- to long-term, according to the survey. A Japanese trading company interviewed in the survey says that it raises wages at around the inflation rate (approx. 10 percent) given strong demand from employees, which shows that the local inflation rate affects the wage rise.

Year		Nominal wage		CPI for Industrial labor	Real Wage Rate Index			
	General	Manufactur ing industry	Constructi on	Agricultur e	Fisheries	(national)	(General)	
2001-0	2637	3035	2444	2262	2411	2024	130	
2	(5.95)	(7.17)	(3.74)	(5.65)	(5.19)	(1.25)	(4.00)	
2002-0	2926	3501	2624	2443	2563	2068	141	
3	(10.96)	(15.35)	(7.36)	(8.00)	(6.30)	(2.17)	(8.46)	
2003-0	3111	3765	2669	2582	2775	2129	146	
4	(6.31)	(7.55)	(1.69)	(5.69)	(8.28)	(2.95)	(3.55)	
2004-0	3293	4015	2758	2719	2957	2216	149	
5	(5.85)	(6.64)	(3.33)	(5.30)	(6.55)	(4.08)	(2.05)	
2005-0	3906	4293	2889	2926	3133	2351	149	
6	(6.50)	(6.92)	(4.75)	(7.61)	(5.95)	(6.09)	(0.00)	
2006-0	3779	4636	3135	3156	3332	2524	150	
7	(7.76)	(7.99)	(8.52)	(7.86)	(6.35)	(7.36)	(0.67)	
2007-0	4227	5197	3549	3524	3669	2740	154	
8	(11.85)	(12.10)	(13.20)	(11.66)	(10.11)	(8.56)	(2.67)	
2008-0	5025	6128	4311	4274	4236	2885	174	
9	(18.90)	(17.91)	(21.47)	(21.28)	(15.45)	(5.30)	(12.92)	
2009-1	5459.70	6620	4756	4985	4821			
0	(10.67)	(13.96)	(10.31)	(16.65)	(14)	••	••	

Figure 2.31 Wage Increase Rate (1969-1970 = 100)

Source: BBS, "Statistical Yearbook of Bangladesh -2010"





Figures in () indicate the ratio of previous year.



Source: JETRO, Survey of Business Activities of Japanese Companies in Asia and Oceania (2012)

(3) Legal Minimum Wage

According to the 21st Comparison of Investment Cost of Major Cities in Asia and Oceania (2011) issued by JETRO, the legal minimum wage in Bangladesh was revised in July 2010 for the first time in four years. In FY2011, the wage was raised to US\$40(1-doller increase).

The monthly minimum wage of a low-level unskilled worker at a garment plant was raised to US\$ 39 (nine-dollar increase). Legal minimum wage of ASEAN countries are following: \$ 136 in Thailand (Bangkok), \$167in Jakarta (Indonesia), \$153 in in Manila (in the Philippines), and \$95 in Hanoi / Ho Chi Minh City (Vietnam). Although legal minimum wage in Bangkladesh has been raised, it has remained at low level compared with the level of statutory wage countries of ASEAN.



Figure 2.37 Legal Minimum Wage by Country (Monthly)

Source: JETRO, 21st Comparison of Investment Cost of Major Cities in Asia and Oceania (2012)





EPZ, which is not the subject to the revision, also reviewed the legal minimum wage for the first time since 1989 and raised the minimum monthly wage of apprentice-level workers to US\$ 39 (20-dollar increase).

Figure 2.35 Minimum Wages for Sewing Industry outside Bangladesh Export Processing Zone (EPZ)

(i) Unskilled worker: 3,000 to 3,210 Taka/month	
(ii) Semi-skilled worker: 3,455 to 4,120 Taka/month	
(iii) Skilled workers: 7,200 to 9,300 Taka/month	

Source: JETRO, 21st Comparison of Investment Cost of Major Cities in Asia and Oceania (2011)

(4) Wage Comparison

The BBS posts the wage data of cotton textile, jute textile, match manufacturing, engineer, and mustard oil. Wages of skilled engineers are relatively high (350 Taka/day) followed by skilled lathe workers (300 Taka/day).

		. –			. –	-		-		(Taka per day)
Gro	up	Category	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
1.	Cotton textile	Skilled	129.67	129.67	129.67	129.67	129.67	163.08	233.17	248.17
		Unskilled	109.94	109.94	109.94	109.94	109.94	121.00	150.00	176.25
2.	Jute textile	Skilled	129.67	129.67	129.67	129.67	129.67	162.58	228.25	247.50
		Unskilled	109.94	109.94	109.94	109.94	109.44	119.50	143.33	165.33
3.	Matches	Skilled	129.67	129.67	129.67	129.67	129.67	158.67	208.67	235.08
		Unskilled	109.94	109.94	109.94	109.94	109.94	118.92	143.83	164.92
4.	Engineering	Skilled	190.42	216.08	241.83	280.00	282.92	311.58	331.75	350.00
	(a) Fitter	Unskilled	140.60	150.00	150.00	150.00	165.83	205.83	217.00	232.00
	(b) Turner	Skilled	95.45	114.50	137.00	137.00	140.00	-	246.67	300.00
		Unskilled	-	•	-	-	-	•	-	-
5.	Mustard oil	Skilled	128.80	135.00	137.83	150.00	170.92	205.17	228.17	250.75
		Unskilled	106.25	111.00	114.00	120.00	150.00	155.40	170.17	195.50
Sou	rce : Price section, B.E	LS.								

Figure 2.36 Wages by Industry

Source: BBS, Statistical Yearbook of Bangladesh -2010

As for the actual monthly cost per worker, Bangladesh is the second lowest at US\$ 78 next to Myanmar among the nations in the figure below compared with such ASEAN countries as Singapore (US\$1,285), Malaysia (US\$ 344), Thailand (US\$ 286), Indonesia (US\$ 209), the Philippines (US\$325), Vietnam (US\$111), Myanmar (US\$68) and Cambodia (US\$82).





Figure 2.37 Worker's Monthly Base Salary (Factory worker)

Source: JETRO, 21st Comparison of Investment Cost of Major Cities in Asia and Oceania (2012)

On the other hand, the monthly base salary of mid-level engineer in Bangladesh is US\$ 251, which is higher than Myanmar, Cambodia and Laos. It can be said mid-level engineer's salary is relatively high standard compared with that of woker class.



Figure 2.38 Engineer's Monthly Base Salary (Mid-level engineer)

Source: JETRO, 21st Comparison of Investment Cost of Major Cities in Asia and Oceania (2012)

The monthlyl cost per staff in the non-manufacturing sector is US\$306 in Bangladesh, which is higher than Myanmar (US\$ 173), Cambodia (US\$266), Laos (US\$167), Pakistan (US\$ 227) and

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Sri Lanka (US\$296). Compared with that of manufacturing sector, non-manufacturing sector's salary is higher.



Figure 2.39 Staff's Monthly Base Salary (Clerical staff, non-manufacturing industry)

The actual monthly cost per managers in the non-manufacturing sector in Bangladesh is US\$811, which is higher than that of Laos (US\$445), Myanmar (US\$562). Considering that the staff salary level is higher than that of Cambodia, Pakistan and Sri Lanka, the manager class salary is relatively lower level in South Asia.



Figure 2.39 Manager's Monthly Base Salary (Non-manufacturing Industry)

Source: JETRO, 21st Comparison of Investment Cost of Major Cities in Asia and Oceania (2012)



Source: JETRO, 21st Comparison of Investment Cost of Major Cities in Asia and Oceania (2012)

(5) Number of Bangladeshi people working overseas (migrant workers) and amount of money transferred

Approx. 200,000 Bangladesh people were working overseas in 2010 which corresponds 0.4% of the whole population. By country or region, many were working in the Middle East (UAE, Saudi Arabia, etc.). The Government of Bangladesh has established the Probashi Kollya Bank (bank for the welfare of wage earners working overseas); specialized in their money transfer as a means of supporting them.

FY	Saudi Arabia	Kuwait	UAE	Bahrain	Oman	Malaysia	Singapore	Others	Total
2000	144618	594	34034	4637	5258	17237	11095	5213	222686
2001	137248	5341	16252	4371	4561	4921	9615	6656	188965
2002	163254	15767	25438	5370	3927	85	6870	4545	225256
2003	162131	26722	37346	7482	4029	28	5304	11148	254190
2004	139031	41108	47012	9194	4435	224	6948	25006	2702958
2005	80425	47029	61978	10716	4827	2911	9651	37903	255440
2006	109513	35775	130204	16355	8082	20469	20139	44032	381516
2007	204112	4212	226392	16433	17478	273201	38324	52457	832609
2008	132124	319	419355	13182	52896	131762	56581	68836	875055
2009	14666	10	258348	28462	41704	12402	39581	80141	475278
2010	4490	22	110199	10756	12267	291	18696	41103	202824

Figure 2.41 Number of Bangladesh People Working Overseas by Country

Source: Adopted from the Bangladesh Economic Review 2011 (original source: BBS and BB)

The amount of money transferred from such migrants has continued to increase from FY2001 to 2009. Although the number of such workers declined by 34 percent in FY2010 from the previous year due to the global economic slump and partly due to the impact of Lehaman's fall, the total money transferred increased by 13.4 percent from US\$ 9,689 million to 10,987 million. This figure accounted for approx. 11 percent of nominal GDP in the year, namely US\$ 100,360 million and was the main source of foreign currency.

MiSector	No of		Amount of r	remittance	
	employment	Million US\$	Percentage	Crore TK.	Percentage
	abroad (UUU)		change (%)		Change(%)
1999-00	248	1949.32	14.28	9825.40	19.63
2000-01	213	1882.10	-3.45	1026.00	4.48
2001-02	195	2503.44	32.81	14390.19	40.17
2002-03	251	3060.31	22.25	17719.58	23.14
2002-04	277	3372.49	10.20	19872.39	12.15
2004-05	250	3848.30	14.11	23646.97	18.99
2005-06	291	4801.88	24.78	32274.60	36.49
2006-07	564	5978.47	24.50	41298.50	27.96
2007-08	981	7914.78	32.39	54293.24	31.47
2008-09	650	9689.16	22.42	66674.87	22.80
2009-10	427	10987.40	13.40	76010.96	14.00
2000-10					

Figure 2.42 Amount of money transferred from Bangladeshi Migrants

Source: BB



A JICA study report of "Poverty Reduction and Human Security in Bangladesh" cites the contributions to the home country of Bangladesh from overseas workers. It says that globalization, in the form of working in the Middle East, deepens ties with Saudi Arabia and other Islamic countries and boosts the number of madrasahs, or Islamic schools, funded with money from those working overseas, which also helps increase the number of those opposed to women's empowerment.

According to the work "Globalizing the Bangladeshi Economy", written by Toshihiko Suda in Asian Economy Nov. 2010 and issued by the JETRO Institute of Developing Economies, Chittagong District, including Comilla Province, has the biggest number of migrant workers. Many are from rural villages and the sharp increase is likely to have a significant impact on the rural economy, although it differs from district to district. It also says that many migrant workers in Middle Eastern oil producers work at construction sites, plants, and as shop clerks. Overall, it says that the sharp rise in the number of overseas migrant workers, mainly in the Middle East, and the large amount of money sent to their home country revitalizes the local economy by expanding consumption demand, not only at a household level, and significantly contributing to a shift toward a non-farming-oriented economy and poverty reduction of such rural villages.

According to JETRO's Dhaka office, sending workers overseas has generated various peripheral businesses, including vocational and language schools and money sent from such workers has increased the number of affluent rural households more than expected. These are factors that cannot be ignored when the potential of the Bangladeshi market is examined.

]	Migrant W	orkers		Ratio of	Poyerty	Ratio ir	
Division/	Population (2001)	Total (leaving from	Ratio	Ratio of (a) to economicall	Arable Land per Person	Boro Rice Acreage to Arable	Rurá (%	(%)*	
District	(1,000 persons)	2007) (1,000 persons) (a)	(70)	y active male population (%)	(acre)	Land (%)	2000	2005	
Chittagong Division (southwest)	24,290	2,276	42.2	34.5	0.10	43.4	30.1	18.7	
Comilla District	4,596	631	11.7	61.7	0.10	69.3	N.A.	N.A.	
Sylhet Division (northeast)	7,940	395	7.3	15.2	0.17	58.2	26.1	22.3	
Dhaka Division (central)	39,044	1,925	35.7	18.8	0.12	62.1	43.6	26,1	
Barisal Division (south)	8,174	206	3.8	6.9	0.20	14.7	35.9	37.2	
Khulna Division (southwest)	14,705	251	4.7	4.9	0.17	38.1	34.0	32.7	
Rajshahi Division (northwest) (southwest)	30,202	337	6.2	3.8	0.18	60.5	43.9	35.6	
Rangpur District (northwest) (southwest)	2,542	9	0.2	1.3	0.16	70.6	N.A.	N.A.	
National Wide	124,355	5,391	100.0	15.0	0.15	51.3	37.9	28.6	

Figure 2.43 Breakdown of Bangladeshi Migrant Workers by District

(Source: compiled based on such data as GOB (2008), GOB (2007a), GOB (2007b), and BMET (n.d.a) (Note) (1) As the total of migrant workers includes the returnees, the "ratio of (a) to economically active male population" is not the ratio of people who are currently working overseas. (2) The number of economically active male population (aged 15 or over) is the data of 2002/2003. (3) (*) is the poverty ratio under the definition of the Lower Poverty Line of the Cost of Basic Needs (CBN) method.

(4) The Lower Poverty Line of the CBN is defined as follows: the total cost per capita including nonfood cost is equal to the food cost necessary for recommended kilocalorie (2122kcal/day/person). The poverty ratio is the percentage of population that does not meet the level. The Upper Poverty Line is the level that food cost is equal to that required for acquiring recommended kilocalorie.

Source: Globalizing Bangladeshi Economy, written by Toshihiko Suda in Asian Economy Nov. 2010 and issued by the JETRO Institute of Developing Economies

The effect of overseas remittances from migrant workers does have a positive aspect and a negative aspect. According to the research report "Poverty Reduction and Human Security" JICA, globalization in the form of overseas migrant workers to the Middle East increases the number of people who doest not feel good about the empowerment of woman, by developing relations with the Islamic countries such as Saudi Arabia. The financial resource from overseas remittance of migrant workers increases the number of madrassa, school of Islamic education.

2.3.3. Labor Issues

(1) Child Labor

The BBS conducted the first National Child Labor Survey (NCLS) in 2002 to 2003 and disclosed

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that 4.9 million children were included in the labor force, since which time no further survey has been conducted. The Government of Bangladesh announced a national child labor policy in March 2010, which is expected to improve the child labor issue.

(2) Protests Over Wage Increase

The Government of Bangladesh, on July 27, 2010, proposed a 80-percent increase in the lowest monthly wage of sewing factory workers from the current 1,662 Takato 3,000 Taka. However, workers claimed that they needed at least 5,000 Taka per month because of soaring consumer prices. Most unions rejected the government proposal and staged a demonstration on July 30, destroying factories at various locations and urban stores, with some workers also setting fire to parked vehicles. There were conflicts with riot police and there have been many labor disputes involving low-wage earners in the garment manufacturing business.

(3) Risk of Ship Breaking Industry

Ship scrapping companies are concentrated along the Chittagong coast. The scrapping work is largely performed manually by low-wage earners at underequipped facilities, which has led to many incidents of falls killing and maiming workers.

Many old ships were built with harmful PCBs and asbestos, which not only adversely affects workers' health but harms the environment. Attention must be paid to the safety of workers and the surrounding environment.

(4) Trend of labor union

On July 8, 2004, the EPZ Workers' Association and Industrial Relations Act 2004 (Act No. 23 of 2004) came into force. The law allows the establishment of labor unions from November 1, 2006. However, no labor union can be formed for the first quarter after the establishment of a new company. The establishment of labor unions was a limited measure and they could survive from November 1, 2006, to October 31, 2008.

However, labor unions are stipulated under the Industrial Act in 1969 for non-EPZ areas, allowing the formation of a labor union with membership exceeding 30 percent of total employees. When multiple labor unions exist within a single company, their representatives elect a Collective Bargaining Agent (CBA, two-year term) by vote. Only the CBA can file a dispute and negotiate with management. The Industrial Act 1969 grants the right to form a union or organization without the prior approval of all workers or employers. However, the labor union must be registered in accordance with the law to function as a labor union.

Foreign companies conduct a wide variety of business activities; mainly in the fields of telecommunications, pharmaceuticals, food and beverages in EPZ as well as infrastructure sectors such as fuel, gas and power and some have labor unions. In reflection of the wage increase demand led by labor unions in the textile industry, some Japanese firms hire only contract workers except for factory management-level employees to circumvent the formation of labor unions.

According to the Japan International Labour Foundation, there are 32 national federations of labor unions and approx. 7,000 labor unions (including worker and employee unions, company unions, trade unions, and national federations of labor unions), with membership of approx. two million. The federation says that changes in the labor market also serve to change the activities of labor unions. Increased numbers of female and home-based workers, the informal sector, and the small-scale commerce and service sector has changed the organizational strategy of labor unions. Labor unions have also recently emerged in such informal sectors as construction, rickshaws, porters and rice mills. As for labor movements, the lack of strong organized leadership in the informal sector means the human rights of workers are violated and the situation has not improved, according to the federation.4

⁴ http://www.jilaf.or.jp/rodojijyo/asia/south_asia/bangladesh2010.html

(5) Current Situation and Trend of the Informal Sector

The informal sector refers to the economic sector not officially recorded in the economic activities of developing countries. According to the Bangladesh Institute of Labour Studies (BILS), this sector includes national construction, agriculture and service industries.5 The BILS says that about 80 percent of the working population is engaged in the informal sector.

There are many employment opportunities for "miscellaneous jobs" in rural areas, including small to medium-sized cities and jobs absorb farming households owning no land and small-scale farming households. The total of unpaid family workers and day laborers accounts for 41.6 percent of all workers, 22 and 19.6 percent, respectively. According to the Millennium Development Goals (MDGs): Bangladesh Progress Report 2008, the inadequate employment rate is 10.9 percent for men and 68.3 percent for women. That implies the underemployment rate of woman in Bangladesh remains at quite high level.

Although assistance such as the NGO microcredit, including Grameen, has drawn attention in relation to the employment of BOP in rural areas and female entry into the work force in recent years, workers are engaged in the collection of steel, metal waste and used paper, or "garbage picking" in urban areas, and the recycling of ship scrapping in Chittagong. The high morbidity of workers in recycling has become a social issue.

2.4. Trend of Exports and Imports

2.4.1. Overview of Exports and Imports

Both exports and imports grew sharply in the first decade of the 21st century. Exports increased by 290 percent from 288.2 million Taka in FY2000 to 1.121 trillion Taka in FY2010. Similarly, imports also grew by 290 percent from 421.3 million Taka to 1.6422 trillion during the same period. One of the recent features is that both exports and imports have continued growing steadily, even after the Lehman's fall in 2008. According to data released by the Ministry of Treasury, exports grew in 2011 and this trend has been maintained (the data in 2011 is from the Ministry of Commerce).

As introduced in subsequent data, RMG sector accounts for a very large part of the exports. Partly due to external factors, such as the increased demand for cheap clothing, post-slump Bangladesh was relatively well-placed when compared with other countries manufacturing mid- to high-grade products.

											/
	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Imports	421.3	503.7	490.5	559.2	642.6	808.9	892.2	1345.1	1336.5	1396.0	1642.2
Exports	288.2	348.6	343.7	379.2	448.1	532.3	698.4	962.7	970.8	1072.1	1121.0
Trade Balance	-133.1	-155.1	-146.8	-127.8	-136.7	-276.6	-193.8	-382.4	-365.7	-323.9	-356.4

Figure 2.44 Trend of Import and Export Values (relisting)

											(% / GDP)
Imports	17.8	19.9	18.0	18.6	19.3	21.8	21.5	28.5	24.5	22.7	23.7
Exports	12.2	13.7	12.6	12.6	13.5	14.4	16.8	20.4	17.5	17.4	16.2
Trade Balance	-5.6	-6.1	-5.4	-4.3	-4.1	-7.5	-4.7	-8.1	-7.0	-5.3	-5.2

Source: MOF

As shown in Figure 2.45, North America and Europe account for the destination of approx. 70 percent of exports. In FY2010, the United States was the biggest importer, followed by Germany, the United Kingdom, and France. Although the export value to Japan is growing, it remains a mere one-tenth that of the U.S. According to the FY2010 data released by the BBS, Turkey, India, China, Hong Kong and Australia are among the top 20 importers other than Japan, and North American and European countries.

It is somewhat surprising that the export value to the great power India, in the same economic zone, is small. According to the above mentioned BBS data in FY2010, it is ranked 11th in terms



(Tk.in billion)

http://www.bils-bd.org/tor.html

of export destinations.

Similarly, among SAFTA (South Asia Free Trade Area) member countries, excluding India, Pakistan and Sri Lanka are ranked 31st and 43rd, according to the BBS data. Although this is because their economies are relatively small, it shows that trade within South Asia is not so active.

As Figure 2.47 and 2.48 show, the trade with SAARC countries formed by almost the same member country to the SAFTA, although trade has been growing become a major factor in imports, in percentage to the trade of the whole there does not change that much. Sometimes the size of the economy of those countries is not large,

To Bangladesh, the United States, EU, and Japan have applied GSP (general preferential tariff system) In the United States, about 4,800 items are duty-free. In EU, the products which require a special consideration (sensitive products) will gain the reduction of 3.5% tax rate than usual. On the other hand, the product with no special consideration (non-sensitive products), will not be taxed. However, fiber requires 20 percent tariff rate. In Japan, agricultural products will be granted preferential tariff for approximately 340 specific items by the positive list system. As for industrial products, special preferential tariffs will be granted to all items in principle by a negative list system. In addition, for developed countries, including Bangladesh, almost all the products are duty-free except some items.

For intra-regional trade in South Asia, SAFTA takes a major role of it. SAFTA was signed in Islamabad in Pakistan, in 2004. Afghanistan, Bangladesh, Bhutan, Maldives, India, Pakistan, Nepal, and Sri Lanka participated in SAFTA, and it started to lower the tariff from July 1, 2006. However, according to the website of the Ministry of Commerce of Bangladesh, all participating countries have a list of items to be considered (sensitive list). The items on the list do not receive preferential tariff at the moment. In addition, about 1,250 items are listed both for the developing countries and non-developping countries, on the list of Bangladesh. In India, 868 are listed for non-developping countries, and the 480 items for developing countries.

According to the JETRO, Bangladesh has concluded bi-national treaty with about 30 countries until May 2012. However, these treaties are generally for only promoting trade, except certain cases. Thus, Bangladesh has not concluded FTA between any countrises. The FTA between India, the economic power next to Bangladesh, is being examined by the government of Bangladesh, but not realized yet.

										(In Millio	on US dollar)
FY	USA	UK	Germany	France	Belgium	Italy	Netherlands	Canada	Japan	Others	Total
1989-90	444.58	97.14	83.56	62.37	62.64	131.37	38.12	22.24	55.60	526.09	1523.71
1990-91	507.29	136.90	164.91	86.40	83.55	115.94	61.86	30.25	41.26	489.19	1717.55
1991-92	673.81	130.40	180.34	116.10	82.08	147.29	81.33	27.64	40.60	514.33	1993.92
1992-93	822.51	183.42	216.21	127.36	83.14	137.40	85.80	44.38	53.31	629.36	2382.89
1993-94	734.82	259.26	275.21	157.72	98.41	170.61	104.90	57.23	61.02	614.72	2533.90
1994-95	1184.28	318.31	300.26	192.93	128.58	211.26	136.66	69.38	99.65	831.26	3472.57
1995-96	1197.54	417.70	369.18	272.88	186.93	207.10	183.22	69.09	120.80	857.98	3882.42
1996-97	1432.15	437.69	428.29	312.65	210.57	203.62	208.59	69.12	114.05	1001.55	4418.28
1997-98	1929.21	440.00	510.93	369.07	210.07	270.47	236.08	106.84	112.00	976.53	5161.20
1998-99	1968.46	491.34	625.13	345.36	227.62	270.01	251.61	104.91	92.76	935.66	5312.86
1999-00	2273.76	499.99	658.71	367.37	225.89	248.28	282.77	110.63	97.64	987.96	5752.20
2000-01	2500.42	594.18	789.88	365.99	253.91	295.73	327.96	125.66	107.58	1101.69	6467.00
2001-02	2218.79	647.96	681.44	413.69	211.39	262.31	283.36	109.85	96.13	1061.08	5986.00
2002-03	2155.45	778.25	820.72	418.51	289.48	258.99	277.95	170.26	108.03	1270.80	6548.00
2003-04	1966.58	898.21	1298.54	552.96	326.95	315.93	290.44	284.33	118.16	1550.90	7602.99
2004-05	2418.67	944.18	1351.06	625.51	327.80	369.78	290.92	335.25	122.53	1875.12	8654.52
2005-06	3039.77	1053.74	1763.38	678.94	359.33	427.89	327.20	406.97	138.45	2349.45	10526.16
2006-07	3441.02	1173.95	1955.38	731.76	435.82	515.66	459.01	457.21	147.47	2860.58	12177.86
2007-08	3590.56	1374.03	2174.74	953.13	488.39	579.23	653.88	564.43	172.56	3591.31	14110.80
2008-09	4052.00	1501.20	2269.70	1031.05	409.80	615.51	970.80	663.20	202.60	3849.33	15565.19
2009-10	3950.47	1508.54	2187.35	1025.88	390.54	623.92	1016.88	648.19	330.55	4522.33	16204.65

Figure 2.45 Trend of Export Destinations

Source: BBS







Figure 2.46 Breakdowns of Export Destinations (FY2010)

Source: BBS





Source: Md.Joynal Adbin(FBCCI), "An analysis of SAFTA in the context of Bangladesh"

Figure 2.48 Share of SAARC Trade in Rest of the World Trade



Source: Md.Joynal Adbin(FBCCI), "An analysis of SAFTA in the context of Bangladesh"

Mitsubishi UFJ Research and Consulting

2.4.2. Breakdown of Export Items

Clothing (although the classifications and titles differ among types of statistics) accounts for a significant portion of exports. Analysis of the entire exports is almost identical with clothing analysis.

According to FY2009 data released by the Ministry of Finance, RMG accounted for approx. 37 percent and knitwear for approx. 40percent of all exports. These two categories combined accounted for more than three quarters of all export value and determined the volume and trend of exports. RMG grew approx. 70 percent from 2000-2001 to 2009-2010, while knitwear grew by as much as 330 percent during the same period. When the two items are combined as clothing, the growth rate is approx. 150 percent, which is that of entire exports and shows that the increase in clothing exports has sparked increased national exports overall.

By country, exports to North America, Europe and Japan have continued to increase. Although exports to major destinations such as the US, UK, and Germany has remained stagnant since around 2008, this is due to the impact of the economic slump in Europe and North America.

After the abolishment of the Multi Fiber Agreement (MFA), which was concluded with the US in 2004, exports to the country continued growing until 2008. According to the JICA's Development Study for Assisting the Industrial Promotion of Low-income Less-developed Countries in 2004, the abolishment had little impact on exports, although there was concern over the impact of the abolishment immediately before its occurrence. Although exports to the U.S. declined in FY2009, this was attributable more to the stagnant US market due to the impact of the Lehman's fall rather than as a direct impact of abolishment.

As of FY2009, jute products were the third biggest export item in value terms. When raw jute is included, it accounts for approx. 4.5 percent of all export values. When the figures are compared with those of FY2000, jute products grew by 130 percent and raw jute by 190 percent. Partly due to recent concern over ecology, jute has drawn attention to some extent, whereupon more sensitive products have been developed and exports is slowly growing. However, because it is not the kind of product for which demand for its original purpose of use, including jute bags, is likely to grow significantly, it is questionable whether it can become a major export item.

The next biggest export item is frozen food, including cultured prawns in Khulna in the west region. However, this only accounted for approx. 2.6 percent of all export volumes in FY2010. When combined with agricultural products and classified in the same category as food, it still only accounted for approx. 4.1 percent. The growth rate of frozen food from FY2001 to 2010 was very low at 20 percent, while that of agricultural products soared by 1,240 percent, because exports were previously negligible.

As for the ratio of primary commodities to manufacturing goods, this is approx. 5.5 to 94.5 percent, showing that the ratio of manufacturing goods is much higher. The ratio in FY2001 was approx. 7.5 to 92.5 percent, mainly comprising manufacturing goods exports, and this tendency has been enhanced. As for the growth rate since FY2001, manufacturing goods increased by approx. 150 percent while primary commodities also grew by approx. 80 percent.

However, the overall export trend is mainly determined by trends of RMG and knitwear and it can be said that the clothing industry has determined the export power of the nation.



	0			-		v			(In Million	US dollar)
	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Commodity										
a) Primary commodities										
1. Raw Jute	67	61	82	80	96	148	147	165	148	196
2. Tea	22	17	15	16	16	12	7	15	12	6
3. Frozen food	363	276	322	390	421	459	515	534	455	437
Agricultural products	18	23	25	41	82	105	88	120	267	242
5. Other primary commodities	14	13	18	26	33	49	75	153	133	3
Total Primary commodities(1-5)	484	390	462	553	648	773	832	988	870	884
b) Manufactured goods										
6. Jute goods	230	244	257	246	307	361	321	318	269	540
7. Leather	254	207	191	211	221	257	266	284	177	231
8. Naphtha, furnace oil and bitumen	10	10	31	37	35	88	84	185	142	301
Readymade garments	3364	3125	3258	3538	3598	4084	4658	5167	5919	6013
10. Knitwear	1496	1459	1654	2148	2819	3817	4554	5533	6429	6483
11. Chemical products	97	67	100	121	197	206	215	216	280	103
12. Shoe	-	-	47	68	88	95	136	170	187	204
13. Handicrafts	7	6	6	4	5	4	8	5	6	4
14. Engineering products	3	1	13	42	85	111	237	220	189	311
15. Other mfg. products	522	477	529	633	652	730	867	1025	1096	1131
Total Manufactured goods (6-15)	5983	5596	6086	7050	800	9753	11346	13123	14695	15321
Grand Total (a+b)	6467	5986	6548	7603	8655	10526	12178	14111	15565	16205
Annual change (%)	12.43	-7.44	9.39	16.10	13.83	21.63	15.69	15.87	10.31	4.11

Figure 2.49 Trend of Export Values by Item

Source: BBS

2.4.3. Breakdown of Import Items

While the major export destinations were North America and Europe, the major exporters to Bangladesh are Asian countries. In FY2010, China was the biggest exporter to Bangladesh, followed by India, Singapore, Malaysia and Japan. However, countries other than the nine featured in the table also accounted for 43 percent of imports, but were less dominant in the case of exports.

As for the trend from FY2003, India and China competed for export supremacy and China has been ranked first for two consecutive years since FY2009. As for the pos pectively, showing that Chinese exports to Bangladesh have rocketed since FY2000. The imports from India and China grew by approx. 170 and 570 percent respectively.

Figure 2.50	Trend of Imports by Country	(1989-90 to 2009-10)	(Unit: US\$ 1 million)
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FY	India	China	Singapore	Japan	Hongkong	Taiwan	S. Korea	USA	Malaysia	Others	Total
1989-90	145	132	323	475	157	-	126	208	41	2,152	3,759
1990-91	181	133	334	336	184	-	165	181	32	1,964	3,510
1991-92	231	149	275	286	247	-	181	230	42	1,885	3,526
1992-93	342	248	211	365	299	-	258	207	53	2,088	4,071
1993-94	414	223	200	498	331	-	284	202	57	1,982	4,191
1994-95	689	420	275	587	399	118	340	274	41	2,691	5,834
1995-96	1,100	707	343	695	390	216	366	330	69	2,715	6,931
1996-97	922	575	297	647	409	300	360	302	197	3,143	7,152
1997-98	934	593	321	483	443	353	381	311	172	3,529	7,520
1998-99	1,235	560	553	494	452	361	287	301	131	3,632	8,006
1999-00	833	568	701	685	455	386	319	325	108	3,994	8,374
2000-01	1,184	709	824	846	478	412	411	248	148	4,075	9,335
2000-02	1,019	878	871	655	441	312	346	261	145	3,612	8,540
2002-03	1,358	938	1,000	605	433	328	333	223	169	4,271	9,658
2003-04	1,602	1,198	911	552	433	377	420	226	255	4,929	10,903
2004-05	2,030	1,642	888	559	565	439	426	329	276	5,993	13,147
2005-06	1,868	2,079	849	651	625	473	489	345	332	7,064	14,746
2006-07	2,268	2,571	1,035	690	747	473	553	380	334	8,106	17,157
2007-08	3,393	3,137	1,273	832	821	477	621	490	451	10,134	21,629
2008-09	2,868	3,452	1,768	1,015	851	498	864	461	703	10,031	22,507
2009-10	3,214	3,819	1,550	1,064	788	542	839	469	1,232	10,239	23,738

Source: MOF



Figure 2.51 Imports by Country FY2009

Source:	MOF
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Figure 2.52 Breakdowns of Import Items (F	<b>FY2010</b> )
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									(Un	1t: US\$	5 I mill	10n)
	1998-99	1999-00	2000-01	2001-02	2002-03	Apr-03	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Commodity												
a)Major primary goods	1448	980	1046	812	1133	1339	1676	1854	2069	3455	2916	2940
Rice	680	115	172	15	211	144	262	117	180	874	239	75
Wheat	317	266	177	171	198	287	312	301	401	537	643	761
Oilseeds	100	90	64	72	64	73	86	90	106	136	159	130
Crude petroleum	118	232	273	242	267	252	350	604	524	695	584	535
Raw cotton	233	277	360	312	393	583	666	742	858	1213	1291	1439
b) Major intermediate goods	1037	1204	1380	1311	1548	1910	2662	3001	3569	4844	5035	4957
Edible oil	287	256	218	251	364	471	440	473	583	1006	865	1050
Petroleum products	270	406	566	481	620	770	1252	1400	1709	2058	1997	2021
Fertilizer	120	140	129	107	109	150	332	342	357	632	955	717
Clinker	38	59	106	150	144	139	170	210	240	347	314	333
Staple fibre	39	43	39	39	41	57	75	76	97	110	112	118
Yarn	283	300	322	283	270	323	393	501	582	691	792	718
c)Capital machinery	294	314	482	554	548	729	1115	1458	1929	1664	1420	1595
d) Other goods	5227	5876	6427	5863	6429	6925	7694	8434	9590	11666	13136	14246
Total imports (a+b+c+d)	8006	8374	9335	8540	9658	10903	13147	14746	17157	21629	22507	23738
Annual change (%)	6.5	4.6	11.50	-8.5	13.1	12.9	20.6	12.2	16.4	26.1	4.1	5.5

Source: MOF

Among major primary and intermediate goods, import volumes were ranked in the following order: petroleum products, raw cotton, edible oil, wheat, fertilizer, yarn, and crude oil. Among the top items, the growth rate from FY2001 was as follows: a 450 percent increase for fertilizer, 380 percent increase for edible oil, 290 percent increase for raw cotton, 250 percent increase for petroleum products, and 120 percent increase for yarn respectively. When the capital machinery was examined alone, its import volume is the biggest after petroleum products and the growth rate from FY2001 was also high at 230 percent.

Imports increased by approx. 150 percent during the same period, which shows that the growth rate of major items exceeds it and served as a pulling force of total imports.

However, other products not listed above also accounted for approx. 60 percent of overall imports.



								(Taka	a in crore
		2010-2011			2009-2010	)	Changes	Changes	
Major Commodities	Amo	ount	% of	Amo	ount	% of	(1)-(4)	(2)-(5)	
3	Taka	USD	Total (A)	Taka	USD	Total (A)	~		
A Import under Cash (c&f)	1 213850	20002	3	4	21355	6 100	(+66087.1)	(+ 8636 Q)	
1 Cotton, (all types) cotton yarn/thread and cotton fabrics	34593.3	4858.6	16.2	19514.3	2820.1	13.2	(+15079)	(+2038.5)	1
2 Nuclear reactors, Boilers, Machinery and mechanical appliances, parts thereof	21304.3	2987.1	10	14520.2	2098.7	9.8	(+6784.1)	(+888.4)	]
3 Mineral fuel, mineral oils and product of their distillation bituminous substances	20389.9	2849.3	9.5	12482.9	1803.6	8.4	(+7907)	(+1045.7)	
4 Cereals	14996.2	2098.2	7	6647.8	960.7	4.5	(+8348.4)	(+1137.5)	]
5 Electrical machinery and equipment and parts thereof, sound recorders and reproducers, television image and sound recorders and reproducers and parts and	12606.9	1766.6	5.9	8397.3	1213.7	5.7	(+4209.6)	(+ 552.9)	
6 Iron and steel	9696.8	1359.6	4.5	7069.6	1021.7	4.8	(+2627.2)	(+337.9)	]
7 Essential oils and resinoids; perfumery cosmetic or toilet preparations	8817.8	1240.9	4.1	4960	717.2	3.4	(+3857.8)	(+ 523.7)	
8 Plastics and articles thereof	8045.8	1129.7	3.8	5715.9	826.1	3.9	(+2329.9)	(+303.6)	
9 Animal or vegetable fats and oils and their cleavage products, prepared edible fats, animal or vegetable way	7784.6	1092.7	3.6	7349.9	1062.5	5	(+434.7)	(+30.2)	
10 Vehicles other than railway or tramway, rolling stock and parts and accessories	6897	968.7	3.2	5633.7	814.1	3.8	(+1263.3)	(+154.6)	]
11 Man-made staple fibres	4778.2	670	2.2	3121.4	451.2	2.1	(+1656.8)	(+218.8)	1
12 Sugar and sugar confectionery	4770.6	668.3	2.2	4569	660.3	3.1	(+201.6)	(+8)	
13 Ships, boats and floating structures 14 Salt, Sulphur, earth and stone, plastering materials lime and comput	<u>4354.1</u> 4078.9	<u>607.3</u> 571.7	2 1.9	<u>5492.7</u> 3173.5	794 458.6	<u>3.7</u> 2.1	(+905.4)	(-186.7) (+113.1)	
15 Organic chemicals	3404.8	477.5	1.6	2717.3	392.7	1.8	(+687.5)	(+84.8)	]
16 Edible vegetables and certain roots and	3242.7	458	1.5	4366.3	631	3	(-1123.6)	(-173)	4
17 Knitted or crocheted fabrics	3162	443.5	1.5	2066.9	298.8	1.4	(+1095.1)	(+144.7)	
18 Residues and waste from the food	3100.1	435.8	1.4	2199.5	317.8	1.5	(+900.6)	(+118)	
19 Paper and paper board, articles of paper, pulp of paper or of paper board	2858.8	308.3	1.3	1660	327.2	1.5	(+595.2)	(+ /4.3)	
20 man-made firaments, surp and the fixe of man made textile materials	2371 4	338.3	1.5	1800.6	239.9	1.1	(+1104)	(+138.4)	
their derivatives, dyes, pigments, and other colouring matters, paints and	2371.4	555.1	1.1	1839.0	274.5	1.5	(+4/1.0)	(+ 38.0)	
22 Misc. chemical products	2115.4	297.2	1	1603	231.7	1.1	(+512.4)	(+65.5)	
23 Inorganic chemicals, organic or inorganic compounds of precious metals of rare-	1669.5	238.7	0.8	1321.4	191	0.9	(+348.1)	(+47.7)	
24 Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus, parts	1483.8	208.5	0.7	1257.7	181.8	0.9	(+226.1)	(+26.7)	
25 Articles of apparel and clothing accessories knitted or crocheted	1423.9	200	0.7	1124.4	162.5	0.8	(+299.5)	(+37.5)	]
26 Articles of iron or steel	1344.7	187.4	0.6	645.6	93.3	0.4	(+699.1)	(+94.1)	4
27 Rubber and articles thereof	1232.1	172.8	0.6	967.4	139.8	0.7	(+264.7)	(+33)	1
edible produce, birds' eggs natural honey, edible products of animal origin, not	1211.7	169.5	0.6	766.3	110.7	0.5	(+445.4)	(+58.8)	
29 Oil seeds and oleaginous fruits; miscellaneous grains; seeds and fruit; industrial or medicinal plants; straw and	1205.3	168.5	0.6	1171.3	169.3	0.8	(+34)	(-0.8)	]
30 Special woven fabrics, tufted textile fabrics lace tapestries trimmings	1195.2	168.1	0.6	1032.8	149.3	0.7	(+162.4)	(+18.8)	
31 Aluminium and articles thereof	1147.9	161	0.5	853	123.3	0.6	(+294.9)	(+37.7)	
32 Edible fruit and nuts, peel of citrus fruit or melons	992.6	139.5	0.5	945.8	136.7	0.6	(+46.8)	(+2.8)	
33 Coffee, tea, mate and spices	935.5	131.8	0.4	764.3	110.5	0.5	(+171.2)	(+21.3)	-
B Imports under loans and grants	322 1	45 7	0.6	376 /	54 4	0.4	(-9488.4)	(+ 301.8) (-8.7)	1
C. Imports under IDB loan (short	9651.3	1347.8		5764.9	833.4		(+3886.4)	(+514.4)	1
D. Other unclassified imports	931.5	131.5		564.4	81.6		(+367.1)	(+49.9)	]
E. Imports of EPZ	15273	2140.3		9774.9	1413.6		(+5498.2)	(+726.7)	
GRAND TOTAL : (A+B+C+D+E)(c&f)	240028	33658		164243	23738		(+75784.5)	(+9919.2)	1

# Figure 2.53 Breakdowns of Import Items (FY2010)

Source: BB

As for recent trends, major import items were examined based on recent BB data, as it is limited to the tracking of major items.

The following five items each accounted for more than five percent of imports in value terms in FY2010 or 2011:

- Cotton (all types) cotton yarn/thread and cotton fabrics
- Nuclear reactors, Boilers, Machinery and mechanical appliances, or parts thereof

• Mitsubishi UFJ Research and Consulting

WEA World Business Associates Co., Ltd.

- Mineral fuel, mineral oils and their distillation products, bituminous substances, •
- Cereals

Electrical machinery and equipment and parts thereof, sound recorders and reproducers, television images and sound recorders and reproducers and parts and accessories of such articles

Although the data source of the MOF is the BB, the classifications of the two organizations differ. Even so, major items, including raw cotton and yarn for domestic sewing industry, machinery and equipment, and crops other than rice such as wheat that can be produced domestically, have accounted for a significant portion of imports according to data of the last decade and most recent data.

#### 2.5. **Investment Trend**

# 2.5.1. Review of Bangladeshi Statistical Data

(1) Assessment of Contributions of Private Sector Investment to the Economy

The Government of Bangladesh has been promoting a private sector-led economic growth strategy, and the nation's manufacturing industries have demonstrated stable growth in recent years. The Board of Investment (BOI) attributes the economic growth led by the manufacturing industries to the investor friendly policy promoted by the nation and a subsequent improvement in the investment climate. Consequently, the inward foreign direct investment (FDI) in 2009 reached US\$700 million

Thanks to the investment-oriented policy, private investment continued growing for the previous decade as seen in Section 2.1.2. The private investment-GDP ratio also increased from 15.8% in fiscal 2001 to 20.2% in fiscal 2010.

(2) Trend in FDI

1) Trends in FDI Inflow

As shown in the following table based on Bangladesh Bank's statistics, actual foreign direct investment started to increase steadily in 2001, peaking at US\$1.086 billion in 2008. However, it fell by about 30 percent in 2009 following the global economic downturn triggered by the Lehman's fall in the previous year.



#### Figure 2.54 Trends in Foreign Direct Investment (actual base: 2001-09) (US\$ Million)

# 2) Components of FDI Inflow

By component, equity capital amounted for US\$809.25 million in fiscal 2008, about twice as much as fiscal 2005 or about four times more than fiscal 2009. This trend shows that an outstanding number of foreign firms entered the Bangladeshi market in 2008. Reinvested earnings peaked in 2009, indicating that some firms that had entered the country the previous year turned cash flow positive the same year. Intra-company loans accounted for more than 15% of the entire FDI in 2005 and 2009, which suggests that foreign firms actively leveraged their business operations for higher profits.



riguit 2.55 FDI Innow In I	Jangiauco	n by Com	ponent (Oc	$\phi$ within (1)	
Item/Year	2005	2006	2007	2008	2009
FDI Inflow	845.3	792.5	666.3	1086.31	700.16
Equity Capital	425.6	503.7	401.6	809.25	218.55
Reinvested Earnings	247.5	264.7	213.2	245.73	364.94
Intra-company Loans	172.2	24.1	51.5	31.33	116.67

Figure 2.55 FDI Inflow in Bangladesh by Component (US\$ Million)

Sources: BB, Bangladesh Economic Review 2010 and Enterprise Survey

#### 3) Distribution of FDI

As far as the distribution of inward foreign direct investment during fiscal 2000-09 is concerned, the largest amount of FDI was distributed to the electricity and other energy sectors in 2000 and 2001, to the manufacturing sector during the period 2002-2004, and to the transport, storage and communication sectors after 2005. As more Bangladeshi people have started using mobile phones in recent years, greater investment was being injected, particularly in the communication sector.

# Figure 2.56 Distribution of FDI in Bangladesh by Component (actual base: 2000-09)

		(			- /					
									(mill	on USD)
Sector/FY	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Agriculture & Fishing	15.18	1.06	1.59	4.07	1.73	2.32	1.26	7.33	14.43	11.79
Power, Gas & Petroleum	301.09	192.44	57.87	88.18	124.05	208.26	208.25	215.94	101.02	51.15
Manufacturing	193.46	132.25	142.95	165.04	139.46	219.27	104.86	142.68	168.49	211.30
Construction	-	-	-	-	-	-	-	-	-	0.74
Trade & Commerce	53.24	27.57	63.67	43.98	66.59	130.48	130.24	92.87	153.40	161.59
Transport, Storage & Communication	5.40	0.85	48.54	45.88	127.51	281.95	346.91	201.90	641.39	250.14
Services	10.27	0.30	13.69	3.09	1.07	2.98	0.25	5.64	7.58	13.45
Others	-	-	-	-	-	-	0.71	-	-	-
Total	578.64	354.47	328.31	350.24	460.41	845.26	792.48	666.36	1086.31	700.16

Source: BB, Foreign Direct Investment in Bangladesh Survey Report (2009)

#### 4) Sources of FDI

Among the top 10 source countries and regions making foreign direct investment in Bangladesh during the period 2000-09, America and Europe – in particular, the U.S. and the U.K. – constantly made huge investment. Some Asian countries and regions such as South Korea, Japan and Hong Kong also ranked in the top ten for most years during the period, while Malaysia was also listed after 2004. From the Middle East, Egypt and the U.A.E. made hefty investments and were increasing their presence in the country.

Figure 2.57 Source Countries and Regions of FDI in Bangladesh

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
1	Netherlands	Ne ther lands	South Korea	U.K.	U.K.	U.K.	U.S.A	U.K.	Egypt	U.K.
1	158.74	126.84	55.51	83.59	91.05	152.82	175.72	1 42.55	373.40	88.08
2	U.K.	U.K.	France	France	U.S.A	U.S.A	Egypt	U.S.A	U.K.	Hong Kong
2	157.30	71.31	43.65	46.35	61.76	141.82	105.36	120.36	130.57	75.60
3	South Korea	France	Norway	U.S.A	Norway	Singapore	U.A.E	U.A.E	U.A.E	Egypt
5	61.60	34.82	30.44	32.11	59.64	97.50	88.02	83.27	102.20	72.71
4	Denmark	U.S.A	Netherlands	Japan	Malaysia	U.A.E	Norway	Egypt	Malaysia	U.A.E
7	58.96	30.85	24.91	29.15	38.99	55.48	82.95	75.17	70.72	67.08
F	U.S.A	Hong Kong	U.S.A	Netherlands	Japan	Norway	U.K.	Hong Kong	Switzerland	Netherlands
5	29.34	23.39	24.49	26.51	30.03	53.48	70.47	55.45	69.25	49.62
6	Japan	South Korea	Hong Kong	South Korea	Egypt	Hong Kong	South Korea	Japan	Japan	South Korea
Ŭ	28.56	21.23	23.54	25.97	19.86	53.09	53.86	36.61	57.15	46.00
7	Hong Kong	Denmark	Denmark	Norway	Denmark	Egypt	Hon g K ong	South Korea	South Korea	Norway
'	20.46	10.61	21.64	21.95	18.75	48.40	47.43	27.68	44.64	45.63
0	Switzerland	Japan	U.K.	U.A.E	South Korea	Japan	Malaysia	Norway	U.S.A	Malaysia
0	11.96	6.85	18.48	16.66	18.45	46.42	44.46	25.68	40.92	43.84
٥	France	Germany	Japan	Hong Kong	Hong Kong	Malaysia	Singapore	Malaysia	Hong Kong	U.S.A
3	10.29	4.54	17.59	15.85	13.89	33.07	35.89	19.54	39.85	42.89
10	India	Saudi Arabia	Singapore	Denmark	U.A.E	South Korea	Japan	Netherlands	Norway	Pakistan
10	8.50	2.20	14.32	14.04	12.84	29.86	22.79	18.67	33.47	30.14

Source: BB, Foreign Direct Investment in Bangladesh Survey Report (2009)

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5) Trends in 100% FDI and Joint Venture Investment Projects

As for investment proposals registered with the BOI, the value of joint venture investment proposals registered with the BOI exceeded that of 100% foreign direct investment proposals registered with the BOI throughout the survey period except 2005 and 2006, when large-scale 100% foreign direct investment proposals were apparently registered with the board.



Figure 2.58 Trends in FDI and JV Investment Proposals Registered with the BOI (2001–10)

6) Comparison of Trends in FDI Inflows in Bangladesh and Southeast Asian Countries

The FDI inflows in Bangladesh in the previous decade were compared with those in Southeast Asian countries of various income levels by referring to the World Investment Report (2011), published by UNCTAD. For comparison, Indonesia, Thailand and Malaysia were selected to represent upper-middle income ASEAN economies and Myanmar and Cambodia to represent low-income ASEAN economies. The comparison results are graphically shown in the following figure. Overall, the FDI inflows in the upper-middle income economies were some 7 - 15 times greater than those in the selective low-income ASEAN economies and Bangladesh, though the difference varied considerably from year to year. Next, the focus shifted to a comparison of Bangladesh, Myanmar and Cambodia. The FDI inflows in the three countries conspicuously fell in 2009 when the global economy was slumped. Following the 2008 Lehman Brothers bankruptcy however, they started to increase at an accelerating pace in 2005-06. Although there was little difference among the FDI inflows in the three countries in 2010, trends in the decade between 2001 and 2010 show that the FDI inflows in Myanmar and Cambodia increased 3.9 and 5.4 times, respectively, far exceeding the FDI in Bangladesh, which increased a mere 2.6 times over the same period. The difference in the growth rates of the FDI inflows is partly attributable to the fact that the absolute foreign direct investment in these low-income ASEAN economies was small in 2001 and also reflects the possibility that foreign investors were taking more attention of Myanmar and Cambodia as potential rival FDI destinations to Bangladesh.



Figure 2.59 Trends in FDI Inflows in Bangladesh and Selective Southeast Asian Countries

Source: UNCTAD, World Investment Report (2011)



Figure 2.60 Trends in FDI Inflows in Bangladesh, Myanmar and Cambodia

# 7) Trends in Investment from Japan

Japan's foreign direct investment in Bangladesh, in terms of FDI registered with the BOI, totaled

US\$1.2 billion as of June 2009, ranked sixth in the world. The amount of investment in export processing zones (EPZs) was US\$173 million, placing Japan third (except for Bangladesh's domestic investment).

Country	General (USD 1 million)	Share (%)
USA	4,167.0	20.8%
Saudi Arabia	3,935.7	19.7%
UAE	2,319.6	11.6%
UK	2,185.5	10.9%
Malaysia	1,413.0	7.1%
Japan	1,211.6	6.1%
Hong Kong	998.7	5.0%
Singapore	811.6	4.1%
Norway	794.1	4.0%
South Korea	644.6	3.2%
Others	3,139.0	15.7%

Country	EPZ (USD 1 million)	Share (%)
South Korea	381.7	24.1%
Bangladesh	291.5	18.4%
Japan	173.0	10.9%
China	202.6	12.8%
Malaysia	109.6	6.9%
Taiwan	105.7	6.7%
USA	61.9	3.9%
UK	36.2	2.3%
Germany	21.9	1.4%
Canada	30.1	1.9%
Others	168.6	10.7%

# Figure 2.61 Source Countries of General FDI (Registered), Figure 2.62 Source Countries of FDI in EPZs (actual)

Source: JETRO (2010)

Note: The figures in the tables show accumulated amounts up to the end of June 2009.

From a quick review at the following figure, Japan's foreign direct investment in Bangladesh basically rose since 2004, though fluctuating slightly over the period. The amount of investment made by Japan in EPZs exceeded the amount of general investment registered with the BOI during the period between FY2004 and 2008, but the latter outnumbered the former since 2009. This was assumed to be attributable to the facts that land in EPZs in major cities such as Dhaka and Chittagong was becoming scarce and investment other than export-oriented investment was expanding.

Figure 2.63 Trends	in Japan's FDI in B	angladesh (US\$ Mi	llion)
Year	General (BOI)	EPZ	
04	3.9	7.5	
05	2.9	16.0	
06	1.6	4.4	
07	7.6	25.4	
08	6.7	18.0	
09	4.1	1.7	
10	16.9	5.2	
Total	1.228.5	178.2	

Source: JETRO (2010)

* Investment registered with BOI is on a registered basis, and that in EPZs is on an actual base.



According to the FY2010 Survey Report on Overseas Business Operations by Japanese Manufacturing Companies released by the Japan Bank for International Cooperation (JBIC), Bangladesh moved up significantly in the ranking from 28th the previous year to 15th on the list of promising countries/regions for overseas business over the medium term, which illustrates Japanese companies started to pay more attention to Bangladesh as an FDI destination. For example, YKK Corporation, known for its fastening products, has been engaging in manufacturing at a plant in an EPZ in Dhaka for about a decade. Since Uniqlo Co., a major clothing retail chain, began operations in 2008 in Bangladesh, an increasing number of Japanese companies involved in the clothing industry have entered the country to do business. The entry of Uniqlo into the Bangladeshi market had a considerable impact: not only companies related to clothing industries, such as general trading companies, specialized trading companies and other clothing companies but also button makers, packaged-goods companies and needlework accessory makers, as well as quality control and inspection companies and logistics companies, have been expanding into Bangladeshi markets.

In addition, in these days, new business such as food processing, cosmetics, toiletries, or chemicals for the domestic marke has appeard, aiming for the market expansion of 150 million people.

# (2) Domestic Investment Trends

According to BOI data, the value of local investment projects registered with the BOI was 391.6 billion taka in 2006, plummeting in 2007 to 135.0 taka, but soon recovering and amounted to 546.1 billion taka in 2011. The number of projects financed by local investment remained somewhat stable at around 1,400 - 1,900 projects each year, over the same period, showing little difference compared to the trends in the value.

By sector, an overwhelming proportion of local investment went to the textile (including clothing) industry in 2006, but after 2010, services enjoyed the most local investment. In 2011, the services remained number one in terms of domestic investment destinations, followed by textile, agricultural and chemical industries respectively.

# Figure 2.64 Trends in Local Investment Amount and Number of Local Investment Projects (2006-11) (registered with the BOI)



Souce: BOI

Sector	2006	2007	2008	2009	2010	2011
Agro based	16,073	7,635	9,652	14,407	29,046	73,070
Food & Allied	6,745	4,459	3,223	11,061	19,352	15,753
Textile	224,595	80,217	119,537	68,593	131,168	115,420
Printing Publishing & Packaging	9,037	2,393	4,062	2,287	1,590	4,318
Tannery & Rubber products	2,968	383	145	340	2,867	1,649
Chemical	5,774	10,655	35,939	30,182	82,374	69,559
Glass &	269	891	3,660	2,326	1,354	1,272
Engineering	43,441	10,827	18,040	31,648	34, 189	51,032
Services	29,213	16,891	20,027	19,327	134,845	187,051
Miscellaneous	1,465	668	1,262	685	932	26,943
Total	391,582	135,018	215,546	180,855	437,718	546,068

Figure 2.65 Destination Sectors of Local Investment (2006-11) (registered with the BOI)

Source: BOI

# 2.5.2. Trends in Investment Climate

(1) Investment Infrastructure

# 1) Electricity

The Bangladesh Power Development Board (BPDB) was established in 1972 for the planning, construction and operation of power generation and transmission facilities and for power supply nationwide. Since 1996, however, the board has been advancing the spin-off or conversion of its power generation, transmission and distribution branches to public corporations. To date, four power generating companies have begun operations under BPDB, namely Ashuganj Power Station Company Ltd. (APSCL), Electricity Generation Company of Bangladesh (EGCB), North-West Power Generation Company Ltd. (NWPGCL), and West Zone Power Distribution Company Ltd (WZPDCL).

Bangladesh has a power generating capacity of 6,693MW, 75.99% of which was generated by gas-fueled power plants. Due to gas shortages, these plants are not yet fully operational, meaning outages are frequent. To deal with this, power generation companies purchase electricity from private-run electric generating stations. On February 1, 2012, for example, there were several outages in the city of Dhaka, although peak demand on the day was 4,908MW, some 73% of the official capacity. It emerged that, during the period between January 31 and February 1, 2012, Bangladesh Mineral Oil & Gas Corporation (BMOGC), the gas supplier to the generation plants in charge of power supply to Dhaka, supplied 714.2 million cubic feet per day (mmcfd), or a mere 63% of the necessary amount, 1,116.8 mmcfd, for the generation plants to appropriately supply electricity.

Unit type	Capacity (u	Total (%)	
Coal	250.00	MW	Coal
F. Oil	110.00	MW	F. Oil
Gas	5086.00	MW	Gas
Heavy Fuel Oil	335.00	MW	Heavy Fuel Oil
High Speed Diesel	682.00	MW	High Speed Diesel
Hydro power	230.00	MW	Hydro power
Total	6693.00	MW	Total

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Source: Prepared by the Study Team in reference with BPDB sources



		Rates	Remarks
Electricity	For industrial use	Monthly basic rate: 600 taka 1.56-5.79 taka/kWh	Supplier: Dhaka Electric Supply Company Voltage: 132KV Time-dependent rates applied 5%-VAT inclusive
rates	For general consumers	Monthly basic rates: 20-60 taka 2.62-5.51 taka/kWh	Supplier: Same as above Basic rates depend on consumption. 5%-VAT inclusive

# Figure 2.67 Electricity Rates in Dhaka

Source: BOI

Reference: The electricity and gas rates in Bangladesh and other countries

The electricity rates in South Korea and Indonesia are low, US\$ 0.05/kWh. The rate in Bangladesh varies depending on consumption contracts, and the lowest rate, US\$ 0.02/kWh, is lower than the rate in any country.

The unit of gas rates differs from one country to another, but the rate in Bangladesh is extremely low, US\$ 0.04/m³, among those on the list.

### Figure 2.68 Electricity and Gas Rates in Selective Countries (for business use. US\$)

	Electricity rate	for business use (per kWh)	Gas rate for busi	ness use (per 1 m ³ )
	Monthly basic rate	Rate / kWh	Monthly basic rate	Rate / 1m ³
Seoul (ROK)	3.87	0.05	-	0.59
Beijing (China)	-	0.08	-	0.3
Shanghai (China)	-	0.119 ~ 0.130	-	0.249 ~ 0278
Guangzhou (China)	6.59	0.049 ~ 0.151	0	2.71
Hong Kong (China)	3.87	0.128 ~ 0.129	Depends on consumption volume	0.026 ~ 0.027/MJ
Taipei (Taiwan)	5.24 ~ 7.42	0.076 ~ 0.098	0.528	6.284 ~ 26.392
Singapore (Singapore)	5.37	0.1599 ~ 0.1611	-	0.1262
Kuala Lumpur (Malaysia)	179.64	0.08	113.22	3.9
Bangkok (Thailand)	6.94	0.11	-	5.33
Jakarta (Indonesia)	3.2	0.05	-	5.5/mmbtu
Hanoi (Vietnam)	-	When consumption is 110kv or more, (1)0.028 (Off-peak: 22:00 ~ 4:00) (2)0.052 (Standard time band: (i) 4:00-9:30, (ii) 11:00-17:00, (iii) 20:00-22:00 on Mon to Sat) (3)0.104 (Peak: (i) 9:30-11:00, (ii) 17:00-20:00 on Mon to Sat. No peak hours on Sun.)	-	1.32 /kg
Ho Chi Min (Vietnam)	S	ame as Hanoi	-	US\$0.88 /kg
Manila (Philippines)	66.24 + 10.57/ k w	0.095	-	1.12 /kg
Yangon (Myanmar)	-	0.08	-	1.00 /kg
New Delhi (India)	1.10/ k w	0.10 in Apr-Sept 0.10 in Oct-Mar	-	0.07
Mumbai (India)	0.66 ~ 2.19	0.038 ~ 0.181	-	1.23
Chennai (India)		0.12	-	1.4/kg
Dhaka (Bangladesh)	8.69	0.02 ~ 0.08	-	0.04 ~ 0.14
Colombo (Sri Lanka)	2.73 ~ 34.14	0.09 ~ 0.28	0	1.18
Karachi (Pakistan)	5.07 ~ 5.57	0.08 ~ 0.15	-	4.54 /1 million BTU Minimum rate: 157.55
Yokohama (Japan)	16.83	0.13 in Summer 0.12 in Winter	Basic fixed rate: 152.14 Basic flow rate: 4.62/m ³ Basic rate for months in high demand: 0.06/m ³	0.69

Source: Prepared by the Study Team in reference with JETRO, Surveys of Cost Comparison Relating to Investment in Major Cities and Regions in Asia.



# 2) Natural Gas

Bangladesh relies more than 75% of its electricity production on thermal power generations fueled by natural gas sources. Many public buses and vehicles are fueled by compressed natural gas, and heat utilization plants also use natural gas. The country is still becoming more dependent on natural gas.

		Rates	Remarks
Gas rates	For industry use	Monthly basic rate: n/a 2.57-9.46 taka/ m ³	Supplier: Ministry of Power, Energy & Mineral Resources The rates depend on intended use. 5%-VAT inclusive
	For general customers	Monthly basic rate: n/a 5.16 taka/ m ³	Supplier: Same as above Meter-based rates applied to ordinary houses. 5%-VAT inclusive

Figure	2.69	Gas	Rates	in	Dhaka
		0.00			

Source: BOI

3) Water Supply and Wastewater Treatment

More than 97% of the population in agricultural areas in Bangladesh use groundwater as drinking water. The 82% of the population in Dhaka use arsenic-free well water, which causes the ground to subside by 2-3 meters in some areas. The remaining 18% are supplied with water from three water purification plants.

The Dhaka Water Supply and Sewerage Authority (DWASA) and Chittagong Water Supply and Sewerage Authority (CWASA) are in charge of supplying water to households, commercial facilities and industrial plants. These authorities also own sewage systems.

There is only one centralized wastewater treatment facility nationwide, which is located in Dhaka. Its treatment capacity is 120,000 tons/day. The facility covers 30% of the population receiving water supply from DWASA and purifies some 30% of wastewater.

		Rates	Remarks
Water rates	For industrial use	Monthly basic rate: n/a 27.12 taka / m ³	Supplier: Dhaka Water Supply & Sewerage Authority 15%-VAT inclusive
	For general customers	Monthly basic rate: n/a 8.34 taka / m³	Same as above

Figure 2.70 Water Rates in Dhaka

Source: BOI

#### 4) Transport

As shown in the following figure, while the transport network connecting cities is well developed, some arterial highways leading to Dhaka and elsewhere are congested. The arterial highways connecting major cities are not chronically congested, but their road surfaces are poor and they have insufficient traffic lanes to handle the traffic volume. Since there are also insufficient traffic lights set up, the authorities concerned must place traffic lights at, for example, major road intersections to mitigate traffic congestion and prevent accidents.



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Figure 2.71 Transportation Infrastructures in Bangladesh

Source: BOI

There are a total of eleven airports in Dhaka, Barisal, Chittagong, Comilla, Cox's Bazar, Ishurdi, Jessore, Rajshahi, Syedpur, Sylhet and Thakurgaon, of which those in Dhaka, Chittagong and Sylhet are international airports. International cargo is only handled at the Shahjalal International Airport in Dhaka.

Water transport is fairly developed in Bangladesh; some 250 major rivers flowing from north to south are used for transportation. The Bangladesh Inland Water Transport Corporation (BIWTC), a state-run corporation, provides passenger and cargo services via inland water channels.

The Ports of Chittagong and Mongla represent the country's major seaports. The former can accommodate 2000TEU vessels with a maximum draft of 8.5-9.2 meters. However, as this is not a deep-water harbor, Panamax type vessels of 10,000 tons of large class can not dock close to the shore.

The Bangladesh Inland Water Transport Authority (BIWTA) is to launch barge transportation

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services for containers between Chittagong and Dhaka.

# 5) Communication Environment

The penetration rate for fixed-line telephones as of 2009 was extremely low, 0.94%, whereas that for mobile phones the same year was high at 55%. The penetration rate in other countries in Southwest Asia is around 60%. As for Internet services, bracNet provides them using both fixed WiMAX and optical fiber systems. In 2009, Augere Wireless Broadband and Banglalion Communications also launched their WiMAX services. Thus, although urban Internet access is theoretically possible, in practice, the cable connection speed is barely usable for the business environment, while the quality of Wi-Fi connections is insufficient, for example, to download images and other heavy files from the Internet.

Some Japanese companies in Dhaka cited the poor communication environment in Bangladesh: members of the Japan Commerce & Industry Association in Dhaka (JCIAD) commented in a hearing on the problems with the coverage and quality of the IP network (ICT). The Bangladesh Association of Software & Information Services (BASIS), on the Bangladeshi side, also criticized the same in a hearing, on the country's communication environment, saying "high-speed Internet connections, essential for development of the ICT industry, have yet to be achieved". According to BASIS, the country is promoting the development of ICT infrastructure, including underground fiber optic cable installations, but has not developed the required infrastructure, even within the city of Dhaka. The authorities and parties concerned are expected to drive the expansion of the Internet services.

## 6) Investment Procedures

Parties intending to inject foreign capital into business operations in EPZs must submit applications to the Bangladesh Export Processing Zones Authority (BEPZA). To set up a business in any area other than EPZs, a foreign investor must contact BOI.  $\rightarrow$ In a case that a foreign corporation invest in Bangladesh, there are three ways to launch an office- subsidiary, branch, and representative office. Establishment and registration of companies in Bangladesh is defined by the Companies Act 1994, and is managed in the commercial registry office. Registration of a company, as shown in the figure below, there are three types: unlimited liability company stock limited liability company (private and public limited liability company), and company limited by guarantee.



# Figure 2.72 Forms of investment to Bangladesh

Source: Prepared by JICA Study Team based on JETRO's "Investment Procedure in Bangladesh"(2010) and interviews





Source: Prepared by JICA Study Team based on JETRO's "Investment Procedure in Bangladesh" (2010) and interviews

Furthermore, according to the World Bank's "Doing Business 2012", for establishing a company, Bangladesh was ranked 183th countries in the world and 86th in Bangladesh. As for the number of procedures and times, it still remains at an average position of South Asian countries, however, the cost of the procedure is above the average. In addition, for the construction permit, Bangladesh is raked 2nd in South Asia, which is higher than the ranking of the region.Furthermore, in terms of investor protection is outstanding for information disclosure system, director liability, and shareholder lawsuits, which is both raked high in the region (1th), and 24th in the world. However, from the point of view of the complexity of the procedure and time, Bangladesh is ranked quite low in the fields of following: electric power (182th in the world, the lowest in the region), real estate registration (173th in the world, the lowest in the region), contract enforcement (180th in the world, 7th in the region).



Topics	2012 Rank	2011 Rank	Change in Rank	Remarks
Starting a Business	86	80	-6	The number of procedures is average among Sounth Asian Countries but the cost is more expensive than the average (the 5th rank)
Dealing with Construction Per	82	79	-3	The permit is more business friendly than other South Asian Countries (the second rank)
Getting Electricity	182	168	-14	Cost is expensive and the rank has dropped be cause Gov't stopped electric supply from April 2010 until March 2011. (the 8th rank)
Registering Property	173	172	-1	The both number of procedures and cost are much lower than standard. (the 8th rank)
Getting Credit	78	75	-3	The situation is just the average. (the 4th rank)
Protection Investors	24	21	-3	It is superior in terms of disclosure, directors' responsibility, shareholders' action.(the first rank)
Paying Taxes	100	96	-4	The praparation time for tax payment is longer than average.(the 5th rank)
Trading Across Borders	115	111	-4	The custom clearance time has been shortened due to electronic procedure in 2010. (the 4th rank)
Enforcing Contracts	180	180	0	The environment is not business friendly in terms of time and cost for contract enforcement. (the 7th rank)
Resolving Insolvency	107	108	1	The time required for insolvency takes 4 year (the average in the region is 2.9 years) (the 5th rank)
Overall ranking	122	118	-4	

Figure 2.74 Comparison of Investment Climate of Bangladesh and South Asian Countries

Source : World Bank, "Doing Business 2012"

If foreign investors run business in the EPZ, they have to apply for The Bangladesh Export Processing Zones Authority (BEPZA) after the completion of corporate registration. For an establishment of business outside the EPZ, BOI is supposed to be the office. BOI investment flow procedures are described in (3.2) Chapter 3.

7) Needs of Private-Sector Corporations and Entities for an Improved Investment Environment

Hearings were carried out of Japanese firms, JCIAD and the Federation of Bangladesh Chambers of Commerce & Industry (FBCCI) to clarify the issues of the current investment environment and suggested solutions. Their views are summarized as follows:

# A. Issues related to Investment Infrastructure

# a) Shortage of Land for Industrial Use

One of the issues acknowledged by private sector corporations at home and abroad, JCIAD and FBCCI as the most fundamental and a serious problem is the shortage of land for industrial use. FBCCI, in particular, concludes that land shortage is responsible for the country's failure to attract investors. As detailed in 3.6, EPZ will not be developed as a new project. However, for the special economic zone development plan, which targets a wide range of companies, just got started. So that it will take the next few years for construction of factory. Since the authorities have already determined not to create new export processing zones, potential investors must develop industrial complexes in existing zones or utilize land owned by private companies. A project to develop a high-tech park in Kaliakor near Gazipur district, north of Dhaka district started two years ago as the first to build a national IT park. However, the development is behind schedule, its feasibility study has been just completed to date, and a few more years will be required to see the high-tech park materialize. As for projects utilizing land owned by private companies, the Korean Youngone Group is working on establishing a Korean Export Processing Zone (KEPZ) in Chittagong. The





Youngone Group has an operating license granted by the Bangladeshi authorities, but the deed of transfer (DoT) for the land ownership has not been issued for sixteen years. Accordingly, the KEPZ Corporation has been unable to conclude agreements with many potential investors attracted to the first private EPZ in the country.

As seen from these problem cases, potential investors cannot even construct factories outside the existing EPZs unless they acquire land by themselves and develop the electricity, gas and water supply infrastructure. Moreover, it is quite time-consuming for foreign firms to acquire land because a large number of individuals own small pieces of land in Bangladesh, meaning they need to negotiate with each landowner to acquire sufficient land for the construction of factories.

Some flexible foreign firms managed to rent land in EPZs from domestic firms or take advantage of their business connections to rent vacant land in areas adjacent to their factories. In other words, the investment opportunity is available only to foreign firms that can patiently invest a considerable amount of time and effort on research for land acquisition in the country. Ordinary foreign firms that want to enter Bangladesh as soon as possible would find it difficult to do so.

## b) Electricity Supply

Firms doing business in EPZs say that the electricity supply is stable. However, according to information of the resident companies of Chittagong EPZ, these firms are paid the electricity surcharges from tenant companies, and they pay additionally to the power company for secure the stable electricity supply. However, since stable electricity is not secured for factories outside the zones, the firms concerned need to secure electricity by generating their own in case of emergencies.

## c) Gas Supply

The Bangladesh Mineral Oil & Gas Corporation (BMOGC), established in 1972, undertakes to supply gas in Bangladesh. According to its annual report in 2010, a total of 703 bcf (billion cubic feet) gas was produced in fiscal 2009-10. This government-owned national company produced 2073.5 mmcfd (million standard cubic feet per day) of gas during the period between January 31 and February 1, 2012, while gas demand was 2,500. Consequently, the company managed to supply only 80% of the demand, making a gas shortfall a daily problem for consumers.

The Bangladesh Petroleum Exploration and Production Company Ltd. (BAPEX), a government-owned national company, is exploring gas fields at five sites but has not yet discovered any new field.

# d) Petroleum-based Fuel Supply

The heavy oil price has been soaring. Businesses that cannot procure a gas supply prepare themselves for outages by owning their own power generators fueled by heavy oil. However, since they are obliged to use their own generators frequently due to repeated outages, increased consumption of heavy oil weighs on them. The current electricity price for general households is 5.5 taka/Kw and the cost of electricity generated by an in-house power generator fueled by heavy oil is 22 taka, which means that users have to pay four times more in the event of a blackout.

## e) Clean Water Supply

Chittagong EPZ suffers from water shortages. Currently, Karnaphuli water supply facilities are being constructed in the northeastern area of Chittagong; financed by a loan assistance from Japan and scheduled for completion in three years' time.

Potential investors are advised to be careful about the use of water and investigate water infrastructure around candidate factory sites because groundwater is used in some parts of the country and may be contaminated by arsenic if taken from shallow wells. Groundwater must be taken from deep wells. In passing, BEPZA acknowledges that the water supplied to Chittagong EPZ contains sodium.

Since the textile industry is currently thriving in Bangladesh, it is not necessary to use a large

amount of water for business activities. Even so, water shortages will become a major problem if there is any change to industrial structures in future.

None of the EPZs in Bangladesh is equipped with wastewater treatment facilities. As for that in Chittagong, it has been confirmed that high turbidity water is drained from factories into the river within the zone. It is believed that the river is being seriously contaminated, but neither BOI nor the EPZ is fully aware of the issue, although it is common to use river water for industrial purposes and more serious contamination will require more costly treatment procedures, which could eventually burden the business operators.

## f) Transport Environment

ADB and quite a few private sector corporations consider that the failure to build and expand roads is hampering efforts to promote industries in Bangladesh.

There is also an urgent need to develop the river and ocean transportation infrastructures to reduce the burden on the road network and establish a well-balanced and efficient traffic system.

Another urgent task is to improve the functions of the ocean logistics bases, the Port of Chittagong and Port of Mongla. In addition, the construction of a deep water port is needed to improve the efficiency of ocean transportation and the landing of energy (coal and natural gas).

The Government of Bangladesh is conducting a feasibility study to build a huge deep water port in Sonadia Island about 7km offshore from Cox's Bazaar and must materialize the port early.

## B. Issues related to Business License: Lack of Transparency

Some factors exist and hamper the operations of foreign-owned companies in Bangladesh. Prominent among these are ambiguous conditions for the issuance of business permits and a non-governmental body authorized to issue such permits.

For example, if a garment manufacturing company is established outside an EPZ and wants to import materials by availing tax exemptionfacilitity, it has to obtain a document called "Utilization Declaration" (UD) to prove that it imports nothing but the materials necessary for its business operation. However, the entity responsible for issuance of the certification is not a governmental body but a textile business association itself. Foreign companies cannot have the certifications issued unless they become members of the association. Moreover, according to the interview with some Japanese garment manufacturing companies, the association is unfavorable to foreign owned companies, and is said to have even refused to issue the certification to a Japanese company.

C. Financial Issues

# a) Delay in Handling of Letters of Credit Transactions

Many companies voice complaints, in hearings, to slow letters of credit transactions. In response, JCIAD conducts, on the initiative of JETRO, questionnaire surveys annually among Japanese companies in Bangladesh concerning the problematic local banks. The survey results are shown in the following figure. Foreign companies doing business in the country need to protect themselves by avoiding banks that habitually delay handling L/C transactions. According to a hearing to the Bangladeshi office of a Japanese trading company, frequent delays in transactions are attributable to local banks' fund shortages. There is another piece of information that may concern delays in L/C transactions. The central bank of Bangladesh is said to borrow settlement funds from commercial banks because it has been drastically reducing its foreign exchange reserves to deal with a sharp decrease in demand for needlework. The sudden drop in demand for one of Bangladesh's major export items was triggered by the recent European sovereign debt crisis.

There are guidelines for foreign exchange transaction, with which local commercial banks should comply with when handling L/C transactions. The guidelines also prescribe that the central bank will directly warn the CEO of a commercial bank if it has delayed a transaction.





Apr 2010 - Sep 2010				
Rank	Bank Name	Cases BtoB / Non BtoB		
1	Exim Bank	151		
2	Prime Bank	130	1	
3	Uttara Bank	86		
4	Islami Bank	71	10	
5	National Bank	77		
6	Pubali Bank	66		
7	Mercantile Bank	65		
8	South East Bank	62		
03	Sonali Bank	61		
10	Standard Bank	57		
11	IFIC Bank	52		
12	Shahjalal Islami Bank	50		
13	Eastern Bank	44		
14	Standard Chartered	41		
15	Premier Bank	34		
16	Janata Bank	33		
17	Bank of Asia	25	3	
18	One Bank	25	1	
19	Dhaka Bank	24		
20	Dutch-Bangla Bank	19	4	
21	Januma Bank	22		
22	Socilal Islami Bank	10	11	
23	AB Bank	18		
24	Al Alafah islami Bank	15		
25	Agrani Bank	13		
26	Basic Bank		5	
27	NCC		3	
	Tatal	1 251	38	

## Figure 2.75 Ranking of Bangladesh's Banks by Number of Delayed Import L/C Transactions (Total delays of banks counted by JCIAD member companies)

Note: BtoB means bank-to-bank transactions and Non BtoB means non-bank-to-bank transactions Source: JETRO based on JCIAD information

## b) Issues related to Money Transfer

The rules governing remittance transactions are ambiguous in Bangladesh. Some companies can make remittance while others cannot do so. It seems common practice in the country to use an L/Ctransaction when, for example, one group company in Bangladesh and another group company in another country make a settlement for a deal of, say, raw materials. Sometimes the company in Bangladesh was refused to make money transfer to the other. When the company consulted with an accounting office, it was told that such transactions were settled only with letters of credit in Bangladesh. Even so, the fact remains that some firms have made money transfers.

## D. Requests from JCIAD to the Governmental Bodies Concerned

Representatives of JCIAD and BOI met on March 31, 2010 and agreed to the following matters:

- (i) To continue holding meetings with the BOI once every four months (three times or so per year)
- (ii) To call on the BOI to coordinate separate meetings between JCIAD and each of the governmental agencies (Ministry of Home Affairs, National Board of Revenue (NBR), the central bank, etc.) to solve specific issues

On Monday, April 19, 2010, JCIAD met with the BOI, the Ministry of Home Affairs, the passport and migration authority, the police, the public security authority and other presiding agencies to request improvements in the procedures to acquire visas and work permits for Japanese workers and their families in Bangladesh. JCIAD reports that the authorities are currently undertaking steps to improve the situation by, for example, establishing a committee to review the regulations and



simplify the visa and work permit procedures so that foreign companies can more smoothly establish their offices in the country.

As for tax affairs, JCIAD met on August 5, 2010 with BOI and NBR to ask to rectify the problematic tax practices. JCIAD says that the two agencies have agreed to share information and discuss the issues with the governmental bodies concerned to reflect the requests in the taxation system in the next fiscal year (FY2012). The Government of Bangladesh reviews the taxation system every fiscal year (starting in July and ending in June).

On November 29, 2010, the Japan-Bangladesh Joint Committee for Commercial and Economic Cooperation held its 16th meeting in Tokyo while the Bangladesh Prime Minister Sheikh Hasina made her visit to Japan. The parties concerned exchanged their opinions concerning immediate issues. (Quotations from the JCIAD website) According to the Japanese Chamber of Commerce office in Dhaka, considering the lobbyings above, they have been working on the tasks to achieve the following results:

(Recent successful achievements)

• The visa acquisition procedures for foreign workers has been simplified and the initial valid period of work permits extended (from 1 to 2 years).

• The SIM card imoport tax has been reduced (from 800 to 600 Taka).

• Regulations on the origin of textile products have been eased and degitalised(deregulation was requested by the Bangladeshi side.)

• The company registration procedures have been simplified and the time required shortened. (Continuous issues)

- Shortage of land for industrial use
- Deterioration of the visa issue
- Deterioration of delay in procedures for L/C transactions
- Increase in general strikes
- New framework for dialogues with BOI and other related governmental bodies

## E. Needs of FBCCI for an Improved Business Environment

The Federation of Bangladesh Chambers of Commerce and Industry (FBCCI) meets regularly with the Japan Bangladesh Chamber of Commerce and Industry (JBCCI, the head office is in the JETRO Dhaka Office) and collaborates for a better business environment in Bangladesh. At the annual Japan-Bangladesh Committee for Commercial and Economic Cooperation, the federation is also committed to seeking ways of stimulating the two economies and solutions to the issues involved. The federation calls on the Bangladeshi government to improve the following four aspects: In addition, according to the FBCCI, for the following demands are being continuously discussed with the Government. There is no significant progress.

- a) The Ministry of Industries is committed to the supervision of government-owned companies. It should focus more on the promotion of the private sector.
- b) In Bangladesh, although a legal framework to promote the private sector has been established, it has hardly been put into practice. A supportive body must be created and human resources developed, so that planned measures can be effectively executed. The government should also take action to develop human resources for industries by focusing not only on programs to improve and train the technical skills of workers but also those to develop human resources at the middle management level (who can serve as managers).
- c) Existing organizations should be reorganized and restructured to enhance the following policy objectives:
  - (i) Export promotion through new sales channels and an increase in export items
  - (ii) Effective liaison between export and domestic industries
  - (iii) Promotion of small- and medium-sized enterprises
- d) The government should allow industry greater freedom and solve electricity, gas and other energy



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supply problems to stimulate inward foreign direct investment.

## 2.6. Industrial Structure of Bangladesh

## 2.6.1. Industrial Configuration

After the liberation of economy from 1990's, competition and innovative entrepreneurship have been the major stimuli in the economic life of Bangladesh which has always inspired external trade and attracted a certain magnitude of the FDI to Bangladesh. From the most traditional labor-intensive low-cost manufacturing ever developed, Bangladesh is now determined to take a part of the Global Value Chains, by developing knowledge and technology-based Industries.

Industrial Configurations within the GDP in the year of 2011 are consisting of the Primary Industry with 17.83% of the share, the Secondary Industry including Construction and Energy with 27.61% of the share and the Tertiary Industry including Logistic and Services Industries accounts for 54.56% of the share. The share of the Manufacturing Industry alone accounts for 17.58% and composition of its share is gradually increasing.



Figure 2.76 Configuration of Bangladesh Industries by GDP (2011)

Source : Bangladesh Economic Review 2011

As mentioned earlier, Bangladesh Industries have been enjoying very sound growth which has been largely contributed to by the remarkable growth of the Services Sector led by the Telecommunication Industry, while the Primary Sector is gradually declining in the recent years. The Manufacturing Sector also demonstrates steady growth which is derived by sharp export drive of the RMG products, with an annual growth rate of 7.4% for the periods from FY2001 to 2010 in comparison with the average growth rate of 5.8% in the same periods as shown in Figure 2.18. Although it is not shown in the Figure 2.18, the growth rate of the Large and Medium corporations was recorded at 10.41% of growth in FY2011, which is a drastic hike from that of the previous years according to the Bangladesh Economic Review 2011. As to the contribution ratio of the Manufacturing Sector to the entire GDP, it was slightly increased to 18.41% in FY2011 from 17.08% in FY2006 as shown in the Figure 2.70. In the Outline Perspective Plan of Bangladesh 2010 – 2021 (Vision 2021), the contribution ratio of the Manufacturing Sector to the drive of 2021 and as 21% at the intermediate target year of 2015.



Figure 2.77 Contribution Ratio of the Manufacturing Sector to GDP (2005 ~ 2011)

(*Secondary Industry included minerals; Industries (mfd); electric, gas & water resources; construction)

Source : Bangladesh Economic Review-2011

# 2.6.2. Characteristic Analysis of the Bangladesh Industry (Scale of Private Entity and Organizational Classifications)

# (1) Configuration of major private industries in Bangladesh

Although major contribution to GDP comes from the Tertiary Industry, the Primary Industry is still playing very important roles as the largest provider of employment opportunity in Bangladesh. It is therefore understood that the productivity of the Primary Sector is quite low, thus it is one of the key issues to be addressed along with the implementation of the strategy paper Vision 2021; shifting of the considerable numbers of employment population from the Primary Sector to the Secondary and Tertiary Sectors, in order to increase the GDP per capita during the planning period.

The Private Entities in Bangladesh are classified based on the classification criteria set in the National Industrial Policy – 2010 and the Regulation issued by the Ministry of Industries on June 12, 2008. The classification varies Six (6) to Eight (8) categories covering from Large to Medium, Small and Cottage entities. Although the specific numbers of the entity along with these classifications were not obtained due to time constraints during the periods of field surveys, the Study Team has conducted analysis on the structure of the major industries based upon the Survey of Manufacturing Industry (2005-06) being conducted by the BBS, and the populations of private entity by scale of employment are as shown in the following figure. Meanwhile, the Number of the total entity covered by this survey was 34,710.



Figure 2.78 Share of the registered private industry in Bangladesh

Source: Prepared by the Study Team based on the BBS Survey Results (2005-06); Ownership of Establishment by the Employment Size.



As it is shown in the above figure, the share of the registered entity with the number of employees between 10 and 19 accounts 43.7%, while the equivalent share of employees between 20 and 49 accounts 32.9%. This means the great majority of the registered entitiv has less than 50 employees. Thus, the equivalent share of the registered entity with the more than 500 employees accounts for only 4.6%. Meanwhile, total fixed assets are analyzed per sector and per employee, and the total number of the employees was analyzed by sector and the results thereof are as shown in the following figure.

Type of	No. of	<b>Total Fixed Assets</b>	Total Persons	Average Fixed Assets per	Average Fixed Assets per
Ownership	Establishment	(in Mill Taka)	Engaged (in No.)	Establishment (in Mill Taka)	Person (in Mill Taka)
Government	119(0.34%)	65,646(7.09%)	100,904(2.72%)	550.2	0.65
Private	34,374(99.03%)	814,321(88.02%)	3,550,328(95.80%)	23.7	0.23
Joint Venture	216(0.63%)	45,222(4.89%)	54,652(1.48%)	208.9	0.83
Total	34,710(100%)	925,189(100%)	3,705,884(100%)	26.7	0.25

Figure 2.79	Scale of the Registered Entity and the Total Fix Assets and Number of
	Employees per Sector.

Source: Prepared by the Study Team based on the BBS Survey Results (2005-06); Ownership of Establishment by Employment.

According to this analysis, the share of the Private Entity accounts for 99.03% which is predominant in the share of the entity population, while the Total Fixed Assets per Entity is 23.7 Million Taka which are 1/24 in comparison with that of the Entity owned by the Public Sector and 1/9 compared with that owned by the Joint Venture, which are quite small in comparison. While, the scale of the Private Sector Entity per Employee shows 0.23 Million Taka, and this figure is 1/3.6 in comparison with that of the Joint Venture and 1/2.8 with that of the Public Sector. As to the comparison in the scale of the Total Fixed Assets per Employee between the Joint Venture and the Public Sector, the figure of the former with 0.83 Million Taka exceeds that of the latter which accounts 0.65 Million Taka. This means that the average number of Employee per the sum of the Total Fixed Assets is higher than that of the Joint Venture.

Besides these Entities legally registered as corporations, it is assumed that there are a considerable number of business operations informally run by family which are not registered as a Corporation in the private sector. And, it is quite unique that large numbers of Non-profit Organizations (NPO) are actively performing their operations throughout the lands of Bangladesh; from the one which is known as one of the largest NPO Organization in the World to a tinny NPO run by a few members of volunteers. The total number of those NPOs reaches to the level of a few hundred thousand, and over 2,000 NPOs are said to conduct their business with financial assistance from foreign donors. In fact, the method of Micro-finance which was first developed in Bangladesh is now widely spread to every corner of developing countries. It is therefore imperative that the activity of NPOs be not neglected in formulating Private Sector Development Program in Bangladesh.



# 3. Policy and Institutional Analysis on the Private Sector Development in Bangladesh

# **3.1.** Higher Policy Review on the Private Sector Development in Bangladesh

At present, the supreme Planning Paper in Bangladesh is the Outline Perspective Plan of Bangladesh 2010-2021 (Commonly known as Vision 2021) which became effective in June 2010. Along with the Development doctrine, the 6th 5-year Plan (2011-2015) has been delineated. Besides this master plan, there are the National Industrial Policy (2010-2012) and the Small & Medium Industry Policy Strategy (2005) by the Ministry of Industries, as well as the Export Policy (2009-2013) and Import Policy (2009-2012). All the subsequent development policies after the Mid-term Development plan shall follow the Master Policies introduced in the Mid-term Development Plan. However, the planning periods of those development policies differ: National Industrial Policy (2010-2012), Export Policy (2009-2012), Import Policy (2009-2012), SME Policy Strategy (2005), and Foreign Private Investment (Promotion and Protection) Act (1980). For analytical purposes, the Study Team has prepared a Matrix showing the major Policies and Characteristics of each development policy as shown in the Appendix 1: Policy Matrix on the Private Sector Development. Brief descriptions of each Development Policy and Act are as follows;

(1) Outline Perspective Plan of Bangladesh 2010-2021 (Vision 2021)

This Policy Paper was introduced as the Indicative Plan based on the Manifestos being adopted at the election campaigns in 2009 by the Awami League which is in administrative power now, and the target year of 2021 was set to meet with the 50th anniversary year of Bangladesh since her independence. The Major Objectives adopted by the Vision 2021 may be summarized as: Rising per capita income to US\$2,000 and transporting Bangladesh into a Middle Income country,

Strengthening Information Technology towards "digital Bangladesh", among broader objectives such as the Eradication of Poverty, Provision of Educational Opportunity, Reduction of Unemployment, Development and Improvement of Power Supply capability, Improvement of Income Level, and others. According to the Director of the General Economic Division at the Ministry of Planning, this supreme policy paper is under review and a new version will soon be announced after getting approvals from the Government of Bangladesh. However, those points that are under review were not identified during the interview with the said Director.

(2) The 6th 5-year Plan (2011 - 2015)

The 6th 5-year Plan (2011-2015) has been developed by the Ministry of Planning along with the Philosophy of Vision 2021 and has been in close coordination and opinion exchange with other related ministries. In fact, the mid-term development plans were used to cover every 5-year period, but for the periods from 2003 to 2011, it was covered by the Poverty Reduction Strategy Paper (PRSP) with 3-year planning periods. However, it was judged that a 3-year planning period is too short to accomplish any achievement within the designated period, thus the planning period of the mid-term development plan has been resumed to 5 years. Although the 6th 5-year Plan is developed along with the Philosophy of Vision 2021, the plan itself is not definitive and not specifying the details of the implementation program to be followed in the line ministries compulsively, but the plan is meant only to specify its objectives as the Strategic Indicator. The ways of implementation are left to discretions of each of the line ministries. The Plan shall be reviewed every year by comparing the planned figures with the achieved figures and necessary modification shall be made. The first review on the 6th 5-year plan shall be done by June 2012.

The 6th 5-year plan has set the average growth rate of GDP as 7.3% throughout the entire planning period from 2011 to 2015, and set the share of Manufacturing Industries as 21% at the target year of 2015. Along with these basic targets, the Plan has also set the share of specific major Manufacturing Industries such as: Ready-made Garment and Apparel (8.7%), Machineries (5.5%), Chemical & Fertilizer (1.9%) and Leather and Footwear (0.9%), and Others (4.0%). The Plan has also set the target of creating 10.4 Million Employment Opportunities and eventually this will reduce the Unemployment Ratio from 25% to 17% at the end of planning period. The Plan has also encouraged positive participation from the Private Sector for the development of Economic Zones and Infrastructure Facilities that may be developed by Public and Private Partnership (PPP) schemes. In





order to increase the level of the Income per capita, modernization and diversification of the Primary Sector which is represented by the Agriculture Sector functioning as the major provider of Employment Opportunities, is essential. At the same time, the Plan calls for a structural change to be realized by reducing the share of the Primary Sector and by increasing the share of the Secondary Sector which is led by the Mining and Manufacturing Industries. Other major objectives of the 6th 5-year plan are the following: Reduction of the poverty level to 15%, Reduction of the Unemployment Ratio and Provision of Employment Opportunity to women, Realization of "Digital Bangladesh", Anchoring the Anti-climate-change Mechanism, Promotion of Human Resources Development, Introduction of Good Governance Practices and the Protection and Promotion of the Human Rights and others.

The 6th 5-year Plan has been developed along with the contents of the National Industrial Plan (2010-2012) which became effective in June 2010, and it has references to the following chapters.

- Reform of Trade Policy
- · Softening the Foreign Exchange Policy
- · Effective Financing Policy through the operation of Private Banks
- · Development of Economic Zones, Industrial Parks
- Extension of the existing incentives to the Export Processing Zones
- · Incentives for Foreign Direct Investment
- Tax Relief for the Capital Costs paid for the Production Equipment by the Exporters
- · Protection of Industrial Rights
- · Preferential Policy on Tax Relief for the Manufacturing Industry
- Improvement of Service Quality at Supporting Organizations such as: -Board of Investment (BOI)
- -Chamber of Comm.rce and Industry (CCI)
- -Export Promotion Bureau (EPB)
- -Bangladesh Tariff Commission (BTC)
- -Bangladesh Standard Testing Institute (BSTI)
- -Bangladesh Institute of Management (BIM)
- -Bangladesh Industrial Technical Assistance Centre (BITAC)
- -National Productivity Organization (NPO)

However, after conducting a hearing research to project committee, It turned out that the expectation for the development of special economic zone, business district, competent human resources, project budget offer, and the invitation of direct investment to overseas (especially the investment for agriculture and agro-pricessing from Thailand.

As to the Land-ownership and Land-registration Systems which are recognized as serious issues together with the issues arising from poor Infrastructure and shortage of Electric and Gas Supplies for private sector development, the Plan calls for drastic improvement and resolution of these issues by adopting Information and Communication Technologies. The Ministry of Land is responsible for the issues related to the land affairs. Meanwhile, the Industrial Input and Output Table have been developed along with the 6th 5-year Plan, but the contents of the said table were not disclosed to the Study Team. Details of 25 Priority Industries being identified by the 6th 5-year Plan shall be discussed in comparison with the same industries identified by other policy papers at the end of this chapter. For 25 prestigeous industuries, please refer to Annex 1:Policy Matrix and 6.3.2 Analysis of national industry and the selection of prestigious indurtries in them.

# 3.2. Industrial Development Policy, Programs and Institutions

# 3.2.1. Overvew of Industrial Policy

(1) National Industrial Policy (2010 - 2015)

This Policy has been introduced by the initiatives of the Ministry of Industries in September 2010 as the guideline for industrialization in Bangladesh for the planning periods up to June 2012. The Principles of this Policy were based on that of Vision 2021 and the 6th 5-year Plan and the Policy has identified initiatives of the Private Sector as the Engine for the realization of various programs under this Policy. The Policy has also identified the promotion of ICT-related Products and





ICT-related Services as well as the development of Small and Medium Enterprises (SMEs), as t

wo core policy goals. Thus, industrialization capitalizing on the initiatives of the private sector with medium and longer perspectives is the major principle under this Policy, and it focuses on economic growth by the promotion and diversification of Exports. The Policy also identifies the Agro-processing Industry and those Industries intensive in Labor as the key strategic areas, and look for an urgent improvement of Electric and Gas Supplies and the development of such Transportation Infrastructures as an International Port, Highway, Railway and Telecommunication Networks. The promotion of Exports is imperative for the realization of the Industrialization Program because of its contribution towards a sound trade balance with the functions of import-substitution, and it will create competitive advantages based on experiences in domestic markets. Furthermore, this program aimed at contributing to provide employment opportunities to those who left from the Primary Sector. However, there is no indicator given under this Policy on the contribution ratio to the GDP and Employment number at the target year of 2012. The Policy has identified 31 industries as Priority Industries. Details of these 31 Priority Industries shall be discussed at the end of this chapter.

# (2) Export Policy (2009 - 2012)

The Ministry of Commerce (MOC) is responsible for the Trade Policies in Bangladesh and the Export Promotion Bureau (EPB) is functioning as one of the major implementation agencies for the said Policy under the administration of MOC. This Policy has been developed in close coordination with other line ministries concerned and introduced in September 2009. It is therefore anticipated that the contents of the Policy were not well coordinated with that of the 6th 5-year Plan, since this Policy has been introduced prior to the launching of the 6th 5-year Plan. The major objectives of this Policy may be summarized as: the promotion of free-trade policy in conformity with the rules and regulations set by the World Trade Organization (WTO) and the phenomena of economic globalization taking place in the recent years, promotion of labor-intensive industries and development of export-oriented commodities, development of higher-end quality products capitalizing on the most-modern technologies and designs, diversification of international markets, promotion of backward and forward linkages for the development of new products for Export, and others. Currently the Export Policy 2012-2015 covering the Export Policies for the next 3 years is under delineation by a Committee which consists of both Public and Private Sectors. However, the outlines thereof are yet to be defined. The Policy has identified 8 Industries as Priority Industries while 11 Industries are identified as Special Promotional Industries. Details of these those Priority Industries shall be discussed at the end of this chapter.

# (3) Import Policy (2009 - 2012)

As well as the Export Policy, this Policy has been developed under the initiatives of the Ministry of Commerce in January 2010. This Policy defines the liberalization of Import Systems which were rather protected by various restrictive rules to satisfy the International Rules and Regulations set by WTO on Imports and the progresses of economic globalization. Objectives of this Policy aimed eventually at the maintaining and promotion of the competitive advantages in Bangladesh Products that can be achieved through improvement on the productivity of the domestic industries and improvement on the quality of its products. The Government of Bangladesh has, however, adopted a gradual liberalization approach in order to avoid economic confusion and negative impacts to the domestic industries that might be affected, due to the drastic change of the systems. This Policy defines the administrative systems for the registered Exporters and Importers, Import Systems by the Industry, the Commercial entity and the Public Sectors, settlement on disputes between the Importers and the Customs, in addition to the list of commodities that are prohibited and/or restricted to import. The rates for Custom Duties, Levies and other Impositions shall be fixed and managed by the separate policy which is administrated by The National Board of Revenue, the Ministry of Finance.

(4) SME Policy Strategy 2005





This Policy Strategy has been introduced in 2005 by initiatives of the Ministry of Industries focusing on the Objectives on various Poverty Reduction Strategies being stated in the Millennium Development Goals (MDGs) set by the United Nations. This Strategic Paper defines that the Small and Medium Enterprises (SMEs) are indispensable entities required for the development of subsistent economies and reduction of poverty in Bangladesh, and various assistances are extended to SMEs in the fields of technology development and human resource development, and modernization of production plants including the development of industrial estates. Bangladesh Small and Cottage Industry Corporation (BSCIC) is a Public Corporation that was established in 1957 and has been actively involved in various programs devoted to this strategy paper. With regard to the human resource development to be implemented under this Policy, drastic improvement on the research and training hardware and curriculum at the Small & Cottage Industry Training Institute (SCITI), Bangladesh Institute of Management (BIM), Bangladesh Industrial Technical Assistance Center (BITAC), and National Productivity Organization (NPO) are recommended. Under this Strategic Paper, 11 industries are identified as the priority industries, but the details of these industries shall be discussed at the end of this chapter.

## (5) Foreign Private Investment (Promotion & Protection) Act (1980)

This Act was introduced in 1980 with an attempt to promote the Foreign Direct Investment (FDI) by the private sector into Bangladesh. This Act follows the policy change which was made in 1991 by the Industrial Policy on the implementation initiative of the Industrialization Program from the Public Sector to the Private Sector. The Act also defines the Opening of Permanent Premises by the foreign investor in Bangladesh and its procedures, details on various Investment Incentives, Monitoring and Control of Foreign Exchanges, Compensation for the Nationalization and Expropriation on the assets of foreign investors, Provision of fair and equitable treatment to Foreign Investors, and others. The Act further defines various Investment Incentives to Bangladesh as: Tax Holidays, Concessionary Duty on imported capital machinery, Tax Exemption on Royalties, Technical know-how fees received by foreign collaborators, firms, companies and experts, Tax Incentives to Export-oriented and Export Linkage Industries and others. This Act, however, does not identify any priority industry.

# (6) Comparison of the Priority Industries by each Policy Paper

As stated herein above, contents of major development policies and related Acts in relation with the Private Sector Development in Bangladesh, namely, Vision 2021, 6th 5-year Plan, National Industrial Policy (2010 – 2012), Export Policy (2009 – 2012), Import Policy (2009 – 2912), SME Policy Strategy 2005, and the Foreign Private Investment (Promotion & Protection) Act of 1980, were briefly analyzed. Those priority industries being identified by these policy papers are summarized in the Figure 2.78under Chapter 2.6.2: Characteristics of Major Industries. According to the analysis, the prioritized industries differ from Policy by Policy, although the basic direction that these Policies look for are seemingly the same, and certain industries are commonly designated. It is assumed that different criteria were applied by each Policy for selecting these Priority Industries based on the different objectives of Policies and different functions and responsibilities of the Implementation Agencies. However, the National Industry Policy, Export Policy, and Import Policy are running to the expiry date of June 2012 and they are now under the processes of review. It is hoped that these Policies will be reviewed in due coordination with the directions of its supreme planning paper, the 6th 5-year Plan.

#### 3.2.2. Organizational Structures of Industrial Development Policy Formulation and Its Implementation Bodies (Planning Commission, Ministry of Industries)

## (1)Planning Commission

The Planning Commission of Bangladesh was established in 1972 soon after the independence of Bangladesh as the organization to be responsible for the formulation and management of all the national development plans. Thus, all the national development plans shall be finally approved by the Executive Committee of the National Economic Council along with the supreme development





visions and doctrines. The Planning Commission consists of the following members.

- Chairman of the Commission: The Prime Minister
- Member: The Cabinet Members
- Secretariat: Assistants to the Ministers, President of the Central Bank, Heads of all the Bureau in the Planning Commission, Under Secretary at the Member Ministries.

The functions of Planning Commission are defined as follows:

- Provision of the Guidance to the preparation of the Perspective Plan, 5-year Plan, Poverty Alleviation Plan, Annual Action Plan, and Economic Policies,
- Finalization and Approval on all the Plans, Programs and Policies,
- Evaluation and Review to the Development Plans and Project Proposal,
- Decision Making on the Alteration of Policy arising from Socio-economic change,
- Launching necessary Councils to help support the Planning Commission.

1) Functions and Roles (Vision • Mission)

The major functions of the Planning Commission may be classified by 3 roles:

- Advisory Roles
  - Provide Advice to the Government of Bangladesh on Policy Goals, Objectives of Development, Priority, Development Strategy, and Promotional Policy,
- **Executive Roles** Preparation of Plan, Approval on the Development Plans and Projects, Preparation of Annual Action Plans.
- **Coordination Roles** Coordination of overall Planning works

## 2) Organizational Structure, Number of Staff and Budget.

As shown in the following Organization Chart, the Organization Structure of the Planning Commission consists of 6 Divisions: namely, General Economic Division, Programming Division, Socio-economic Infrastructure Division, Agriculture, Water Resources and Rural Institution Division, Industries and Energy Division, and Physical Infrastructure Division. All the Divisions are assigned with such staff as the Head, and several other positions including that of Chief, Joint Chief, and Assistant Chief. In addition to the staff shown in the Organization Structure below, there are a number of staff assigned to other line ministries and the aggregated numbers of these staff account for approximately 540. In the meantime, the Annual Budget of the Planning Commission in the financial years of 2011/12 are said to be 494 Million Taka.





Source: Planning Commission

With regard to the Scope of Services at the Industries and Energy Division which are directly related to the affairs of Private Sector Development are as follows:





• Preparation of Industrial Development Plans, Power Generation Plans, Sectoral Development Plans in relation with Oil, Gas and other Natural Resources.

• Conducting the Evaluation Processes and Provision of Support for the approval of the Project Proposals concerned to be submitted to the Evaluation Committee,

- Preparation of Annual Action Plans in close coordination with the line ministries,
- Preparation of the Development Plans in the fields of Industries and Energy Sectors.

## 3) Implementation Capability (Assessment by Self and by Others)

In an interview with the Planning Commission, improvement on the Planning Capability of the Staff and up-grading of the Computer Systems were identified by the head of General Economic Division as issues of concern. With regard to the former issue, it identified the lack of planning capability based upon and in close reflection with the phenomenon of the real economy, and it was therefore recommended to conduct the training program focusing on various case studies. At the same time, the director has pointed the necessity of establishing new public servant profiles departed from traditional ways of management and has recommended the introduction of leadership training programs in order to overcome these problems. According to the Director, they have up-graded their computer systems to certain levels but still further improvement is required to make an effective working environment with the most modern data processing equipment. They have however indicated no particular specification and computer model.

## 4) Issues to be addressed

As stated herein above, the functions of the Planning Commission are now focused on the preparation of development frameworks and will thereafter remain focused on the role of coordinator, which will, in contrary, delegate more powers to the line ministries for the realization of strategic goals set under the 6th 5-year Plan. Critical points under these functional changes are whether the line ministries have enough resources to perform the same planning capabilities that have ever been delivered by the Planning Commission. Although it was said that some staff of the Planning Commission are assigned to several line ministries, the Study Team, however, could not confirm the trails of their performances during the site surveys conducted in the past. Those performances that were delivered by the staff of Planning Commission attached to the line ministries could further be identified in the next visit and the Study Team will try to recommend any improvement plan, as necessary.

## (2) Ministry of Industries

## 1) Functions and Roles (Vision • Mission)

According to the Website of the Ministry of Industries, the Vision and Mission of the Ministry are as follows:

## [Vision]

To promote the contribution of the industrial sector in the indigenous production from 25 to 40 percent and to provide all sorts of assistance in uplifting the labor force in the industrial sector increasing from 16 to 25 percent by 2021.

## [Mission]

- 1. Rapid formulation of industrial policy giving priority to private entrepreneurship,
- 2. Attaining self sufficiency in production and distribution for the sake of safety in agriculture,
- 3. Elevating the standard of products to the world standard in an attempt to preserve the consumer's interest,
- 4. Establishment of industrial park (API) for production of raw materials of pharmaceutical industry,
- 5. Playing the role of facilitator for the development of cottages and small and medium enterprises,
- 6. Maintaining market stability by increasing the production of sugar & salt,



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- 7. Manufacturing environment friendly motor vehicles within the purchasing capacity of the people,
- 8. Manufacturing environment friendly light green vehicles for the rural population by September, 2010.
- 9. Enhancement of production in the industrial sector through training emphasizing productivity
- 10. Protecting national interests & expanding trade and industry by preserving and encouraging intellectual property in relation to industry,
- 11. Expansion of industrialization by providing entrepreneurship with training and incidental assistance by BSCIC & SME Foundation.
- 2) Organizational Structure, Number of Staff and Budget.

As shown in the following Figure, Organizational Structure of the Ministry of Industries consists of 6 Divisions, namely; Secretariat, Planning Division, Administration and Coordination Division, Privatization Division, Autonomous Body Division, and Audit & Directive Division. These Divisions are administered by the Additional Secretary, 4 members of Joint Secretary and one Joint Chief. Each Division has a pool of 15 - 30 staff members and overall number of the staff accounts for 214 in the entire Ministry. In the meantime, the Annual Budget of the Ministry of Industries in FY2012 which covers July 2011 to June 2012 is said to be 1,000 Million Taka.

Figure 3.2 Organizational Structure of the Ministry of Industries



Source: Ministry of Industries

# 3) Brief Description of the Industrial Policy (Specific Program)

The National Industrial Policy which was established and introduced by the Ministry of Industries in 2010 is the fundamental guideline for the industrialization of Bangladesh. Under this policy, Industrialization capitalizing the initiatives of the private sector with medium and longer perspectives is the major principle, and it focuses on economic growth by the promotion and diversification of Exports.

The Policy also identifies the Agro-processing Industry and those Industries of Labor-intensiveness as the key strategic areas, and look for the improvement of Electric and Gas Supplies and the development of such Transportation Infrastructures as an International Port, Highway, Railway and the Telecommunication Networks. According to the Policy, these Energy Developments shall include various Sustainable Energy Development Programs such as Solar-based and Biogases arising from urban wastes, in addition to the effective utilization of Natural Gas and Coal which are available in the territory of Bangladesh. The Policy has also identified the promotion of ICT-related Products and ICT-related Services as well as the development of Small and Medium Enterprises (SMEs) as two core policy goals.





The promotion of Exports is imperative for the realization of the Industrialization Program because of its contribution towards a sound trade balance with the functions of import-substitution and creating competitive advantages based on experiences in domestic markets. Furthermore, this program aimed at contributing to provide employment opportunities to those who left the Primary Sector.

The National Industrial Policy defines the following: Privatizing State-owned Industries ( Chapter 4), Investment Incentives (Chapter 5), Promoting Small, Medium, Micro and Cottage Industries(Chapter 6), Establishment of Special Economic Zones and Industrial Parks (Chapter 7), Productivity, Quality and Product Standardization (Chapter 8), Participation and Development of Women Entrepreneurs (Chapter 9), Export-oriented and Export Linkage Industries (Chapter 10), Foreign Direct Investment (Chapter 11), Industrial Technology (Chapter 12), The Environment (Chapter 13), Human Capital Development (Chapter 14), Institutional Mechanism to Facilitate Industrial Activities (Chapter 15), Implementation, Monitoring and Review (Chapter 16). Although 32 priority industries have been identified under this policy, it is too fuzzy and not clearly focused, according to the officials of the said Ministry. In the meanwhile, there is no action plan for those priority industries, except two Road Maps for the Automotive Industry and Ship-building Industry which are due to be ready by coming June 2012.

SME Foundation (SMEF) and Bangladesh Small & Cottage Industry Corporation (BSCIC) are two major implementation agencies under the supervision of the Ministry of Industries. SMEF is responsible for Medium to Small Industries, while BSCIC is responsible for Micro and Cottage Industries. BSCIC is operating 77 Industrial Estates around the Country but management of these estates is not going well, according to the information gathered from the private sector. Besides these Industrial Estates, there are 8 Export Processing Zones (EPZs) which are, except for 3 EPZs located at North-western part of Bangladesh, already fully occupied. Inquiries regarding new premises from potential investors are also increasing day by day. However, those 3 EPZs are located at far-distant and isolated areas from the capital city of Dhaka and are not supplied with the Industrial Gases, and thus, they are not attractive to potential investors. The gateway port for these vacant EPZs is Mongla Port where it is difficult for larger ships to dock, due to shallow waters at the access channel and in the port. In addition, these EPZs are under the direct management of the Office of the Prime Minister and it is not clear to what extent a proper coordination is made between the Office of the Prime Minister and the Ministry of Industries, SMEF and BSCIC.

A lot of problems are found in the fields of Human Resources Development. Bangladesh Industrial Technology Assistance Center (BITAC) is an organization under the Ministry of Industries and they are performing key functions as the prominent training institution for industrial human resources development. BITAC produces 2000 new graduates every year and one Senior Volunteer is dispatched to BITAC by JICA. However, services of BOTAC are not well appreciated by the private sector as saying that the training equipment and curriculums are not up-dated, and the courses are not reflected properly to the requirements of today's industries. Besides BITAC, the Ministry of Industries is running the Bangladesh Institute of Management (BIM) as a training institution for managers. For the human resources development in the fabric sector, the Ministry operates Bangladesh Textile Engineering University. They have varied human resources development menus, since they are also involved in the operation and management of Polytechnic and Vocational Schools. Due to time constraints, the Study Team could not so far visit all those training institutions and conduct surveys on its functions and performances. In the coming site survey, the Study Team will conduct in-depth surveys and identify the issues that these institutions are facing and try to delineate solutions for these issues. At the same time, it is essential to conduct a comprehensive survey on the educations systems for the industrial human resources development under the Ministry of Education as well, and see how well those industrial human resources development programs run by the Ministry of Industries and the Ministry of Education are coordinated.

4) Implementation Capability (Assessment by Self and by Others)



As it was stated hereinbefore that the official in the Ministry of Industries declared that the contents of the National Industrial Policy are too generous and no specific action plan is made available. As the results of political pressure and lobby activities from the private sector, the Policy identifies 32 priority industries but no focus is made to really important specific industries. On the other hand, performances of those supporting institutions in the public sector are quite badly evaluated and it is anticipated that tremendous efforts are required to fill these gaps. The Ministry of Industries however highly appreciates the SME Development Policy and Implementation Program provided by the Government of Japan, and they wish to request the Japanese Government for an extension of support. In particular, they are anticipating dispatch of Japanese Experts in the fields of Industrial Policy Development and SME Development.

# 5) Issues to be addressed

The Study Team made Interview Survey with the Ministry of Industries twice so far, and found that quite a large number of Government Offices are involved in the affairs of industrial development in Bangladesh. Although there are basic distinguished areas of responsibility, the Ministry of Industries is responsible for Industrial Development, while the Ministry of Commerce is responsible for the Distribution and Trade. However, many manufacturers are now involved themselves in the International Trade under the rapid extension of global economy world-wide. They are involved not only in such international business processes as marketing their products for overseas markets, but also involved in the procurement of materials and intermediate products from abroad. It seems that the Government of Bangladesh should consider a drastic reform on these Governmental Institutions in order to introduce more effective administration systems on these affairs, considering such dynamic changes in the business environment. It is therefore essential that more dynamic strategies and implementation plans be introduced to the Bangladesh Industrial Policy focusing closer linkages with such emerging economies as China, India and ASEAN (in particular with Myanmar) where an economic integration is expected by 2015. This idea was pointed out by a senior staff of the Ministry of Industries.

# (3) Bangladesh Industrial Technical Assistance Centre (BITAC)

# 1) Functions and Roles (Vision • Mission)

BITAC was first established by the merger of Industrial Research & Development Centre (IRDC) and Industrial Productivity Services (IPS) in 1962 under the administration of the East Pakistan Government. Thereafter, the present name of BITAC was adopted by the Bangladesh Government after becoming independent. Objectives of BITAC are the Training of Industrial Personnel to upgrade their skills, Extension of Advisory and Consulting Services for technology development and promotion of Import-substitute Industries, Promotion of Productivity and Quality Standards, Reduction of Production Costs, Assistance for promotion of Industrialization utilizing Resources and Skills available in Bangladesh, Development of Plastic Technologies, Tools and Jigs, and Provision of Technical Support based on the Metal-processing technologies. The Major activities of Extension of Training Programs, BITAC are to fulfill the Objectives mentioned above through Technical Support, Transfer of Technology, and Research and Development.

2) Organizational Structure, Number of Staff and Budget.

Management of BITAC is conducted by the Governing Body headed by the Secretary of the Ministry of Industries and 7 other members representing various Ministries and other organizations. The total number of BITAC Staff is 645 at present and they are assigned to separate venues of operations as follows: 357 Staff for Dhaka, 137 Staff for Chittagong, 72 Staff for Khulna, 68 Staff According to the Organization Structure Chart given for Chandpur, and 52 Staff for Bogra. by them, the Headquarters of BITAC is located in Dhaka which is, at the same time, responsible for the operations of Dhaka Campus and Khula Campus. The Chittagong Branch is responsible for the operations of Chittagong Campus and Chandpur Campus and the Bogra Branch is responsible for the Bogra Campus. As to the operations of the Bogra Campus, construction of the training halls is





yet to be completed and installation and cabling works to the training equipment (most of them are imported from China) are incomplete as of February 2012, thus they are not ready to accept trainees yet. The Annual Budget of BITAC for the fiscal year of 2011/12 is approximately 3 Million Taka. Organization Structure of BITAC is as follows:



Figure 3.3 Organization Structure of BITAC

Source : BITAC

3) Brief description of the Training Program of BITAC

Besides its Headquarters in Dhaka, BITAC have several venues of operations: Chittagong, Chandpur (Suburban area of Comilla), Khulna, and Bogra, and they are accepting approximately 2,000 trainees annually. The Training Courses which are provided by BITAC are widely varied and consist of 11 longer courses (14 weeks), 13 middle term courses (4 weeks), and 2 shorter courses (1~2 weeks). BITAC also designs and provides tailor-made courses that run for about 4~12 weeks, depending upon the requirements of the private sector. Contents of the training courses are mainly in the fields related to metal-processing, but there are a few courses related to the trades of Electric, Fabric and Plastic as well.

# 4) Implementation Capability ( Assessment by Self and by Others )

According to BITAC Officials interviewed, BITAC has a lot of issues to be addressed, namely that regarding Obsolete Training Equipment which were introduced long ago, and Capacity Building on Trainers and many others. BITAC is, however, facing constraints of budget, and they wish to overcome these issues by adopting a strategy of collaboration with the private sectors. At present, they have the following programs:



# Tool Institutes Development Project

The training courses that are being provided by BITAC are mostly related to Metal-processing Technologies and the training facilities and equipments related to Mold Technologies are in serious lack at BITAC. BITAC wishes to introduce the most modern training equipment in this field, considering the rapid introduction of computerized metal-cutting machineries to the concerned industry. According to the opinion of Mr. Fujita, JICA Senior Volunteer dispatched to BITAC, however, the training facilities equipped with ordinal metal-cutting technologies which are easily available in the second-hand market, are enough for the training activities in BITAC.

# Common Testing Laboratory Development Project

In Bangladesh, testing instruments and devices for prototypes and final products are inadequate. This project aimed at the development of testing laboratories where various tests examining the intensity, composition analysis and chemical analysis of raw materials as well as the final products are conducted at a reasonable cost upon request from the private sector. It may be considered to be a similar facility to that of the public testing laboratories in Japan.

# Development of Training of Trainers (TOT) Program

Development of Trainers and Instructors at BITAC Training Centers is one of the matters of urgency. At the same time, it is anticipated that BITAC Training Centers shall have facilities for Research and Development activities in order to conduct Study, Research and Development works within BITAC. With these programs, Human Resource Development throughout all of Bangladesh will be accelerated remarkably.

# Dispatch of Industrial Designer for the SEPA Project

Currently BITAC is actively involved in a Program which trains young women in rural areas who are trapped in the extreme difficulty (SEPA Project). Along with this Program, development of Handicrafts is initiated, but BITAC is in shortage of such experts as industrial designers and other professionals, who have experience in product development and production management, required in the global markets. BITAC is seeking for such experts and professionals from Japan for this program.

# 5) Issues to be addressed

Although BITAC have various constraints in the fields of Finance, Human Resources Development and Technology Development, up-grading of the technology level is imperative to achieve the proposed Industrialization Program in Bangladesh. In the meanwhile, the Government of Japan has been providing assistances in this field by dispatching Japanese Experts (Senior Volunteers) to BITAC for 3 consecutive terms. The Study Team will examine and define the details of the modernization program for BITAC in due coordination with the results of selecting processes of two (2) priority industries along with this study.

# (4) Bangladesh Standarts and Testing Institution (BSTI)

# 1) Function and Role (Vision and Mission)

BSTI was founded in 1985, integrating Bangladesh Standarts Institution and Central Testing Laboratories. BSTI is under supervision of the Ministry of Industry. The objective of BSTI is to standardize industrial materials, foods, and chemical products. BSTI has not received any kind of financial aid and succeeded to administrate independently. Also, BSTI is registered in several institutions in charge of international standardization, such as ISO, IEC, and Codex, as the representative of Bangkadesh. In this way, when BSTI legalizes a product, that product will be automatically notarized by the countries registered by international organization.

2) Organizational framework (organization chart), staffs, and the budget.

BSTI has Standards Wing, Certification Wing, Chemical Testing Wing, Physical Testing Wing, Metrology Wing, Administration Wing in Dakka headquarter. BSTI also has some branch offices in Chittagong, Khulna, Rajshahi, Sylnet, and Barisal. The most important function is Laboratory

Testing and Certification. In order to bring out the best of these functions, BSTI put One-Stop Services Center in both headquarter and branch offices. So far, BSTI has legitimized around 36000 food product regislations. 155 standards of those are obliged to implemented, on the other hand, government and private companies can decide to legalize the rest of those. As for the Certification system, BSTI is cooporating with NABCA for 15 fields, focusing on the most exported foods.

The certification process is as following: 1) Preparation of documents and application 2) Examining production site 3) Laboratory test by sample 4) Evaluation of test result 5) Evaluation from certification committee 6) Certification of responsible of BSTI. The budget needed for certification, for a small project is 2000 taka, a big project is maximum 1.5 million taka. Laboratory test costs additionally. The cost of laboratory test varies as the examining topics are different to each product. All the members of BSDTI are around 600, 60% of them are engineers and the rest are in charge of administration and logistics. The annual budget is around 3 million taka, BSTI organization chart is below:

## 3) Future Vision

Organization of industrial standards for fundamental industrialization is the urgent task to tackle with. BSTI says it must corporate not only with Dakka headquarter but also branch offices such as Chittagong, Khulna, Rajshahi, Sylhet, and Barisal. So far, BSTI has been received the aids from foreign government, for example, the government of Norway for constructing Metrology Laboratory in head quarter. And also, they have received the budget (200 million taka) from the Japan Debt Cancellation Fund(JDCF) from the Japanese government. That was used for the construction of test-building in head quarter and furnishing test-devices project. For now, BSTI is going to focus on branch offices of Chittang and Khulna on the seaside with the aide of foreign donners.

# (5) National Productivity Organization (NPO)

## 1) Function and Role (Vision and Mission)

NPO was founded in 1989, under the supervision of the Minisry of Industry, in the objective of contributing to economic development and improving proficiency. NPO is public organization which aims at sharing the commun value of importance of productivity within both industry and citizens. Also, that aim includes improving proficiency of the organization, by developmenet of human resourse, research/analyse, producing facility, and consulting. The government points out several products for improving productivity, such as Jute, Textile, Chemicales, Emngineering, Food and Sugar, Small and Cottage Industries, Services Industries, and Agriculture Sector.

From 2007 to 2009, 3 experts on product management were sent to NPO with the aid of JICA, and they navigated to improve productivity of Jute industry in particular.

2) Organizational framework (Organization chart), staffs, and budget]

The total staffs of NPO are 69, however, only 25 persons are in charge of actual teaching for improving productivity. Only one organization is active and located in head-quarter in Dahka. There are plans to launch branch offices in Chittagong, Khulna, and Rajshahi but they are not ongoing because of a lack of finacial resource. The organizational framework is follow:





3) Outline of NPO programs offered by NPO.

Current NPO programs are about the following topics: the basic topics are about basic of productivity, research/analysis, Total Quality Management, 5S, Kaizen, Quality Control Circle, ISO 9000 series, workers management, product evaluation, Industrial Engineering, Productivity Improvement Cell(PIC), Problem-solving, and Decision Making, Benchnarketing, etc.

#### 4) Future Vision

NPO has been conducting a project for improving productivity, especially for Jute industry. However, any tangible result has not come out yet, and NPO is asking for further help by JICA. As for the facility, NPO rents their office inside of head-quarter of the Minister of Industry. No branch office is built in Chittagong and Khulna. NPO is expecting further aid from JICA, as the Japanese government has been a long-term partener for Bangladesh and NPO. For this project, NPO clearly noted that they expect the technology aid or grant aid for the construction for NPO's head-quarter office (including library, conference room, and computer facility), and branch offices in Chittagong and Khulna.

As NPO acknowledges, their organizational framework and project plan are quite restrictive, so that Bangladesh will need a drastic capacity improvement for further industriall development.

#### (6) Bangladesh Institute of Managemenet (B|M)

#### 1) Function and Role (Vision and Mission)

BIM has its root in Management Development Centre of East Pakistan Period in 1961. This Institution is legally independent by the law enacted in 1970, and this has been kept even after the independence of Bangladesh in 1971. After BIM joined market in 1975, BIM's costmers started offer human resource development service to private companies as well as governmental organization and public companies. From 1970 to 1980, BIM accepted numerous aid projects from foreign governments. A number of long-term/short-term human resorce development programs was offered and BM took a major role as a core institution. From the begging of 1990, GM gradually began to be exposed to a severe competition of their human resorce development education services with other private companies. As GM had a less number of clients, GM was obliged to change their system drastically. In this period, one year Post-Graduate Courses system was lanched. The courses were about marketing, finance, and computer sciences.



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The vision of BIM is "Improvement of management skills for contributing the development of Bangladesh" and their mission is "With the competent experts team, BIM takes a role as a core center of management skill development for Bangladesh". The objective of BIM is as following:

- Committeent to any level of executives education, concerning public institution, private enterprise or NGO, industry, service industry, etc.

- Contribution to improvement of productivity in any kind of economic activities, as through training, research, consulting, etc.

- Publication of latest information and press about mondernazation of managemenet, and any other topic related to managemenet.

- Stimulation of interatction of experience and know-how related to management skill, with collaborating with domestic and international service institution of it.

## 2) Organizational Framework, Staff, Budget

The head-quarter of BIM is in Dhaka, capital of Bangladesh, and other branch offices are in Chittagong and Khula. The total job post are 52, but only 25 staffs of them are acvtive. Some of instructors were scouted to private institution of management development. However, BM is still struggling for increasing its members. 25 million taka per year is paid as lump sum, but actual management needs 60 million taka. The balance, 35 million taka, is replenished by self-orgaized training prpgram.

## 3) Outline of programs offerd by BM

BIM offfers short/long term training course, the short-term course is for a week to 4 weeks. There are around 80 courses per year and 38,500 subscribed the cources since last 2009, June.

The long-term program more than one year is varied in 5 courses. Since last 2009, June, there are around 7000 students who graduated from this course.

BM's consulting service has been conducted to demands from domestic/international external organization.

Researching extends to training needs, selection servey, motivation managemenet, and product quality certification.

Press release includes quartery magazines, and press on certain topics.

90 percent of students are already working so that courses start from the evening, except the long-term Diploma course.

## 4) Future Vision

BIM have not been allocated an enough budget, and been struggling with a serius lack of professors.

About the BIM services, though we could not have comments from students, as the current situation above explains that their service would not excess the sufficient level for the students. The professors in BIM are rearly changed, once they are hired. That turned into the gap between training contents and training needs of students.BIM has developed its long-term Diplima program, with the aid of German (GIZ). As BIM prepares the courses which maches students' needs, more students would register the courses. In this perspective, improvement of the budget is paramount. BIM are interested in Japanese management skills and expect to apply it to their own training program.

# (7) Small and Cottage Instustries Training Institute (SCITI)

1) Function and Role (Vision and Mission)

SCITI was founded in 1985, as a sole training institution supplemented to Bangladesh Small and





Cottage Industries Corporation (BSCIC), under the supervision of the Ministery of Industry.

The head-quarter is located in north of Dahka city. They offer the training programs for people aims at small-scaled business or inauguration.

The Objective of SCITI is a) Offering the trainings for recovery of small business in Bangladesh; b) Offering the trainings for mid-executives in existing enterprise; c) Offering the trainings for capacity development of staffs of public/private aid institution; d) Researching for giving a solution to problems that small business launchers have. The participants of the training includes the staffs of BSCIC, private sectors, entrepreneurs, and foeigners (Nepal, Srilanka). The total number of participants to the trainings is around 33,800, since 1985 to 2011.

# 2) Organizational framewok (organization chart), Staffs, Budgets

Currently, SCITI holds 6 departments: Entrepreneurship, Development, Industrial Management, Financial Management, Marketing Management, General Management, Research and Consultancy. SCITI offers around 50 training programs per year, and has about 1000 students (One class has around 20 students). The tuition for one week course is 1000 taka, and students rent dorm have to pay extra. There is no specific demand of entrance criteria, but only interview. SCITI sometimes sends their professors to the training programs that BSCIC local bureau organizes.

The total number of staffs are 85, and 29 of them are professors. The whole amout of budget is allocated by the government of Bangladesh. For the fiscal year 2011, the budget was about 600,000 taka. The organizational chart of SCITI is below:



# **Figure 3.6 Organizational Chart of SCITI**

# Source: SCITI

3) Outline of SCITI program The outline of SCITI program of 2011-2012 is below:

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	Figure 5.0 Training Trogram of	SCIII	
Training Field	The title of course	Credits	Training period
Entrepreneurship Development	Entrepreneurship Develoment for Business Creation	6 courses	12 days
	ToEstabilishSmallIndustry/BusinessProfitable	3 courses	5 days
	Entrepreneurship Development for Rural Woman	1 course	4 days
General Management	Office Management	3 courses	5 days
	Human Resourses Management	6 courses	5 days
	Management Information Systems	1 course	5 days
Industry Management	Industrial Management	3 courses	5 days
	Production Management	4 courses	5 days
	Quality Management	1 course	5 days
	Cottage Industry Management	2 courses	5 days
Financial	Book Keeping and According	2 courses	5 days
Management	Small Indusries Financing	4 courses	5 days
	Cost Reduction Techniques	1 course	5 days
	Financial Management	1 course	5 days
	Costing and Pricing	2 courses	5 days
Total		50 courses	

Figure 3.6 Training Program of SCITI

Source: SCITI

4) Issues to be addressed

According to the interview with SCITI, it is necessary to renovate the old training facilities, training prpgram management, and re - training to professors. Especially, for the training to professors, SCITI wants to apply Japanese styled management. As SCITI is about to update their training facilities and training programs, the renovation of the government and of the utilization of the aid from foreign donners is highly encouraged.

In these days, Bangladesh is catching attention as direct investment target countries. The organization of infrastructure and human resource development is quite important for both Bangladesh and other donners. As for human resourse development, a high supply of quality/quantity of manual workers should be the key. In order to organize these workers, a number of competent executives are also needed.

At the renovation of the SCITI training system, these concerns need to be solved. In the perspective of financing, the maching of micro-finance system and the entrepreneurship of SCITI

is also quite important.

# 3.3. Investment Promotion Policy, Programs and Institutions

# 3.3.1. Investment Promotion Policies and related Institutional Analysis

The Government of Bangladesh decided in the early 1980s to include investment facilitation and promotion in its policy framework. This move originated from the enactment of a Foreign Private Investment (Promotion and Protection) Act and an Export Processing Zones Authority Act in 1980. In line with the global economic trend, there was increased need to establish an agency specializing in the promotion of private sector investment, both from abroad and domestically. Accordingly, the government established a Bangladesh Board of Investment after formulating an Investment Board Act in 1989.

The following five agencies play the central roles in investment promotion in Bangladesh:

- (1) Bangladesh Board of Investment (BOI) Potential investors must first contact BOI to establish a business in areas other than EPZs. BOI was established in 1989 to support the establishment of facilities necessary to promote private sector investment in industries and establishment of businesses.
- (2) Bangladesh Small & Cottage Industries Corporation (BSCIC) The predecessor of BSCIC was established by an act of parliament in 1957 and reorganized as BSCIC in 1992 when the act was amended to meet the government's industrial and macroeconomic policy of the time. The corporation is entrusted with the responsibility of investment promotion for small and cottage industries in Bangladesh. The details of BSCIC will be given in Section 3.4.
- (3) Bangladesh Export Processing Zones Authority (BEPZA) BEPZA is the governmental agency to promote, attract and facilitate foreign investment in the export processing zones (EPZs). Potential investors will first register with and contact the agency to do business in EPZs. Details will be given in Section 3.5.
- (4) Bangladesh Economic Zones Authority (BEZA) BEZA was established in November 2011 to promote, administer and supervise special economic zones in Bangladesh. It is a new governmental body under the Prime Minister's Office. Currently, it is engaged in designing and planning projects to deploy in economic zones and is supported by the World Bank. Details will be given in Section 3.5 "Export Processing Zones and Economic Zones".
- (5) Public-Private-Partnership Office (PPP Office)

The PPP Office was established in 2010 under the Prime Minister's Office to take public private partnership initiatives. Its activities include policy-related assessment, consistency with higher-level policies, understanding of PPP projects proposed by ministers, assessment of project details (such as price, work schedule and profitability), advice, financial support for feasibility studies and procedures to submit appropriate and recommendable projects to the Cabinet Committee on Economic Affairs (CCEA).

Foreign direct investment projects which have been registered with the BOI are eligible for the following incentive benefits. In passing, details of incentive measures for firms entering EPZs will be given in Section 3.5 since they are administered by a different agency, BEPZA.

Registered FDI projects are eligible for a tax holiday for 5-7 years. The terms of the corporate tax holiday differ among the zones.

(i) SPZs in Dhaka and Chittagong districts (excluding Chittagong Hill districts)

• Term of tax holiday: 5 years

100% for the initial 2 years; 50% for the subsequent 2 years; and 25% for the subsequent 1 year

(ii) SPZs in Khulna, Sylhet, Barisal, Rajshahi and Chittagong Hill districts

• Term of tax holiday: 7 years

100% for the initial 3 years; 50% for the subsequent 3 years; and 25% for the subsequent 1 year

(iii) Private Electricity Companies

• Term of tax holiday: 15 years





100% throughout the term

(iv) Sectors eligible for tax holidays in the regions cited in the above (i) and (ii):

1. Textile, 2. Medicine, 3. Pelamine products, 4. Plastic products, 5. Ceramic products, 6. Iron and steel products, 7. Fertilizers, 8. Insecticides and pesticides, 9. Computer hardware, 10. Three-star and higher-ranked hotels, 11. Petrochemistry, 12. Pharmaceutical materials, 13. Agricultural machines, 14. Shipbuilding, 15. Boilers and compressors, 16. Manufacturing of textile machinery, 17. Jute products, 18. High value-added clothing, 19. Mild steel rods, 20. CI sheets, 21. Diamond processing, 22. Food processing, 23. Solar energy plants and 24. Physical infrastructure

a. Sea and river ports; b. Container terminals, coastal container depots and consolidated cargo stations; c. LNG terminals and gas pipelines; d. CNG terminals and gas pipelines; e. gas pipelines; f. Elevated expressways; g. Large-scale water purification plans and water distribution pipes; h. Wastewater treatment plants; i. EPZs; j. Communication except mobile phones; and k. Monorails and subways

- (v) Special notes on the above (i) and (ii) (from the BOI and BEPZA websites):
  - No tax holiday shall be applicable to branch factories or extension units of the main businesses.
  - · A tax holiday shall be applicable to industrial project companies established as separate companies.
  - Companies benefiting from tax holidays must reinvest at least 30% of income subject to the exemption or invest at least 10% surplus of profit in any of the companies listed on the Bangladeshi Stock Exchange in the last quarter of the accounting year.
  - Tax holidays will apply only to businesses registered with the BOI.
  - Tax holidays will be applicable only to the designated sectors.
  - Tax holidays will be applicable to companies whose eligibility has been approved and certified by NBR within 90 days of submitting the application.

A summary of the Foreign Private Investment (Promotion and Protection) Act enacted in 1980 (Act No. XI, 1980), the basic law to attract foreign investment, is shown in Figure 3.4.

#### Figure 3.8 The Foreign Private Investment (Promotion and Protection) Act, 1980 (Act No. XI, 1980)

An Act to provide for the promotion and protection of foreign private investment in Bangladesh.

WHEREAS it is expedient to provide for the promotion and protection of foreign private investment in Bangladesh;

It is hereby enacted as follows:-

#### 1. Short title.

This act may be known as the Foreign Private investment (Promotion and Protection) Act, 1980.

#### 2. Definitions.

(1) In this Act, unless anything to the contrary is stated in the subject or context,-

(a) "foreign capital" means capital invested in Bangladesh in any industrial undertaking by a citizen of any foreign country or by a company incorporated outside Bangladesh, in the form of foreign exchange, imported machinery and equipment, or in such other form as the Government may approve for the purpose of such investment;

(b) "foreign private Investment" means investment of foreign capital by a person who is not a citizen of Bangladesh or by a company incorporated outside Bangladesh, but excludes investment by a foreign Government or an agency of foreign Government;

(c) "industrial undertaking" means an industry, establishment or other undertaking engaged in the production or processing of any goods, or in the development and extraction of such mineral resources or products, or in the provision of such services, as may be specified in this behalf by the Government.

(2) Words and expressions used but not defined in this act shall have the same meaning as in the Companies Act, 1913 (VII of 1913).

#### 3. Foreign private investment.

(1) The Government may, to promote foreign private investment, sanction establishment with foreign capital of any industrial undertaking-(a) Which does not exist in Bangladesh and the establishment whereof, in the opinion of the Government, is desirable; or

(b) Which is not being carried on in Bangladesh on a scale adequate to the socioeconomic needs of the country; or

(c) Which is likely to contribute to-

(i) the development of capital, technical and managerial resources of Bangladesh; or

(ii) the discovery mobilization or better utilization of natural resources; or

(iii) the strengthening or the balance of payments of Bangladesh; or

(iv) increasing employment opportunities in Bangladesh; or

(v) the economic development of the country in any other manner.

(2) Sanctions of the establishment with foreign capital of an industrial undertaking under sub-section (1) may be subject to such conditions as the Government deems fit to impose.

#### 4. Protection and equitable treatment.

The Government shall accord fair and equitable treatment to foreign private investment, which shall enjoy full protection and security in Bangladesh.

#### 5. Terms of sanctions, etc.

The terms of sanctions, permission or licence granted by Government to an industrial undertaking having foreign private investment shall not be unilaterally changed so as to adversely alter the conditions under which the establishment of such undertaking was sanctioned; nor shall foreign private investment be accorded a less favourable treatment than is accorded to similar private investment by the citizens of Bangladesh in the application of the relevant rules and regulations.

#### 6. Indemnification. etc.

In the event of foreign investment losses owing to civil commotion, insurrections, or riots, foreign private investment shall be accorded equivalent treatment with regard to indemnification, compensation, restitution, or other settlement as is accorded to investment by the citizens of Bangladesh.

#### 7. Expropriation and nationalization.

(1) Foreign private investment shall not be expropriated, nationalized or subject to any measures having the effect of expropriation or nationalization except for public purpose against adequate compensation, which shall be paid expeditiously and be freely transferable. (2) Adequate compensation for the purpose of sub-section (1) shall be an amount equivalent to the market value of investment expropriated or nationalized immediately before the expropriation or nationalization.

#### 8. Repatriation of investment.

(1) With respect to foreign private investment, the transfer of capital and the returns from the same and, in the event of liquidation of industrial undertaking having such investment, of the proceeds from such liquidation is guaranteed.

(2) The guarantee under sub-section (1) shall be subject to the right which, in circumstances of exceptional financial and economic difficulties, the Government may exercise in accordance with the applicable laws and regulations under such circumstances.

#### 9. Elimination of difficulty.

If any difficulty arises in implementing any provision of this Act, the Government may make such order, not inconsistent with the provisions of this Act, as it may deem necessary for the purpose of eliminating the difficulty.

#### Source: Foreign Private Investment Act, 1980

Source: The Foreign Private Investment (Promotion and Protection) Act, 1980

#### 3.3.2. Institutional Structures of Investment Promotion Policy Formulation and **Implementation Bodies**





# (1) BOI

1) Functions and Role (Visions and Missions)

The aims of BOI are to promote investment from home and abroad to the private sector, contribute to Bangladesh's socioeconomic growth, and provide the facilities and assistance necessary to establish industries. Its functions are as follows (from the BOI websites):

a) Investment promotion

- Country promotion
- Sector/industry promotions
- · Publications on business processes

b) Investment facilitation

- · Pre-investment information and counseling service
- · Investor welcome service (swifter immigration)
- · Registration/approval of foreign, joint-venture and local projects
- · Registration/approval of branch/liaison/representative offices
- · Approving work permits for foreign nationals
- Facilitating utility connections (electricity, gas, water & sewerage, telecom, etc.)
- Assistance in obtaining industrial plots (land)
- · Approving remittance of royalties, technical know-how and technical assistance fees
- Facilitating the import of capital machinery & raw materials
- Approving foreign loan suppliers' credit, PAYE schemes, etc.

c) Policy advocacy

- · Advocating policy suggestions to the government
- · Assisting the government in framing new policies for private sector development
- Assisting the National Taskforce on investment climate facilitation

2) Organizational Structure (Organizational Chart) and Budget

The BOI has regional offices in divisions. Its organizational structure is as follows:



# Figure 3.9 Organizational Chart of BOI

Source: BOI, Handbook & Guidelines

3) Summary of Investment Promotion Policy (Specific Programs)

As a governmental body responsible for industrial development, the BOI serves as a "one-stop center for companies". The BOI is committed, through its services, to attracting foreign investors promptly, helping them establish new business facilities in Bangladesh and thus contributing to the industrial development of the country. The BOI acknowledges that even foreign investors not



versed in the investment environment in Bangladesh can manage, if they contact BOI, to obtain all necessary information at the airport and implement all the procedures to establish new business facilities and start-ups. It also launched new online services to enable foreign investors to register online and obtain the information and services they need.



Figure 3.10 Flow of BOI One-Stop Service

Source: BOI

- 4) Regulations related to Foreign Investment
- (i) Restrictions on Sectors

Foreign investment may not be made in some sectors by regulations. The restricted sectors for foreign investment are as follows:

· Prohibited sectors:

Arms; ammunition and other defense equipment and machinery; production of nuclear energy; forest plantation and mechanized extraction within the bounds of reserved forests; and printing of currency notes and minting.

• Restricted sectors: (business permits, etc. required chiefly from the government)

Fishing operations in deep water; banking and financial businesses; insurance businesses; electricity-related businesses; businesses related to natural gas, petroleum oil, refineries, coal and other mineral resources; large-scale infrastructure business; medium- and large-scale corporate operations using gas and mineral resources as raw materials; communication services; satellite broadcasting services; air passenger services and transport; marine transport; port and harbor construction; Voip/IP telephone service; and industries using heavy metal extracted at coastal areas



# (ii) Capital Ratio

Basically, 100% foreign capital investment is accepted, though there are exceptions. Investment in marine transport and logistics is restricted in terms of the investment amount and ratio. Joint ventures funded by foreign capital are accepted in both private and public sectors.

## (iii) Land Ownership

Foreign national individuals may not acquire land but registered foreign capital companies may do so. They are entitled to use the land for 30 years if in EPZs and extend the use right once for another 30 years.

5) Assessment of Policy Implementation (Assessment by Governmental Bodies Themselves and Third Parties)

## (i) Self-Assessment by Governmental Bodies

BOI officials proudly consider their "one-stop service" to be a high value-added service on the grounds that they can promptly provide foreign investors with the necessary information and respond to investors' requests.

(ii) Assessment by Third Parties

The Federation of Bangladesh Chambers of Commerce and Industry (FBCCI) considers that the BOI does not fully function as a means of offering services to private sector parties wishing to invest in Bangladesh and emphasizes the need to shuffle governmental bodies and create a body (such as Japan's JETRO) capable of providing more effective assistance to the private sector.

According to remarks from Japanese companies, there is room for improvement in the services provided by BOI. Some Japanese private corporations say that they cannot see the BOI service as "one-stop" because, after obtaining investment permits from BOI, they eventually need to contact various governmental bodies directly, including immigration authorities, to undergo a number of procedures, for example, to have utilities installed in their office buildings and factories. Others complain that they have had to wait for the authorities to issue work permits for nearly six months. Moreover, there is a view among Japanese companies that the financial procedures adopted in Bangladesh do not meet the global standard because they have difficulty remitting surplus capital to their own country, due to the failure of BOI and the central bank to issue the required permits.

## 6) Issues to be addressed

BOI appropriately serves as the first stop for investors. However, they must undergo excessive procedures in addition to those with BOI. The board, for example, must take over various and complicated procedures that investors need to make at different agencies, which will make BOI a true one-stop agency. Delayed procedures for the issuance of work permits could hamper competitive business operations and new entries into the Bangladeshi market, so should be regarded as a serious problem. The time required for the procedures differs among the officers in charge and a consistent system must be established.

# (2) PPP Office

## 1) Functions and Role (Visions and Missions)

The activities of the PPP Office include related policy assessment, consistency with policies at higher levels, understanding of the PPP projects proposed by ministers, assessment of project details (such as price, work schedule and profitability), advice, financial support for feasibility studies and procedures to submit appropriate and recommendable projects to the Cabinet Committee on Economic Affairs (CCEA).

## 2) Organizational Structure (Organizational Chart) and Budget

The PPP Office was established in 2010 under the Prime Minister's Office to take public private partnership initiatives. Currently, it is staffed by five workers but will increase its workforce up to 19 by February 2012. The budget is unknown.





# 3) Summary of Industrial Development Policy (Specific Programs)

It is difficult for the Government of Bangladesh alone to invest and ensure development of infrastructure and industries due to financial, capacity and other constraints. The government is thus exploring the possibility of collaborating with the private sector in the form of a Public-Private Partnership. To date, two PPP projects – one to construct an elevated expressway 2.5km in length between Jatribali and Gulishtal and another to construct the Dhaka elevated expressway (including the city and airport) of 26km in length – are taking place. Another five projects are under consideration as potentially implementable under PPP initiatives: namely, the construction of a Bangladesh deep sea port, Bangladesh international airport, the 2nd Padma Bridge, Mongla sea port and Sonadia LNG plant.

The following 18 sectors, as well as the ICT, environmental and tourism industries, are prioritized for PPP and these may become the leading sectors/industries for Bangladesh's industrial development:

## **Eighteen Highest Priority Sectors for PPP**

(Policy and Strategy for Public-Private-Partnerships (PPP) 2010)

- (a) Exploration, production, transmission, and distribution of oil, gas, coal and other mineral resources
- (b) Oil refinery, and production of LPG
- (c) Production of fertilizers
- (d) Power generation, transmission, distribution and services
- (e) Airports, terminals and related aviation facilities
- (f) Water supply and distribution, sewerage and drainage, effluent treatment plants
- (g) Land reclamation, dredging of rivers, canals, wetlands, lakes and other related facilities
- (h) Highways and expressways including mass-transit, bridges, tunnels, flyovers, interchanges, city roads, bus terminals, commercial car parking, etc.
- (i) Port development (sea, river and land) including inland container terminals, inland container depots and other services
- (j) Deep sea port development
- (k) Telecommunication systems, networks and services including infocommunication technology (ICT)
- (l) Environmental, industrial and solid waste management projects, railway systems, rolling stock, equipment and facilities
- (m) Tourism industry
- (n) Economic zone, industrial estates and parks, city and property development, including services to support commercial and noncommercial activities
- (o) Social infrastructure e.g. health, education, human resource development, research and development, and cultural facilities
- (p) E-service delivery to citizens
- (q) Poverty Alleviation Projects: village water supply, Remote Area Power Supply Systems (RAPSS), rural gas supply, rural Internet projects, river passenger terminals/landing stations, rural health services and hospital, and irrigation and other agricultural services
- (r) Other urban, municipal and rural projects that the Government views as priority areas for development so as to support economic development activities

## Figure 3.11 Classification of PPP Projects by Investment Size

A project, which is estimated to have total investment exceeding BDT 2.5 billion, excluding ongoing capital for expansion, shall be classified as a large project.

Medium projects

A project, which is estimated to have total investment between BDT 500 million and 2.5 billion, excluding ongoing capital for expansion, shall be classified as a medium project. ■ Small projects

A project, which is estimated to have total investment below BDT 500 million, excluding ongoing capital for expansion, shall be classified as a small project.

Source: Policy and Strategy for Public-Private-Partnership (PPP) 2010



[■] Large projects

# 3.4. Trade Promotion Policies, Programs and Institutions

# 3.4.1 Trade Promotion Policy and related Institutional Analysis

As stated in the previous chapter, the supreme Planning Paper in Bangladesh is the Outline Perspective Plan of Bangladesh 2010-2021 (Commonly known as Vision 2021) which became effective in June 2010. Along with the Development doctrine defined in the Vision, the 6th 5-year Plan (2011-2015) has also been delineated. Although the 6th 5-year Plan was developed along with the Philosophy of the Vision 2021, the plan itself is not definitive and not specifying the details of the implementation program to be followed by the line ministries compulsively, but the plan is just to specify its objectives as the Strategic Indicator, and the ways of implementation are left to discretions of each of the line ministries. All the subsequent development policies after the Mid-term Development plan including Export and Import Policies shall follow the Master Policies introduced in the Mid-term Development Plan. However, the planning periods of those development policies differ. Export Policy and Import Policy cover the periods from 2009 to 2012 while the 6th 5-year Plan covers for the periods from 2011 to 2015, and its implementation rules and regulations are yet to be established, according to the information. Under the existing Export Policy, there are Eight (8) Priority Industries: Agro and Agro-processing Industries, Light Engineering Industry, Footwear & Leather Industries, Pharmaceutical Industry, Software & ICT Products, Home Textile Industry, Out-bound Ship-building Industry and Toiletry Industries, for which such supports as provisions of low-interested loans, Tax Relieves, Export Credits, Discount on Transportation Fees, Technical Supports, and others are extended.

#### 3.4.2. Institutional Structures of Trade Promotion Policy Formulation and Implementation **Bodies**

In Bangladesh, the Ministry of Commerce (MOC) is responsible for the delineation of Trade Policy, while the Export Promotion Bureau (EPB) is responsible for the implementation of such Trade Policy. Bangladesh has been suffering an in-balance of Foreign Trade for a long time and these deficits are filled by the remittance of Non-resident Bangladeshi (NRB) and the funds of Official Development Assistance (ODA) received. Thus, functions and performances of these institutions are very important.

# (1) Ministry of Commerce (MOC)

# 1) Functions and Roles (Vision and Mission)

The Ministry of Commerce( MOC )has, together with other Ministries and Agencies in the Country, commenced its administrative activities in the fields of Foreign Trades and Domestic Commerce since 1971, the independence of Bangladesh. During the periods from 1971 to 1975, they have adopted the Planned Economy systems, the same model of administration with that of U.S.S.R. who helped initiate the independence of Bangladesh. Under this administration, the Government of Bangladesh has nationalized many major industries and has been involved in barter trades through the National Trade Corporation. However, they have tried to introduce Market-oriented Economy systems since 1975, and this trend has been accelerated since around the 1980s. Although it took more than 30 years from this change, the mentality of some Government officials and the bureaucratic structure in those offices remains the same as that of the Planned Economy. According to the Joint Secretary of MOC interviewed, it is important to get out from those outdated mentalities and structures for the sake of Bangladesh being currently admired as one of the emerging countries in the World under the names of China plus One and/or Next 11.

At present, destinations of the Ready-made Garment export are dominant to the markets of the European Council which account approximately 50% and of the U.S.A which accounts for approximately 25%. Diversification of those export markets has been a key issue for Bangladesh. According to the trade association related, they have tried to penetrate the apparel markets in Japan which have been identified as one of the target markets with due recognition of shrinking markets in Europe as the results of the financial crisis that had happened recently. However, they have felt that this is a difficult target. They feel that the main reason for such difficulty came from the difficulty in



communicating with the Japanese Industry in English. The market of Japan is also stricter in keeping the requirements of quality and lead time. Under such circumstances, they have now identified the markets in the Central and South America (Brazil and Argentina in particular) and Africa (South Africa in particular) as the target markets.

In the meantime, the Export Promotion Bureau (EPB), Bangladesh Tea Board, Business Promotion Council (BPC) and other auxiliary offices are functioning under the administration of MOC. MOC and EPB segregate their functions that EPB, belonging to the Export Division of MOC, functions as the implementation agency of the Export Policies introduced by MOC, while MOC remains as the organization responsible for delineation and administration of the said policies. Management of EPB is conducted by the Board of Management which consists of 14 members: Chairman (Minister of MOC), 2 Directors from EPB, 11 Representatives from the Central Bank (1), Other Ministries (6) and the Private Sector (4). The same structure was adapted to the Business Promotion Councils (BPCs) in MOC.

## 2) Organizational Structure, Number of Staff and Budget

The Ministry of Commerce (MOC) currently consists of 5 Wings: Administration Wing, FTA Wing, Export Wing, Insurance and Domestic Trade Wing and WTO Wing. Besides these Wings, there are two Cells, the Planning Cell and Fabric Cell. With regard to the Agreement with other countries, Bilateral Agreements shall be handled by the Export Wing, while Multilateral Agreements shall be managed by the FTA Wing. So far, 62 international agreements were concluded including 56 Bilateral Agreements and 6 Multilateral Agreements. There is no fixed road map for the negotiation of a Free Trade Agreement (FTA) with Japan so far. In the meanwhile, MOC is not responsible for the negotiation of the Bilateral Investment Treaty (BIT), but the Board of Investment (BOI) is responsible, being commissioned under the Prime Minister's Office. The total number of MOC Staff is approximately 250 and 25 Staff out of 250 are assigned to the Export Wing, and another 20 Staff are attached to the diplomatic offices of Bangladesh abroad who are directly managed by the Ministry of Commerce. The annual budget of MOC in the fiscal year of 2011/12 is 10 Million Taka, according to the information.







Source : Ministry of Commerce

3) Brief description of the Export Policy (Specific Program)

The title of the existing Export Policy is "Export Policy 2009-12" being adopted by the Ministry of Commerce and this Policy expires in June 2012. Thus, the next Export Policy which will cover the forthcoming 3 years from 2012 - 2015 is under preparation by the authority. The preparatory committee has already been formed by both of Public and Private Sectors, and the committee is meeting regularly for delineating outlines of the Policy which is unknown to the Study Team. The existing Export Policy defines the following: General Provision of Export (Rules and Regulations to be followed for the Export business, Prohibited Products and its Exception for Export, Re-export, Re-shipment Obligations, etc) (Chapter 2), Steps toward Export Diversification (Formation of Product and/or Service specific Business Promotion Councils) (Chapter 3), General Export Facilities (Export Promotion Fund, Special use of Foreign Exchange for Export Promotion, etc) (Chapter 4), Product-specific Export Facilities (RMG, Frozen fish, Handicrafts, Jute Products, Leather Products, Pottery, etc) (Chapter 5), Export of Services (Services identified by GATS) (Chapter 6), and Other steps toward Export Promotion (Chapter 7). Export Action Plans based upon this Export Policy are, however, yet to be established, although 19 Commodities have been identified by the Policy for Cash Incentive. The extent of those Cash Incentives varies from 2% to 20% at the highest and applicable period


Highest Priority Sector						
Priority Sector	Incentives					
<ul> <li>Agribusiness, Agro-processing industry</li> <li>Light Engineering Industry Auto/Bicycle parts</li> <li>Shoe-making industry</li> <li>Software, IT service Industry</li> <li>Home textile Industry</li> <li>Shipbuilding</li> <li>Toiletry Industry</li> </ul>	<ul> <li>Low interest project finance</li> <li>Exemption of income tax</li> <li>Fiscal incentives, including tax refund</li> <li>Provision of export credit with concessional loan</li> <li>Air-cargo allocation with good condition</li> <li>Tax refund and credit guarantee</li> <li>Prioritized utility provision to support reduction of production cost</li> <li>Technical support for quality standard and quality control</li> <li>Support for expansion of production and sales</li> <li>Support for export market development</li> </ul>					
Special Develo	opment Sector					
Priotiry Sector	Stimulation					
<ul> <li>Final leather products</li> <li>Frozen fish and processed products</li> <li>Handy craft</li> <li>Electronics goods</li> <li>Flowers and leaves</li> <li>Jute products</li> <li>Handwoven products made in Hill area</li> <li>Diamond in the rough</li> <li>Medical herb and medicine</li> <li>Ceramic and meramine resin products</li> <li>Plastic products</li> </ul>	<ul> <li>Low interest project finance</li> <li>Provision of export credit with concessional loan</li> <li>Fiscal incentives, including tax refund</li> <li>Tax refund and credit guarantee</li> <li>Prioritized utility provision to support reduction of production cost</li> <li>Technical support for improvement of quality of the products</li> <li>Support for expansion of sales</li> <li>Support for export market development</li> </ul>					

# **Figure 3.13 High Priority Sector and Incentives**

Source: Prepared by JICA Study Team based on the Export Policy 2009-2012

As for the definition of High Priority Sector, it indicates a product group which is potentially high productivity with a proper measure, but still not demonstrated its potentiality for some reason. On the other hand, the demonstration of Special Development Sector, a product group which is potentially able to export, but still its raw material supply, and export and production logistics are not properly organized.

#### 4) Implementation Capability (Assessment by Self and by Others)

As stated herein above, one of the most important issues to be addressed is to the change of the mind-set of the Government Official and elimination of old bureaucratic regimes as soon as possible, according to the Joint Secretary in the MOC. Most of the potential foreign investors commence their investigation work prior to an investment in Bangladesh with an attempt to find a business opportunity arising from the lower and competitive labor cost, but many of them face the incident of "Invisible Costs" when they have once started investment and/or operations in Bangladesh. Such Invisible Costs may refer to unforeseeable procedures for complicated applications and approvals and requests for grease money from Government Officials which is now disappeared in most of the countries in South-east Asia that have successfully achieved



Industrialization processes. It might be considered that lack of detailed implementation rules and regulations which shall be developed based on such basic policies as the Export Policy or alike, is one of the reasons why such "Invisible Costs" occur. From that point of view, it is quite an imperative request from foreign investors that the improvement of managerial skills and the maintaining higher moral at the Government Officials be achieved.

#### 5) Issues to be addressed

According to the information gathered through the Interview Surveys, it seems that the performances of MOC and EPB are fairly appreciated in general. On the other hand, some exporters made a comment that retention and use of foreign exchange being sourced from Exports shall be used more flexibly for the promotion of Exports. Although it is not clear whether this issue falls under the responsibility of MOC or BOI which is under the Prime Minister's Office, such an issue as this shall be settled more flexibly and dynamically by both of them, since the activities related to foreign trade and investment will happen seamlessly and simultaneously in the future.

# (2) Export Promotion Bureau (EPB)

## 1) Functions and Roles (Vision and Mission)

The Export Promotion Bureau (EPB) has been established as one of the Implementation Agencies under the Ministry of Commerce (MOC) in 1977 and providing various promotion services for the export of Bangladesh commodities. Management of EPB is conducted by the Board of Management which consists of 14 members: Chairman (Minister of MOC), 2 Directors from EPB, 11 Representatives from the Central Bank (1), Other Ministries (6) and the Private Sector (4 Members including a representative from FBCCI). As to the representatives from the Private Sector, Ready-made Garment, Pharmaceutical and Leather Products Industries are sending their representatives to the Board besides FBCCI. Although the majority of the EPB's activities are focused on the activities for exploring overseas markets for Bangladesh export commodities, EPB also provides Cash Incentives which are calculated by applying certain percentage points to the amount exported as a subsidiary to 19 prioritized commodities. In the meantime, the Bangladesh Export and Import Bank provide traders with low-interest loans for their international trades.

#### 2) Organizational Structure, Number of Staff and Budget

The Organizational Structure of EPB consists of 7 Divisions: Information Division, Fair & Display Division, Administration & Finance Division, Textile Division, Commodity Division, Policy & Planning Division, and Statistics & Research Division. In addition to those Divisions, Textile cells were established in commensurate with the rapid increase in the Ready-made Garment trade in the recent years, and they are issuing a certificate for the Generalized System of Preferences (GSP). The total number of EPB Staff is 230 and the Annual Budget for the fiscal year of 2011/12 is 36 Crone Taka. The Organizational Structure of EPB is shown in the following Figure.

# Figure 3.14 Organizational Structure of EPB





#### Source : EPB

3) Brief description of the Export Promotion Plan (Specific Program)

Under the Export Promotion Policy applicable for the fiscal year of 2010/2011, 19 Priority Industries have been identified, and the priority industry for the next fiscal year is currently under consideration. It is anticipated that the Furniture and Fixture Industries will be new industries to be added to the existing priority industries of Ready-made Garment, Jute Products, Footwear, and Pharmaceuticals. Also, EPB is eager to explore new markets for ICT-related Industries and Light Engineering Products. Along with these promotion programs, they will provide the exporters with subsidiaries on the Rental Fees for a slot at international exhibitions (up to 70%), Transportation Costs for the Samples (up to 100%), and organization of Overseas Observation Tours for the convenience of the Exporters.

#### 4) Implementation Capability (Assessment by Self and by Others)

According to the results of Interview Surveys with several Trade Associations in the private sector which have been arranged by FBCCI, the performance of EPB is fairly appreciated. On the other hand, EPB itself recognizes the limitation of its activities based on budget shortages. EPB now wishes to have assistance for the development of human resources which might be required for their market exploration program in various emerging countries, in order to diversify the existing export destinations which are now predominant to that of European Countries and the U.S.A.

#### 5) Issues to be addressed

According to EPB, Japan International Cooperation Agency (JICA) has been assisting EPB in the fields of Human Resources Development in the past, but there has been no invitation for the last 2 years thereafter. EPB has delineated their strategic targets as: Intensive support to the Exporters for market penetration activities in emerging markets (in particular to those in Central and South American Countries such as Brazil, Argentina, and Mexico), Assistance in the field of Human Provision of Rap-top Computers to EPB Staff. In addition, EPB Resource Development, and wishes to receive assistance from the Government of Japan for these programs. With regard to the Functions and Organizational Performance of EPB, responsibilities of MOC and EPB are currently limited to the activities related to International Trade through Export and Import. Since seamless, yet consistent, support services covering International Trade to Investment have become a matter of essence now due to the rapid globalization of the economy, the ways of coordination and collaboration between EPB and BOI shall be seriously discussed.





Additionaly, as for the specific soluition for these problems, a project to build"Trade Training Center" and to put EPB as a project manager, is being concerned. This project is more or less the same as the one held in East Asian countries, however, as Bangladesh does not have any facilities neither assistance program, there must be a great needs of the project in the rural area in particular.

# (3) Business Promotion Council (BPC)

1) Function and Role (Vision and Mission)

BPC was founded in 2002, formally started as a lieson office in Sillicon Valley and in Bangladesh for developing IT.

The concept of BPC can be found in Export Policy (2006-2009).BPC is under supervision of the Ministry of Commerce and other related industry group, and is registered as Non-Profit Cooperation under the Company Law of Bangladesh (1994), chapter 28.

Public sector are also parter of BPC, such as Bangladesh Bank, mahor industrial banks, EPB, the Ministery of Industry, the Ministery of Foreign Affaires, the Ministery of Agriculture, and the Minnistery of Commerce. The objective of BPC is Capacity Building for stimulating export. In order to improve Foreign Trade, Product Development/Diversification is highly expeted. The current excessive emphasis on RMG is expected to be changed. The BPCs launched so far are following: 1) ICT industry (IBPC-December 2001), 2) Leather industry (LSBPC-Feburary 2004), 3) Light Engineering industry (LEPBPC-March 2004), 4) Medical herbes and remedy industry, (MPHPBPC-April 2006), 5) Fish Product Industry (FPBPC-March 2008), and 6) Agricultural products industry (APBPC-June 2011).

The main activities are organizing seminar and workshop concerning about product development.

2 ) Organization framwork, staffs, and budget

The current SME staffs, and the budget is allocated by the Ministry of Commerce, annual fee and contribution from partener companies, deposit interest, and contribution from private companies. The total amout of the contribution of The Ministry of Commerce was about 30 million taka, and this was used for staff's salary. Thus, each activity cost of BPC are supposed to begiven by other partner companies. BPC says, in order to realise all of their projects and activities, the budget is absolutely insufficiant. BPC has often accepted the financial aid by EU, USAID, and Katalyst.





3) The programs organized by BPC

BPC has organized these projects below:

- The construction of Bangladesh Leather Services Center

- Opening the Portal site related to PPP project realized by BPC and the Ministry of Commerce
- Developping concept of research department and information center for the demands from suppliers

- Degitalizing product catalog of Bangladesh industry

- Developing concept of Aquaculture and Food Safety Center

#### 4) Issues to be addressed

As the budget of BPC was insufficient for realizing all the submitted programs, BPC has accepted the aids from partner companies and foreign donners. As for the donners, the financial crisis in Eurpean countries and the United States, Bangladesh will face difficulty for financing thier activities. BPC needs more financial and technology aid for developping their future markets, such as East Asia, Middle East, and South and Middle America. For Japanese government, BPC is looking for the aid for agricultural processing adn Light Engineering. They expect Japanese government to send to BPC the experts of product and market developping it.

# (4) Bangladesh Tariff Commission (BTC)

## 1) Function and Role (Vision and Mission)

BTC is under supervision of the Ministery of Commerce, and lauching advocacy of domestic and also foreign industry to Bangladesh. To offer these opinions, BTC holds assemblies with government bodies, economic organizations, experts, and private enterprises. For the important matters, BTC makes offers to gather information by conducting public hearings. They also consider policies to keep the trade deficit on a sustainable level. As its main work, BTC conducts industrial analysis support, investigation of subsectors, model maling for trade policy and management of trade datas. In addition, BTC conducts investigations and researches to look to the effective practical use of domestic resources by using the parameters of the effect of protective policies and repayment cost of domestic resources. In general, protective policies by imposing high tariff to the imports are said to reduce the productivity of domestic industries and to lead to technology stagnation and loss of consumer interest. At present, exportation is conducted with no tariffs except cigarettes. Although protective policies of domestic industries have gotten fewer, import tariffs are set between 0% and 25%. Based on these investigations and researches, BTC offers opinions but the Custom Office is the one that actually decides. Custom Service belongs to National Board of Revenue which is the lower branch of the Ministry of Finance. However, during the process of deciding tariff rates, Custom Office hasn't taken the process to consult with other authorities from the view of national economic such as industrial policies and exporting policies. The actual state is that they decide the tariff late only from the view of maximizing the amount of tax collection. Moreover, there was a redpond which said; "there is a bonded area in Bangladesh, but bonded warehouses are not approved except some parts of garment industry even though it exists legally."

#### 2) Issues to be addressed

The import policies that BTC offer do not have a strong legitimacy and it is unclear that whether these policies were efficient.BTC has researched trade policy of all over the world and has administrated trade data from it, however, BTC still does not have any proficient computer system. More importantly, human resources are not sufficient to tackle with these problems. Therefore, BTC demands a further aid from Japanese government.

#### **SME Development Policy, Programs and Institutions** 3.5. 3.5.1. SME Development Policy and related Institutional Analysis

(1) The Outlines of Small and Medium Sized Enterprises (hereinafter referred to as "SME")

In Bangladesh there are 93,660 small industries and 636,577 cottage industries, while the number of employment is 33.37 million.

The manufacturing industries occupy 18.41% of the GDP in Bangladesh. Large and medium industries occupy 13.12% and small and cottage industries occupy 5.29% in manufacturing industries. (As of June, 2011)

# (2) SME Development Policy

The definition and classification of Industries are referenced as per Figure 3.16:







Classification	Manufacturing industries	Service industries
Clubbilleuton	Enterprises with either the value	Enterprises with either the value
	(replacement cost) of fixed	(replacement cost) of fixed assets
Large Industry	assets excluding land and	excluding land and buildings in
	buildings in excess of Tk. 300	excess of Tk. 150 million or with
	million or with more than 250	more than 100 workers.
	workers.	
	Enternaisee with either the velue	Enternaises with either the velue
	(replacement cost) of fixed	(roplocament cost) of fixed assets
Medium Industry	assets excluding land and	excluding land and buildings between
Weaturn maasary	buildings between Tk 100	Tk 10 million and Tk 150 million or
	million and Tk. 300 million, or	with between 50 and 100 workers.
	with between 100 and 250	
	workers.	
	Enterprises with either the value	Enterprises with either the value
	(replacement cost) of fixed	(replacement cost) of fixed assets
Small Industry	assets excluding land and	excluding land and buildings between
	buildings between Tk. 5 million	Tk. half a million and Tk. 10 million,
	and Tk. 100 million, or with	or with between 10 and 25 workers.
	between 25 and 99 workers.	
Migro Industry	(replacement cost) of fixed	
Micro mausu y	assets excluding land and	
	buildings between Tk half a	
	million and Tk 5 million or	
	with between 10 and 24, or a	
	smaller number of workers.	
	Enterprises with either the value	
	(replacement cost) of fixed	
	assets excluding land and	
Cottage Industry	buildings of less than Tk. half a	
	million, or with up to 9	
	workers, including household	
	members.	

Figure 3.16 Definitions and Classification of Industries

Source : Ministry of Industry, National Industrial Policy - 2010

Note) If on one criterion a firm falls into a certain category, while falling into an upper category based on another criterion, the firm will be deemed as being in the upper category.

In Bangladesh, the manufacturing industry is under the custody and administration of the Ministry of Industry and international trade, distribution and service industry are under the custody and administration of the Ministry of Commerce, irrespective of whether they are large industries or small and cottage industries. There is neither government organization nor authority that administrates and manages whole categories of SMEs ranging from manufacturing industries to service industries in integrated fashion.

In Bangladesh, two organizations substantially supporting SME development make and execute SME policy under the Ministry of Industry: They are the Bangladesh Small and Cottage Industries Corporation (abbreviated as "BSCIC") and the Small and Medium Enterprise Foundation (abbreviated as "SMEF" or "SME Foundation).

There is no independent law or act relating to SMEs in Bangladesh similar to the "SME Law and SME Basic Laws of Japan". The definition and classification of industry are stipulated in the "Industrial Policy – 2010, Ministry of Industry", which governs SME industries at present. SME





Policies are also based on "SME Policy Strategy 2005, Ministry of Industry", "BSCIC Vision-2020" and "SMEF Business Policy (Vision, Mission, Objectives and Activities)".

#### **SME 3.5.2.** Institutional Structures of **Development** Policy Formulation and **Implementation Bodies**

#### (1) Bangladesh Small and Cottage Industries Corporation (BSCIC)

BSCIC is the prime mover organization entrusted with the responsibility of the development of small and cottage industries (SCI) in Bangladesh. It is an autonomous corporation under the Ministry of Industries and was established by an Act of the parliament in 1957. Under the direct or indirect initiative of BSCIC, plenty of entrepreneurs have been created and enterprises have been set up in the country. But the influence of globalization and the free economy impacts upon the traditional manufacturing enterprises. This situation for marketing small and cottage industry products is a major constraint facing the sector. BSCIC is to provide facilities to existing and new entrepreneurs to expand and develop their markets and to stay and sustain in a competitive environment.

1) The functions and roles (BSCIC- 2025 Vision and Mission)

Vision

To be the leading Organization in developing Small, Medium & Cottage Industries that contribute to economic growth and create vibrant and resilient SMCIs that enhance Bangladesh's competitiveness in the world market. To transform SMCIs into an economic powerhouse of the country by 2025.

Mission

i) Providing latest technical and managerial assistance to enterprises and communities for the improvement of productivity, quality, and environment.

ii) Promoting strategic alliances with clients as well as national and international professional bodies in pursuit of economic development.

iii) Molding a work place that encourages creativity, innovation, professional growth and positive value.

iv) To instill and eventually ingrain deeply the concept of a learning organization into SMCIs and encourage them to be export-oriented.

v) Sharing the rewards of one's own endeavours with communities, customers, employees, suppliers, management and stakeholders.

Roles and functions

**BSCIC** provides:

-Pre-investment counseling:

-Post-investment extension services;

-Technical information;

-Design and prototype of handicrafts;

-Industrial profiles and fact sheets;

-Marketing information;

-Infrastructural facilities:

-Skill development training;

-Entrepreneurship development training;

-In-plant advisory services; and

-Credit facilities etc.

2) Organization control (Organization chart, Personnel and Budget) Organizational Chart:







Figure 3.17 BSCIC Organization Chart

Number of Employees: Head Office 650, Branch 850 Total 1.500 Annual Budget(2010) :

The annual budget of Financial year 2010-11 was Tk. 119.11 crore (Revenue budget Tk. 79.00 crore, Development budget Tk. 40.11 crore) and in the financial year 2011-12, Tk. 394.33 crore (Revenue budget Tk. 86.00 crore and Development budget Tk. 308.33 crore).

The objective of the revenue budget is to meet the recurring & logistic expenditures of employee and the objective of the development budget is to promote small and cottage industries in the country through development projects.

(Notes. 1 crore = 1,00.00.000 = 10 million)

# 3) The Outlines of SME Policies (Strategy and providing services)

## Strategy

- 1. Strategy 1: Upgrade technological and management capabilities of SMCI's.
  - Develop an enterprise diagnosis system for business improvement and problem solving.
  - Support the adoption of ISO 9000 and TQM, and the efforts of companies to • improve their product quality.
  - Improve the efficiency of R&D institutes and facilitate their networking with • private companies.
- 2. Strategy 2: Develop SMCI's entrepreneurs and human resources
  - Foster new entrepreneurs and incubate existing entrepreneurs.
  - Improve the educational curriculum and teaching methods to meet industry needs.
- 3. Strategy 3:Enhance SMCI's access to markets
  - Improve SMCI's access to government procurement systems.
  - Promote subcontracting and linkages with large enterprises. •
  - Strengthen the export promotion activities of SMCIs •
- 4. Strategy 4: Strengthen financial support system for SMCIs
  - Expand and develop credit guarantee systems for SMCIs
  - Establish venture capital funds for the development to SMCIs •
  - Establish SMCIs Promotion Fund.
  - Strengthen financial advisory services for SMCIs

5. Strategy 5: Foster an environment conducive for business development

- Establish and strengthen local information center for SMCIs
- Develop mechanisms to review and revise laws, regulations and • administration procedures to re-address problems facing SMCIs
- Strengthen support to equip SMCIs to prepare for the IT revolution. •
- Improve the efficiency of various distribution channels. •



Promote the establishment of SMCI parks.

6. Strategy 6: Develop micro-enterprises and community enterprises

- Incubate "strategic" micro-enterprises and community enterprises.
- Promote commercialization of indigenous know-how.
- Upgrade the managerial capabilities of micro-enterprises and community • enterprises.
- Encourage the formation of business associations among these enterprises.
- 7. Strategy 7: Develop networking among SMCIs and clusters
  - Conduct studies of various industrial clusters to promote their efficiency collectively.
  - Support pilot projects to develop industrial cluster(s) in each region. •
  - Encourage the formation of business associations to serve as platforms of • fostering cooperation among members.
  - Provide infrastructural support and financial incentives to promote the • development of SMCIs

Services

- Entrepreneurship development through counseling and training
- Provide infrastructural facilities by establishing Industrial Estates
- Extend credit facilities to entrepreneurs from its own funds and also through • banks and financial institutions;
- Preparation of Project Profiles and project appraisal proposals •
- Provide technical and consultancy services for establishing new industrial units • and quality improvement of SCI products;
- Development and distribution of new designs and prototypes
- Innovation and adaptation of appropriate technologies in the SCI sector •
- Collection, compilation, and dissemination of technical and other information • leading to investment, production and marketing of SCI
- Conduct research, studies and surveys in the SCI sector •
- Other pre and post investment counseling •
- **Regulatory Functions** •
- Registration of small and cottage industrial units •
- Recommendation for exemption of duties and taxes
- Recommendation for import entitlement of raw materials and packaging materials

Institutional networking

BSCIC has its institutional network throughout the country. Having its Headquarters at Dhaka, it has 4 Regional offices, 64 District offices (Industrial Service Centers), 74 Industrial Estates and 15 Skill Development Centers at different places in the country. Moreover, it has some project offices at Upazilla lvel also.

Industrial estates

- BSCIC has provided infrastructural facilities by establishing 74 industrial estates at present, while also planning to work on 9 new projects throughout the country in the future. The names of the industrial estates already established are given as bellow:
  - 4 Industrial Estates up to Dec, 2011 (Barisal) (Chittagong) 16 Industrial Estates up to Dec, 2011
  - (Dhaka) 26 Industrial Estates up to Dec, 2011
  - (Khulna) 11 Industrial Estates up to Dec, 2011
  - (Rajshahi) 17 Industrial Estates up to Dec, 2011
  - (Sylhet) 5 Industrial Estates up to Dec, 2011

The land of industrial estate is leased for 99 years. The average space of the land is 150 to 200 acres.

Tax benefits for Small and Cottage Industries

Corporate Tax exemption for 3-5 years





- Duty free •
- Handcraft income tax free •
- Tax exemption on materials to substitute for imports.

#### (2) Small and Medium Enterprise Foundation (SME Foundation, SMEF)

Over the medium term and beyond, the Government shall form an SME Foundation (SMEF) as a pivotal platform for the delivery of all planning, developmental, financing, awareness-raising, evaluation and advocacy services in the name of all SME development as a crucially-important element of poverty alleviation. The Foundation would strive to provision one-window delivery of all promotional and administrative facilities, including some resources needed for capacity building in appropriate industry association(s) for SMEs in the country. (defined in SME Policy Strategy 2005)

SMEF got registration from the Ministry of Commerce on 12-11-2006 and from the Registrar of Joint Stock Companies and Firms on 26-11-2006 under the Companies Act (Act XXVIII) of 1994. It is an independent and unique non-profit organization, the establishment of which was assisted by ADB. The SME Foundation is playing its role in helping the SME entrepreneurs including women entrepreneurs by conducting various programs with an aim to develop the SMEs of Bangladesh. One of the major aims of SMEF is to bring the grassroots entrepreneurs into the main stream of economic development through employment generation, reduction of social discrimination and poverty alleviation.

The functions and roles (Vision and Mission) 1)

Vision

Foster industrialization through SME promotion for employment generation, economic development, and finally poverty alleviation of Bangladesh.

Mission

Undertake and implement multi-sectoral action plans for the proper growth of SMEs and make them competitive in the free market economy.

- 2) Organizational control (Organizational chart, Personnel and Budget) Organizational Chart: as per Figure 3.18 SMEF Organization Chart Number of Employees :
  - Employees are 43, including officers 32. Many participated in SMEF in the past year. a 58 employees are planned as the final goal within a few years.
  - The Board of directors has 14 members, who consist of 4 representing government and the rest of the 14 representing the private sector, FBCCI, Research Institute and NGO.

Budget: (Unknown)





The above chart shows the future plan after 3-5 years. Note. Source : SMEF

- 3) The Outlines of SME Policies (Objectives and activities) Objectives
  - Implementing SME Policy Strategy adopted by the Government of Bangladesh.
  - Recommending SME friendly policies to different government ministries and agencies.
  - Providing business support services to the SME entrepreneurs.
  - Providing information and proper guidance for establishing new SMEs.
  - Conducting sectoral studies to ensure availability of latest information, identify challenges and recommend preventing measures.
  - Operating credit wholesaling programs for the SMEs through different banking and non-banking financial institutions.
  - Conducting training programs to create skilled labor for different SME sub-sectors based on their demands.
  - Technology development, adopting new technologies, conducting reverse engineering and supporting SMEs to get quality certifications.
  - Supporting SMEs in marketing their products and promotion of services.
  - Bringing women entrepreneurs into the mainstream of development and helping them to achieve economic self-dependency.
  - Assisting SMEs in creating institutional bondage with foreign companies for capacity building, technology transfer and improving productivity.
  - Training up and motivating SMEs in using ICT tools for more productivity and improving quality.

Activities

- Implementation of SME Policy Strategies adopted by the Government of Bangladesh:
  - Implementation of the SME Policy Strategies adopted by the Government of Bangladesh is one of the main responsibilities of the SME Foundation. The SME Foundation continuously assists the government in core issues mentioned in the policy strategy such as recommending rational budget structures for SMEs, advice on fiscal and financial issues, assist to ensure quality of SME products, in capacity development, techno-entrepreneurship development, information support through web portals, and in technology transfer activities at the international level etc.
- Policy Advocacy & Research





Policy advocacy & research is one of the most important mandates of the SME Foundation and aims for sustainable SME development in the country. The main activities of the Policy Advocacy & Research Wing are to facilitate for growth enabling the environment to run SME businesses smoothly in the country. SME Foundation works to identify and resolve the challenges on legal and administrative regimes like regulatory barriers on trade licenses, patents and trademarks, product certification, environmental issues etc.

Credit Wholesaling Program

Credit wholesaling is one of the major activities of the SME Foundation to ensure easy access to finance for SME entrepreneurs. The SME Foundation has already taken the credit wholesaling program as a pilot scheme with its own fund. The SME Foundation helps the SME entrepreneurs by providing collateral free loans at a 9% interest rate to technology based potential SME manufacturing industries along with agro-based industries.

Capacity Building & Skill Development

The SME Foundation organizes training programs in public-private partnership modules to enhance the skills of SME entrepreneurs as well as to create new entrepreneurs. Training programs like entrepreneurship development, SME cluster wise skill based, technology based, ICT based, TOT, productivity and quality improvement, marketing, management, financial management etc. are conducted by signing a MOU between training institutes or SME related associations.

Access to Technology

The SME Foundation is committed to improve competiveness of SMEs through technology up-gradation, adaptation of advanced technology, diffusion of appropriate technology, moving towards reverse engineering, and compliances and product certification. The SME Foundation is also devoted to enabling SMEs to become energy efficient and environmentally sound.

Access to Information

The SME Foundation provides update information and data through its own web portal (http://www.smef.org.bd) to establish new businesses or run businesses in a profitable manner. Establishment of a data bank with different information, data, findings and strategy for the development of SMEs at local and international levels is an important activity of the SME Foundation.

Women Entrepreneurship Development

Bringing up women entrepreneurs to the main stream development process and facilitating the empowerment of women is one of the prioritized activities of the SME Foundation. Main activities include institutional capacity building of women chamber/trade bodies, formulate gender action plans, encourage bankers to provide finance to women entrepreneurs, conduct study on women entrepreneurs, organize women entrepreneur conferences, national SME women entrepreneurship awards, and SME product fairs for women entrepreneur.

**Business Support Services** The SME Foundation provides different kinds of business support services for entrepreneurship development. These are to promote and market expansion of SME products, establish linkage between buyer and seller, provide advice and guidelines with information support for new business development, publish SME business manuals, organize SME product fairs etc.

#### **3.6.** The Development and the Issues of the Export Processing Zone and Economic Zone 3.6.1. Overall Outlines (rend in EPZ, EZ and Private EPZ)

(1) The types of Export Oriented Industrial Zones

In Bangladesh there are three types of Export Oriented Industrial Zones under legal definition: They are the "Export Processing Zone" (hereinafter abbreviated as "EPZ"), "Economic Zone" (hereinafter abbreviated as "EZ") and "Private Export Processing Zone" (hereinafter described as "Private EPZ" or "PEZ"). Among the three types, only EPZs are developed and now under operation officially.

#### (2) Export Processing Zone (EPZ)

Definition of EPZ: An export processing zone is defined as a territorial or economic enclave in which goods may be imported and manufactured and reshipped with a reduction in duties and/or



minimal intervention by custom officials. (World Bank 1999)

- In Bangladesh, there are 8 locations of EPZ at 7 Divisions across the country: Chittagong EPZ, Dhaka EPZ, Karnaphuli EPZ, Comilla EPZ, Mongla EPZ, Adamjee EPZ, Ishiwardi EPZ, and Uttara EPZ.
- There are incentives at EPZ such as exemption of corporate taxes and duty free. One-stop-service is provided for the convenience of investors and the tenant industry in EPZ, which is the typical characteristic of EPZ.

# (3)Economic Zone (EZ)

The Economic Zone is sometimes called as Special Economic Zone, too. In Bangladesh, a new Act regarding the implementation of EZ was stipulated in August, 2010 to replace EPZ by EZ. In November, 2011, the Bangladesh Economic Zone Authority which is the organization to manage and operate EZ was set up in the Prime Minister's Office. However, the authority has just started to employ staff, develop human resources and make organizations. It was deemed practically difficult to set up the business immediately. Under such circumstances, the study team had the impression that it might be a long way until the land of EZ is selected, developed and practically operated for inducing foreign investors. On the other hand, there are hints showing that foreign and local industries are interested in investing business development in the land of EZ.

(4) Private Export Processing Zone (Private EPZ, PEZ)

Korean EPZ is a typical project of the Private Export Processing Zone having a long history. However, the development of the project had been suspended and far delayed due to political reasons which are prevailing among the investors. Nevertheless there are enquiries from overseas investors regarding investment on Korean EPZ, according to the company.

# 3.6.2. Export Processing Zone (EPZ)

- (1) Outlines of EPZ
- 8 EPZ at 7 Districts nationwide 1) Number of EPZ :
- 2) Form of Investment: There are 3 types of investment
  - $\Rightarrow$  Type A: 100% foreign owned including Bangladesh nationals ordinarily residing abroad
  - $\diamond$  Type B: Joint Venture between foreign and Bangladesh entrepreneurs resident in Bangladesh
  - $\diamond$  Type C: 100% Bangladesh entrepreneurs resident in Bangladesh

3) Investment Guarantee:

- The Foreign Private Investment (Promotion and Protection) Act. 1980 secures all foreign investment in Bangladesh.
- OPIC's (Overseas Private Investment Corporation, USA) insurance and finance programs operable.
- MIGA: Security and safeguards available under the Multilateral Investment Guarantee Agency (MIGA) of which Bangladesh is a member.
- ICSID: Arbitration facility of the International Center available for the Settlement of Investment Disputes (ICSID).
- · WIPO: Safeguarding of copy right interest through World Intellectual Property Organization (WIPO) is ensured.
- 4) One stop service: BEPZA provides one window same day service and simplified procedures such as Registration of companies, Trade Licenses, Export/Import Licenses, Work permits and customs clearance for EPZ factories.
- 5) Incentives

Corporate Tax

Corporate Tax is exempted 100% for 10 years in the case that the company was established on and before 31st December, 2011. Now it has been changed as below:

Corporate Tax is exempted 100% for a maximum of 5 years in the case that the company was

established after 1st January, 2012: 100% for the first 2 years, 50% for the second 2 years and 25% for the last 1 year.

Duty free import of construction materials

Duty free import of machinery and equipment (office equipment and spare parts)

Duty free import of raw materials and duty free export of finished goods.

Relief from double taxation

Exemption from dividend tax

GSP (Generalized System of Preferences) facility is available

Accelerated depreciation on machinery and plant

Remittance of royalty, technical and consultancy fees allowed

Duty and quota free access to EU, Canada, Norway, Australia etc.

6) Providing Services

- Bank, International parcel delivery, Fire station, Post Office, a. Business : Forwarder service, Airline Agent, Shipping Agent
- Administration : Investors' Club, Medical Center, Duty free shop b.
- c. Others: Customs Office, Police station, Restaurant, Health Club, Sports Club etc.

7) Historical development of EPZ

BEPZA Act, 1980 & Foreign Private Investment Act, 1980 were enacted in 1980.

The first EPZ in Bangladesh started to be developed at Chittagong where there is an International Sea Port. The operation of Chittagong EPZ started in 1983. Secondly, Dhaka EPZ started its operation in 1993 on the outskirts of capital city Dhaka, where manufacturing industries are concentrated. Thereafter 6 EPZs were developed at 6 locations. In view of the character of EPZ, the site location near the Chittagong International port is most suitable but some EPZs were placed in the Northernwestern part of the country, which is so far away from Chittagong port. It is reported that the decision has been made under the pretext of developing local economies.

(2) Conditions of Each EPZ

1) Conditions & status

EPZ is under the custody and management of BEPZA, as mentioned. There are 8 EPZs in Bangladesh nationwide, all of which are now in operation.

8 EPZs are as follows:

1. Dhaka-EPZ 2. Chittagong-EPZ 3. Mongla-EPZ 4. Ishwardi-EPZ 5. Comilla-EPZ 6. Uttara-EPZ 7. Adamjee-EPZ 8. Karnaphuli -EPZ



Site location of EPZ Figure 3.19

Source: BEPZA Website (http://www.epzbangladesh.org.bd/bepza.php?id=about_bepza)

2) Conditions of Investment in each EPZ

At present, there is no vacancy available for new investments in all 5 EPZs of Chittagong, Dhaka, Comilla, Karnaphuli and Adamjee. There is a plenty of vacancy available for new investors in the 3 EPZs of Mongla, Ishwardi and Uttara, where there are less investors and tenants due to the far distance from Chittagong and Dhaka with bad traffic conditions in inland transportation.



ED7	Chittagong	Dhaka	Comillo	Karpaphuli
EPZ	Chillagong	Dilaka	Comina	Kamaphui
Location	South Halisbabar	Ganakhari Savar	Comilla Old Airort Area	Chittagon Steel Mill Area
LUCAUUT	3 1km from Chittagong Sea Port	35km from Dhaka city center	97km from Dhaka	North Patenga
	5.5km from the main Business	25km from Hasrat Shahjalal	167km from Chittagong Sea Port	5.6km from Chittagong Sea Port
	Center	Internaional Airport		8Km from the Business Center,
	7.21km from Chittagong Airport	304km from Chittagong Sea Por	t	4.7Km from Chittagong Airport
Profile of Zone				
(acres)	453	347	258	222
(hectares)	183	144	104	90
Number of industrial plots	428	388	208	211
Size of each plots	2,000	2,000	2,000	2,000
LIS¢/M2/month)	115\$2.20	115\$2.20	115\$2.20	115\$2.20
Standard Factory (M2)	58 245	79 843	27 000	2 974
Tariff (Building)	00,2.0	, ,,,,,,,,	£.,000	L,
(US\$/M2/month)	US\$2.75	US\$2.75	US\$2.75	US\$2.75
Warehouse (M2)	2,668	2,356	· · · ·	· · · ·
Tariff (Warehouse)				
(US\$/M2/month)	US\$2.75	US\$2.75		
Utility Service				
Water	Chittagong WASA	BEPZA	BEPZA	Chittagong WASA + BEPSA
Storage Capacity(millon i)	/.2b			
Laritt (US\$/IVI3)	050.20	050.20	C2.06CU	U\$\$U,20
Status	Short Bakhrahad Gae System Ltd	G000 Titos Cas field	Good	G000 Bokbrahad Gae System   td
Cas Tariff (US\$/M3)	US\$0.08	US\$0.08	US\$0.08	US\$0.08
Status	Good	Good	Good (only factory built before Dec, 200	Good
Power Supply				
Tariff (US\$/Kwh)	US\$0.06	US\$0.06	US\$0.06	US\$0.06
Status	Good(Supplied by private sector)	Good(Supplied by private sector)	Good(Supplied by private sector)	Good(Supplied by private sector)
Waste Water Treatment	Under construction (Scheduled	Under construction (Scheduled	Under construction (15%	None
Waste Water Frederice	June, 2012)	Nov. 2012)	completed)	
Tenants (Operating Dec 2011)	167	127	63	56
Vacant Plots	Unavailable	Unavailable	Unavailable	Unavaliable
EPZ	Adamjee	Mongla	lshwardi	Uttara
EPZ	Adamjee	Mongla	Ishwardi	Uttara
EPZ Location	Adamjee Admjee Nagar, Shiddirgonj,	Mongla Mongla Port area, Bagerhat	Ishwardi Pakshi, Pabna	Uttara Shogalshi, Nilphamari
EPZ Location	Adamjee Admjee Nagar, Shiddirgonj, Narayanganj	Mongla Mongla Port area, Bagerhat 105km from Jessore Airport	Ishwardi Pakshi, Pabna 200km from Dhaka	Uttara Shogalshi, Nilphamari 401km from Dhaka
EPZ Location	Adamjee Admjee Nagar, Shiddirgonj, Narayanganj 15km from Dhaka city center 40km from H S I Airrort	Mongla Mongla Port area, Bagerhat 105km from Jessore Airport 397km from Dhaka 654km from Chittagoog Sea Por	Ishwardi Pakshi, Pabna 200km from Dhaka 255km from Mongla Port 484km from Chittagong Sea Port	Uttara Shogalshi, Nilphamari 401km from Dhaka 586km from Mongla Port 650km from Chittagong Sea Port
EPZ Location	Adamjee Admjee Nagar, Shiddirgonj, Narayanganj 15km from Dhaka city center 40km from H.S.I. Airport 255km from Chittagong Sea Port	Mongla Mongla Port area, Bagerhat 105km from Jessore Airport 397km from Dhaka 664km from Chittagong Sea Por	Ishwardi Pakshi, Pabna 200km from Dhaka 255km from Mongla Port 484km from Chittagong Sea Port	Uttara Shogalshi, Nilphamari 401km from Dhaka 586km from Mongla Port 650km from Chittagong Sea Port
EPZ Location Profile of Zone	Adamjee Admjee Nagar, Shiddirgonj, Narayanganj 15km from Dhaka city center 40km from H.S.I. Airport 255km from Chittagong Sea Port	Mongla Mongla Port area, Bagerhat 105km from Jessore Airport 397km from Dhaka 664km from Chittagong Sea Por	Ishwardi Pakshi, Pabna 200km from Dhaka 255km from Mongla Port 484km from Chittagong Sea Port	Uttara Shogalshi, Nilphamari 401km from Dhaka 586km from Mongla Port 650km from Chittagong Sea Port
EPZ Location Profile of Zone (acres)	Adamjee Admjee Nagar, Shiddirgonj, Narayanganj 15km from Dhaka city center 40km from H.S.I. Airport 255km from Chittagong Sea Port 293	Mongla Mongla Port area, Bagerhat 105km from Jessore Airport 397km from Dhaka 664km from Chittagong Sea Por 460	Ishwardi Pakshi, Pabna 200km from Dhaka 255km from Mongla Port 484km from Chittagong Sea Port 309	Uttara Shogalshi, Nilphamari 401km from Dhaka 586km from Mongla Port 650km from Chittagong Sea Port 230
EPZ Location Profile of Zone (acres) (hectares)	Adamjee Admjee Nagar, Shiddirgonj, Narayanganj 15km from Dhaka city center 40km from H.S.I. Airport 255km from Chittagong Sea Port 293 119	Mongla Mongla Port area, Bagerhat 105km from Jessore Airport 397km from Dhaka 664km from Chittagong Sea Por 460 186	Ishwardi Pakshi, Pabna 200km from Dhaka 255km from Mongla Port 484km from Chittagong Sea Port 309	Uttara Shogalshi, Nilphamari 401km from Dhaka 586km from Mongla Port 650km from Chittagong Sea Port 230 93
EPZ Location Profile of Zone (acres) (hectares) Number of industrial plots	Adamjee Admjee Nagar, Shiddirgonj, Narayanganj 15km from Dhaka city center 40km from H.S.I. Airport 255km from Chittagong Sea Port 293 119 200	Mongla Mongla Port area, Bagerhat 105km from Jessore Airport 397km from Dhaka 664km from Chittagong Sea Por 460 186 162	Ishwardi Pakshi, Pabna 200km from Dhaka 255km from Mongla Port 484km from Chittagong Sea Port 309 125	Uttara Shogalshi, Nilphamari 401km from Dhaka 586km from Mongla Port 650km from Chittagong Sea Port 230 93
EPZ Location Profile of Zone (acres) (hectares) Number of industrial plots Size of each plots	Adamjee Admjee Nagar, Shiddirgonj, Narayanganj 15km from Dhaka city center 40km from H.S.I. Airport 255km from Chittagong Sea Port 293 119 200 2,000	Mongla Mongla Port area, Bagerhat 105km from Jessore Airport 397km from Dhaka 664km from Chittagong Sea Por 460 1866 182	Ishwardi Pakshi, Pabna 200km from Dhaka 255km from Mongla Port 484km from Chittagong Sea Port 309 125 166 2,000	Uttara Shogalshi, Nilphamari 401km from Dhaka 586km from Mongla Port 650km from Chittagong Sea Port 230 93 155 2,000
EPZ Location Profile of Zone (acres) (hectares) Number of industrial plots Size of each plots Tariff (land)	Adamjee Admjee Nagar, Shiddirgonj, Narayanganj 15km from Dhaka city center 40km from H.S.I. Airport 255km from Chittagong Sea Port 293 119 200 2,000	Mongla Mongla Port area, Bagerhat 105km from Jessore Airport 397km from Dhaka 664km from Chittagong Sea Por 460 186 162 2,000	Ishwardi Pakshi, Pabna 200km from Dhaka 255km from Mongla Port 484km from Chittagong Sea Port 309 125 166 2,000	Uttara Shogalshi, Nilphamari 401km from Dhaka 586km from Mongla Port 650km from Chittagong Sea Port 230 93 155 2,000
EPZ Location Profile of Zone (acres) (hectares) Number of industrial plots Size of each plots Tariff (land) (US\$/M2/month)	Adamjee Admjee Nagar, Shiddirgonj, Narayanganj 15km from Dhaka city center 40km from H.S.I. Airport 255km from Chittagong Sea Port 293 119 200 2,000	Mongla Mongla Port area, Bagerhat 105km from Jessore Airport 397km from Dhaka 664km from Chittagong Sea Por 460 186 162 2,000 US\$1.00	Ishwardi Pakshi, Pabna 200km from Dhaka 255km from Mongla Port 484km from Chittagong Sea Port 309 125 166 2,000 US\$1.00	Uttara Shogalshi, Nilphamari 401km from Dhaka 586km from Mongla Port 650km from Chittagong Sea Port 230 93 155 2,000 US\$1.00
EPZ Location Profile of Zone (acres) (hectares) Number of industrial plots Size of each plots Tariff (land) (US\$/M2/month) Standard Factory (M2)	Adamjee Admjee Nagar, Shiddirgonj, Narayanganj 15km from Dhaka city center 40km from H.S.I. Airport 255km from Chittagong Sea Port 293 119 200 2,000 US\$2.20 42,737	Mongla Mongla Port area, Bagerhat 105km from Jessore Airport 397km from Dhaka 664km from Chittagong Sea Por 460 186 162 2,000 US\$1.00 18,000	Ishwardi Pakshi, Pabna 200km from Dhaka 255km from Mongla Port 484km from Chittagong Sea Port 309 125 166 2,000 US\$1.00 18,000	Uttara Shogalshi, Nilphamari 401km from Dhaka 586km from Mongla Port 650km from Chittagong Sea Port 230 93 155 2,000 US\$1.00 18,000
EPZ Location Profile of Zone (acres) (hectares) Number of industrial plots Size of each plots Tariff (land) (US\$/M2/month) Standard Factory (M2) Tariff (Building) (LIS\$@M2/month)	Adamjee Admjee Nagar, Shiddirgonj, Narayanganj 15km from Dhaka city center 40km from H.S.I. Airport 255km from Chittagong Sea Port 293 119 200 2,000 US\$2.20 42,737	Mongla Mongla Port area, Bagerhat 105km from Jessore Airport 397km from Dhaka 664km from Chittagong Sea Por 460 186 162 2,000 US\$1.00 18,000	Ishwardi Pakshi, Pabna 200km from Dhaka 255km from Mongla Port 484km from Chittagong Sea Port 309 125 166 2,000 US\$1.00 18,000	Uttara Shogalshi, Nilphamari 401km from Dhaka 586km from Mongla Port 650km from Chittagong Sea Port 230 93 155 2,000 US\$1.00 18,000
EPZ Location Profile of Zone (acres) (hectares) Number of industrial plots Size of each plots Tariff (land) (US\$/M2/month) Standard Factory (M2) Tariff (Building) (US\$/M2/month)	Adamjee Admjee Nagar, Shiddirgonj, Narayanganj 15km from Dhaka city center 40km from H.S.I. Airport 255km from Chittagong Sea Port 293 119 200 2,000 US\$2.20 42,737 US\$2.75	Mongla Mongla Port area, Bagerhat 105km from Jessore Airport 397km from Dhaka 664km from Chittagong Sea Por 460 186 162 2,000 US\$1.00 18,000 US\$1.25	Ishwardi Pakshi, Pabna 200km from Dhaka 255km from Mongla Port 484km from Chittagong Sea Port 309 125 166 2,000 US\$1.00 18,000 US\$1.25	Uttara Shogalshi, Nilphamari 401km from Dhaka 586km from Mongla Port 650km from Chittagong Sea Port 230 93 155 2,000 US\$1.00 18,000 US\$1.25
EPZ Location Profile of Zone (acres) (hectares) Number of industrial plots Size of each plots Tariff (land) (US\$/M2/month) Standard Factory (M2) Tariff (Building) (US\$/M2/month) Warehouse (M2) Tariff (Warehouse)	Adamjee Admjee Nagar, Shiddirgonj, Narayanganj 15km from Dhaka city center 40km from H.S.I. Airport 255km from Chittagong Sea Port 293 119 200 2,000 US\$2.20 42,737 US\$2.75	Mongla Mongla Port area, Bagerhat 105km from Jessore Airport 397km from Dhaka 664km from Chittagong Sea Por 460 186 162 2,000 US\$1.00 18,000	Ishwardi Pakshi, Pabna 200km from Dhaka 255km from Mongla Port 484km from Chittagong Sea Port 309 125 166 2,000 US\$1.00 18,000 US\$1.25	Uttara Shogalshi, Nilphamari 401km from Dhaka 586km from Mongla Port 650km from Chittagong Sea Port 230 93 155 2,000 US\$1.00 18,000
EPZ Location Profile of Zone (acres) (hectares) Number of industrial plots Size of each plots Tariff (land) (US\$/M2/month) Standard Factory (M2) Tariff (Building) (US\$/M2/month) Warehouse (M2) Tariff (Warehouse) (US\$/M2/month))	Adamjee Admjee Nagar, Shiddirgonj, Narayanganj 15km from Dhaka city center 40km from H.S.I. Airport 255km from Chittagong Sea Port 293 119 200 2,000 US\$2.20 42,737 US\$2.75	Mongla Mongla Port area, Bagerhat 105km from Jessore Airport 397km from Dhaka 664km from Chittagong Sea Por 460 186 162 2,000 US\$1.00 18,000 US\$1.25	Ishwardi Pakshi, Pabna 200km from Dhaka 255km from Mongla Port 484km from Chittagong Sea Port 309 125 166 2,000 US\$1.00 18,000 US\$1.25	Uttara Shogalshi, Nilphamari 401km from Dhaka 586km from Mongla Port 650km from Chittagong Sea Port 230 93 155 2,000 US\$1.00 18,000 US\$1.25
EPZ Location Profile of Zone (acres) (hectares) Number of industrial plots Size of each plots Tariff (land) (US\$/M2/month) Standard Factory (M2) Tariff (Building) (US\$/M2/month) Warehouse (M2) Tariff (Warehouse) (US\$/M2/month )	Adamjee Admjee Nagar, Shiddirgonj, Narayanganj 15km from Dhaka city center 40km from H.S.I. Airport 255km from Chittagong Sea Port 293 119 200 2,000 US\$2.20 42,737 US\$2.75	Mongla Mongla Port area, Bagerhat 105km from Jessore Airport 397km from Dhaka 664km from Chittagong Sea Por 460 1866 162 2,000 US\$1.00 18,000 US\$1.25	Ishwardi Pakshi, Pabna 200km from Dhaka 255km from Mongla Port 484km from Chittagong Sea Port 309 125 166 2,000 US\$1.00 18,000 US\$1.25	Uttara Shogalshi, Nilphamari 401km from Dhaka 586km from Mongla Port 650km from Chittagong Sea Port 230 93 165 2,000 US\$1.00 18,000 US\$1.25
EPZ Location Profile of Zone (acres) (hectares) Number of industrial plots Size of each plots Tariff (land) (US\$/M2/month) Standard Factory (M2) Tariff (Building) (US\$/M2/month) Warehouse (M2) Tariff (Warehouse) (US\$/M2/month ) Utility Service	Adamjee Admjee Nagar, Shiddirgonj, Narayanganj 15km from Dhaka city center 40km from H.S.I. Airport 255km from Chittagong Sea Port 293 119 200 2,000 US\$2.20 42,737 US\$2.75	Mongla Mongla Port area, Bagerhat 105km from Jessore Airport 397km from Dhaka 664km from Chittagong Sea Por 460 186 162 2,000 US\$1.00 US\$1.00 US\$1.25	Ishwardi Pakshi, Pabna 200km from Dhaka 255km from Mongla Port 484km from Chittagong Sea Port 309 125 166 2,000 US\$1.00 18,000 US\$1.25	Uttara Shogalshi, Nilphamari 401km from Dhaka 586km from Mongla Port 650km from Chittagong Sea Port 230 93 155 2,000 US\$1.00 18,000 US\$1.25
EPZ Location Profile of Zone (acres) (hectares) Number of industrial plots Size of each plots Tariff (land) (US\$/M2/month) Standard Factory (M2) Tariff (Building) (US\$/M2/month) Warehouse (M2) Tariff (Warehouse) (US\$/M2/month) Utility Service Water	Adamjee Admjee Nagar, Shiddirgonj, Narayanganj 15km from Dhaka city center 40km from H.S.I. Airport 255km from Chittagong Sea Port 293 119 200 2,000 US\$2.20 42,737 US\$2.75	Mongla Mongla Port area, Bagerhat 105km from Jessore Airport 397km from Dhaka 664km from Chittagong Sea Por 460 186 162 2,000 US\$1.00 18,000 US\$1.25	Ishwardi Pakshi, Pabna 200km from Dhaka 255km from Mongla Port 484km from Chittagong Sea Port 309 125 166 2,000 US\$1.00 18,000 US\$1.25 BEPZA	Uttara Shogalshi, Nilphamari 401km from Dhaka 586km from Mongla Port 650km from Chittagong Sea Port 230 93 155 2,000 US\$1.00 18,000 US\$1.25
EPZ Location Profile of Zone (acres) (hectares) Number of industrial plots Size of each plots Tariff (land) (US\$/M2/month) Standard Factory (M2) Tariff (Building) (US\$/M2/month) Warehouse (M2) Tariff (Warehouse) (US\$/M2/month) Utility Service Water Storage Capacity(millon I)	Adamjee Admjee Nagar, Shiddirgonj, Narayanganj 15km from Dhaka city center 40km from H.S.I. Airport 255km from Chittagong Sea Port 293 119 200 2,000 US\$2.20 42,737 US\$2.75	Mongla Mongla Port area, Bagerhat 105km from Jessore Airport 397km from Dhaka 664km from Chittagong Sea Por 460 186 162 2,000 US\$1.00 18,000 US\$1.25 Public Health Engineering Dept & BEPZA	Ishwardi Pakshi, Pabna 200km from Dhaka 255km from Mongla Port 484km from Chittagong Sea Port 309 125 166 2,000 US\$1.00 US\$1.00 US\$1.25 BEPZA	Uttara Shogalshi, Nilphamari 401km from Dhaka 586km from Mongla Port 650km from Chittagong Sea Port 230 93 155 2,000 US\$1.00 18,000 US\$1.25 BEPZA
EPZ Location Profile of Zone (acres) (hectares) Number of industrial plots Size of each plots Tariff (land) (US\$/M2/month) Standard Factory (M2) Tariff (Building) (US\$/M2/month) Warehouse (M2) Tariff (Warehouse) (US\$/M2/month) Utility Service Water Storage Capacity(millon I) Tariff (Ustan)	Adamjee Admjee Nagar, Shiddirgonj, Narayanganj 15km from Dhaka city center 40km from H.S.I. Airport 255km from Chittagong Sea Port 293 119 200 2,000 US\$2.20 42,737 US\$2.75 BEPZA	Mongla Mongla Port area, Bagerhat 105km from Jessore Airport 397km from Dhaka 664km from Chittagong Sea Por 460 186 162 2,000 US\$1.00 US\$1.00 18,000 US\$1.25 Public Health Engineering Dept & BEPZA US\$0.25	Ishwardi Pakshi, Pabna 200km from Dhaka 255km from Mongla Port 484km from Chittagong Sea Port 309 125 166 2,000 US\$1.00 US\$1.00 US\$1.25 BEPZA US\$0.25	Uttara Shogalshi, Nilphamari 401km from Dhaka 586km from Mongla Port 650km from Chittagong Sea Port 230 93 155 2,000 US\$1.00 18,000 US\$1.25 BEPZA
EPZ Location Profile of Zone (acres) (hectares) Number of industrial plots Size of each plots Tariff (land) (US\$/M2/month) Standard Factory (M2) Tariff (Building) (US\$/M2/month) Warehouse (M2) Tariff (Warehouse) (US\$/M2/month) Utility Service Water Storage Capacity(millon I) Tariff (US\$/M3) Status	Adamjee Admjee Nagar, Shiddirgonj, Narayanganj 15km from Dhaka city center 40km from H.S.I. Airport 255km from Chittagong Sea Port 293 119 200 2,000 US\$2.20 42,737 US\$2.75 BEPZA US\$0.25 Good	Mongla Mongla Port area, Bagerhat 105km from Jessore Airport 397km from Dhaka 664km from Chittagong Sea Por 460 186 162 2,000 US\$1.00 US\$1.00 US\$1.25 Public Health Engineering Dept & BEPZA US\$0.25 Good (containing salt a lot)	Ishwardi Pakshi, Pabna 200km from Dhaka 255km from Mongla Port 484km from Chittagong Sea Port 309 125 166 2,000 US\$1.00 US\$1.00 US\$1.25 BEPZA US\$0.25 Good	Uttara Shogalshi, Nilphamari 401km from Dhaka 586km from Mongla Port 650km from Chittagong Sea Port 230 93 155 2,000 US\$1.00 US\$1.00 US\$1.25 BEPZA US\$0.25 Good
EPZ Location Profile of Zone (acres) (hectares) Number of industrial plots Size of each plots Tariff (land) (US\$/M2/month) Standard Factory (M2) Tariff (Building) (US\$/M2/month) Warehouse (M2) Tariff (Warehouse) (US\$/M2/month) Utility Service Water Storage Capacity(millon I) Tariff (US\$/M3) Status Gas Tariff (US\$/M2)	Adamjee Admjee Nagar, Shiddirgonj, Narayanganj 15km from Dhaka city center 40km from H.S.I. Airport 255km from Chittagong Sea Port 293 119 200 2,000 US\$2.20 US\$2.20 US\$2.75 U	Mongla Mongla Port area, Bagerhat 105km from Jessore Airport 397km from Dhaka 664km from Chittagong Sea Por 460 186 162 2,000 US\$1.00 US\$1.00 US\$1.25 US\$1.25 Public Health Engineering Dept & BEPZA US\$0.25 Good (containing salt a lot) Shahabajpur gas field (sheduled) US\$0.25	Ishwardi Pakshi, Pabna 200km from Dhaka 255km from Mongla Port 484km from Chiltagong Sea Port 309 125 166 2,000 US\$1.00 US\$1.25 BEPZA US\$0.25 Good US\$0.25	Uttara Shogalshi, Nilphamari 401km from Dhaka 586km from Mongla Port 650km from Chittagong Sea Port 230 93 155 2,000 US\$1.00 US\$1.00 US\$1.25 BEPZA US\$0.25 Good Gas Transmission Company Ltd.
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# Figure 3.20 BEPZA 8EPZ – Conditions and status of Investment

Source: Prepared by the Study Team with reference to BEPZA information "New Horizon For Investor" and Information gathered from interviews.

#### (3) Investors in EPZs

The foreign investors from 35 countries invested in 8 EPZs as aforementioned. The status of the



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investment by type of investment is as follows (as of November, 2011):

		Number	of tenant	Gross Inve	estment (US\$1,000)
∻	Type A:	100% Foreign Investment	216 indus	tries	US\$1,551,348.45
∻	Type B:	Joint Venture	55 indu	stries	US\$217,868.96
$\diamond$	Type C:	100% Bangladesh	107 indust	tries	US\$364,429.04
		Total in operation	378 ind	lustries	US\$2,133,646.45

Number of industries in operation is 378. Number of industries under implementation is 56 while the number of industries sanctioned is 82.

Among 100% foreign investment, Korea is the top country among the number of industries and investment, followed by Japan in number of industries and Hong Kong in investment amount.

Figure 3.21 Number of country-by-country industries in operation					
and investment amount in EPZ					
[100% Foreign Investment]	(as of November, 2011)				

Country-by-country ranking		Number of industries	Investment Amount (US\$1,000)		
1	S. KOREA	64	477,766.67		
2	JAPAN	22	196,297.85		
3	HONGKONG,CHINA	20	210,728.13		
4	TAIWAN,CHINA	19	137,914.62		
5	INDIA	15	27,859.51		
6	CHINA	12	54,989.73		
7	UNTD KINGDOM	12	56097.89		
8	U.S.A.	10	58229.09		
9	MALAYSIA	7	108343.51		
10	SRILANKA	5	20,652.18		
11	NETHERLAND	4	46,141.22		
12	CANADA	4	34,473.90		
13	BR. VIRGIN.IS	4	32,199.08		
14	GERMANY	4	17,520.05		
15	ITALY	2	29,645.08		
16	PAKISTAN	2	3,478.65		
17	SWEDEN	1	10,223.63		
18	INDONESIA	1	7,822.67		
19	SWITZERLAND	1	6,540.86		
20	UKRAINE	1	4,161.34		
21	BELGIUM	1	3,478.96		
22	KOREA RP	1	3,314.61		
23	SINGAPORE	1	1,873.41		
24	DENMARK	1	1,075.41		
25	IRELAND	1	375.38		
26	THAILAND	1	145.02		
	Total	216	1,551,348.45		

Source: Prepared by the Study Team with reference to BEPZA data.

Among joint ventures, Taiwan/China is top in number of industries but Japan ranks low with two industries. India and Pakistan adjacent to Bangladesh rank less than expected.

#### Figure 3.22 Number of country-by-country industries in operation and investment amount in EPZ [Joint Venture between Foreign investors and Bangladesh] (as of November, 2011)

Country-by-country ranking		Number of industries	Investment Amount (US\$1,000)
1	TAIWAN,CHINA	7	53,504.80
2	CHINA	7	24,859.81
3	S. KOREA	5	26,302.74
4	U.S.A.	5	21,131.22
5	PAKISTAN	5	10,567.52
6	UNTD KINGDOM	3	3,168.43
7	INDIA	3	1,382.06
8	NETHERLAND	2	11,910.05
9	ITALY	2	10,313.84
10	MALAYSIA	2	8,230.59
11	DENMARK	2	3,748.15
12	GERMANY	2	3,495.64
13	JAPAN	2	1,427.35
14	MARSHAL ISLAND	1	22,525.83
15	PANAMA	1	5,872.24
16	HONGKONG,CHINA	1	3,475.70
17	KOREA RP	1	1,692.94
18	INDONESIA	1	1,636.50
19	CANADA	1	1,208.57
20	U.A.E	1	1,180.69
21	PORTUGAL	1	234.29
	Total	55	217,868.96

Source: Prepared by JICA Study Team with reference to BEPZA data.

According to sector by sector investment, the Garment and Textile industries figure prominently. This is the similar tendency to be seen among 100% foreign investment, Joint venture and 100% Bangladesh investment. The Agro Products Sector accounted for 20.6% of the Bangladesh GDP in the year 2009, but in EPZ the investment of Agro Products Sector ranks low.



( as of November, 2011 )						
	Products	Number of Industries	Investment Amount (US\$1,000)			
1	Garments	54	475,463.07			
2	Textile	26	335,475.07			
3	Garment Accessories	28	193,093.72			
4	Knitting & other Textile pdt.	22	102,360.28			
5	Footwear & Leather goods	16	99,523.71			
6	Electronics & Electrical goods	11	56,328.60			
7	Caps	5	47,568.93			
8	Terrytowel	5	45,738.05			
9	Tent	7	44,443.87			
10	Miscellaneous	14	41,716.33			
11	Fishing Reel&Golf Equipment	1	32,370.55			
12	Furniture	3	25,630.38			
13	Metal Products	8	22,774.16			
14	Plastic goods	8	15,851.76			
15	Ropes	2	6,476.14			
16	Service Oriented Industries	1	4,583.57			
17	Agro Poducts	4	1,540.25			
18	Chemical & Fertilizer	1	410.01			
	Total	216	1,551,348.45			

# Figure 3.23 Number of sector by sector industries in operation and investment amount in EPZ[100% **Foreign Investment]**

Source: Prepared by JICA Study Team with reference to BEPZA data

Figure 3.24 Number of sector by sector industries in operation
and investment amount in EPZ
[Joint Venture between Foreign investors and Bangladesh]
( as of November, 2011 )

	· · · · · · · · · · · · · · · · · · ·	, ,	
	Product-wise ranking	Number of Industries	Investment (US\$1,000)
1	Garments	13	57,386.36
2	Knitting & other Textile pdt.	8	55,321.10
3	Textile	4	27,028.44
4	Electronics & Electrical goods	2	23,475.83
5	Garment Accessories	6	18,488.61
6	Service Oriented Industries	1	7,554.39
7	Plastic goods	1	6,385.15
8	Terrytowel	6	6,044.02
9	Miscellaneous	2	3,750.08
10	Tent	1	3,047.00
11	Chemical & Fertilizer	3	2,473.52
12	Footwear & Leather goods	2	2,349.79
13	Caps	1	1,598.79
14	Metal Products	2	1,373.42
15	Sports goods	1	1,160.40
16	Agro Poducts	2	432.06
	Total	55	217,868.96

Source: Prepared by JICA Study Team with reference to BEPZA data.



#### Figure 3.25 Number of sector by sector industries in operation and investment amount in EPZ [100% Bangladesh Local Investor] (as of November, 2011)

	Product-wise ranking	Number of Industries	Investment (US\$1,000)
1	Garments	24	131,986.70
2	Textile	11	73,982.42
3	Power Industry	1	44,903.27
4	Garment Accessories	31	36,523.98
5	Knitting & other Textile pdt.	10	28,989.69
6	Footwear & Leather goods	5	21,376.37
7	Terrytowel	7	8,860.73
8	Miscellaneous	10	6,873.36
9	Service Oriented Industries	3	5,143.20
10	Electronics & Electrical goods	2	1,534.98
11	Metal Products	1	1,459.14
12	Paper Products	2	1,316.00
13	Plastic goods	2	704.16
14	Agro Poducts	1	600.58
15	Chemical & Fertilizer	1	174.46
	Total	111	364,429.04

Prepared by the Study Team with reference to BEPZA data. Source:

(4) The Issues Faced by EPZs

1) Mismatch of development in EPZs

According to BEPZA, foreign investors have keen interest in investment in Bangladesh, and everyday a few investors visit the BEPZA office to make research for investment. On the other hand, the 5 EPZs of Chittagong, Dhaka, Comilla, Karnaphuli and Adamjee have been fully occupied by existing investors and there is no available land for new investment.

The Mongla EPZ, Ishiwardi EPZ and Uttara EPZ are located on sites of unfavorable conditions for export oriented industries: Those EPZs are far away from Chittagong International Sea Port and the inland transportation from the EPZ to Chittagong needs a long lead time and truck transportation freight is high. That is one reason why the 3 EPZs are not attractive for the potential investors and there remains a lot of vacant plots. Consequently, the investors of export oriented industries have been disappointed when they visit Bangladesh to realize that there is no land in EPZs suitable for investment. Also, outside EPZs, it is difficult to find and acquire land suitable for their business.

Further, even if they could acquire the land outside EPZs, there would be fewer incentives than in the EPZs. It takes a lot of time to carry out the necessary procedures to do business outside EPZs, since there is no one stop service by one window like BEPZA.

2) The problems of utilities at EPZs

During an interview with some investors and tenant industries in EPZs, they raised some questions regarding utilities (electric power and water) as follows:

Electricity: During the summer season, the power supply is often cut off. Due to the nature а of factories, instant blackouts cause damage to products in processing and such products have no alternative but to be disposed as rejected goods. (Chittagong EPZ) Also in the Dhaka EPZ, the power supply is cut off. The Dhaka EPZ has privately owned power supply facilities but the company has its own diesel generator to accommodate itself to the blackouts. (Dhaka EPZ) However, another tenant industry in the Chittagong EPZ thinks there is no problem regarding the electric supply in the Chittagong EPZ.

From the above mentioned interview, the study team had the impression that the evaluation on power supply and influences caused by power cuts may vary depending upon the type of

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manufacturers or products they make.

- b. Water: There is shortage of water supply in the Chittagong EPZ. In the factory where a lot of water is used, the company worries about the shortage of water. Some tenant industries purchase and procure water from the Chittagong Water Supply Authority by tank lorry (truck) according to their need of stock. (Chittagong EPZ)
- 3) Workforces and Human Resources

The cheapest wages and abundant workforces were believed to be most attractive advantages of Bangladesh from the viewpoints of foreign investors. However, according to the interview with some overseas investors in the EPZs, there are a few problems: (1) It take much time and cost to do in-house education and training for factory workers. (2) It is difficult to look for and hire high performing managers in the market. If they were found luckily, the high salary should be payable. (3) As a consequence, it is desired that basic education and cultural education at primary school should be upgraded and fulfilled by the Bangladesh government.

4) Changes of condition after investment

Among the government organizations in Bangladesh, BEPZA are evaluated more positively and favorably by foreign investors than any other organizations. However there are negative voices among investors as follows: Currently, the Bangladesh EPZ is a seller's market. BEPZA sometimes shows strong and arrogant attitudes toward investors in some cases. The conditions when investment was made are changed at later stages, creating dissatisfaction and a sense of mistrust for investors.

#### 5) Linkage with industrial cluster and domestic industries

The total number of investment in the 8 EPZs is 369 industries. The total amount of investment is US\$2,117 million while the number of employment is 306,427. In all products, garments, textiles and related products occupy an overwhelmingly large share, accounting for 232 industries (62.8%), US\$1,632 million (77.0%) of investments and 252,771 employees (82.5%). This shows, to a great degree, that the EPZs depend upon one's specific industry. It is suspected that there are potential risks in the longer term. Further garments, textiles and related products are typical export oriented processed industries, which have a weak linkage with industrial cluster and the domestic industries of Bangladesh.

#### 3.6.3. Institutional Structure of BEPZA

#### (1) Vision, Mission

BEPZA is a government agency which oversees EPZ and promotes foreign as well as domestic investment. Its main objective is to eliminate complicated procedures and provide special zone that has excellent investment climate.

(2) Organizational Structure, Number of Staff and Budget

As of the end of January 2012, the total number of staff in BEPZA and 8 EPZ is 983. The organizational structure and annual budget is as follows.





Source: BEPZA



Year	BEPZA	DEPZ	CEPZ	KEPZ	AEPZ	Com.EPZ	MEPZ	IEPZ	UEPZ	Total
2010-11 BD Tk.)	1,095.50	8,210.87	4,525.74	1,400.14	1,733.28	1,728.70	198.47	381.01	207.91	19,481.62
2011-12 (BD Tk.)	1,070.66	8,696.00	4,789.94	1,572.65	1,781.78	1,743.00	258.88	459.43	377.94	20,750.28

Figure 3.27 Annual Budget of BEPZA (FY2010 and FY2011) (Unit: 100,000 Taka)

Source : BEPZA

(3) Brief Description of the Industrial Policy (Specific Program)

The existence of EPZ itself is the sole industrial policy of BEPZA. As mentioned earlier, various incentives such as tax and duty exemption are offered by EPZ. In addition, BEPZA offers One Stop Service, i.e; application process, approval for machinery and equipment, registration of company establishment, etc.

# 3.6.4. Economic Zone (EZ)

## (1) Current Status of EZ

EZ is under the custody and administration of the Bangladesh Economic Zone Authority (hereinafter abbreviated as "BEZA"). BEZA was established in November, 2011. Mr. Bhuiyan was assigned to the Presidential Director just before the study team met him at the BEZA office placed inside the Prime Minister's office in December, 2011. As at May 2012, BEZA has 25 staffs and all of them are official. They were recruiting staff to start up the business.

There is a law, the Bangladesh Economic Zone Act, but concrete contents of EZ such as location and conditions would be considered and concrete rules and regulation of EZ were still in progress as of December, 2011. According to the Presidential Director, EZ staff was planning to visit and see overseas EPZ (such as Hyderabad, in India) for study.

Basically the country is divided into 7 districts and one EZ at each district is constructed, totaling 7 EZs. The Bangladesh government made a dicision to allow investment to 5 Special Economic Candidate Zones in May, 2012. For now, the application process, FS, and the selection of responsable for development, will be considered.

Mirshrai	Around Chittagong, 15,000 Acre (expected to extend up to 42,000
	Acre)
Gohira Anowara	Around Chittagong, 700 Acre
Serajigonji	1,000 Acre
Mongra	400-500 Acre
Sherpur Moulovibazar	Around Shylet, 600 Acre

According to BEZA secretary, the selection process is as following:

- The candidate sites are 20 in total (government property: 15, private sector property: 5). Firstly, BEZA selected 7 administration sites, and then the bord of governers selected 4 administration sites. The private consulting firms were entrusted the evaluation projects of these sites. The 4 of all 5 sites are government properties, thus the government has to buy the private sector property.
- For now, in this July (expected), F/S international bidding is supposed to be held. The 6-9 months later, the responsible development consultant will be selected.

Regulatory Regime and Guidline are planned to be organized accordingly.

- The assistance for EZ by World Bank
- World Bank is assisting for the new Regime of EZ, new EZ Act, and Regulation and Rule, instead of developing EPZ. While World Bank assist the research on F/S, logistics, training, procurement of experts, management of experts, the govenment of Bangladesh makes a plan on them. In addition, World Bank assists FS by making a plan and financing. Sherpur is supposed to assist Resettlement Assessment and Physical Resettlement.





- International Finance Corporation (IFC) made F/S about EZ in particular. IFC is in charge of Site Assessment, Regulatory Development, Promotion, and Roadshow. It extends to Private Secotor Development Support Program (PSDSP), and Bangladesh investment Climate Fund(BICF) with the support from DFID/EU, which inclusively assists BOI, BEPZA, BEZA. For now, all the works of IFC will be passed on PSDSP.
- In order to invite investors as much as possible, World Bank will apply F/S and organize Regulatory Regime and Guide Line.
- World Bank will develop the road-show to the investors from Japan, Thailand, Malaysia, China, Korea, and UK. It will be scheduled in this June to July, due to bureaucrats of the government of Bangladesh.
- Aiming for assisting the infrastructure, resettlement, and environmental policy, World Bank (70%) and DFID(30%) are ready to invest their budget.
- The total budget is 102 million dollars. Though World Bank and DFID can not compensate all the budget, 1-3 zone are expected to be developed approximately. As for JICA, the contribution to connection road to SEZ, infrastructure, power generation facilities, fence repair, One-Stop-Service, Office Supply, Human Resources Development, and Capacity Development is highly encouraged by World Bank.
- The World Bank is assisting in planning EZs, while the IFC makes feasibility studies on outlines of EZs. Candidates of EZ sites are south of Chittagong and Sonargoan (Dhaka Division) According to IFC publicity matters⁶, "The Adamjee EPZ and Karnaphuli EPZ were established when the Government of Bangladesh handed over the State Owned Adamjee Jute Mills and Chittagong Steel Mills to BEPZA for conversion into EPZs. Conversion of other 22 State Own Enterprises to Economic Zones for private sector investment provides potential economic zone developers/operators an alternative route to enter the Bangladesh EZ sector."

In response to the inquiry of the Study Team, Mr. Bhuiyan explained that the main reason why EZs will be constructed instead of EPZs is because it has become difficult to acquire land in existing EPZs. The aim is to utilize private sector, develop the export industry as well as domestic industries and diversify the industries.

Comparison between EPZ and EZ

Figure 3.22 as hereunder shows the comparison of rough concepts between the EPZ and EZ, which was summed up from the IFC public matter aforementioned.

rigure 5.20 Comparison of Dasie Co	heepts between EI Z and EZ
EPZ	EZ
Currently garment, textile and related industries	The investment on new industries and heavy
account for major share in EPS.	industries and diversified industries are
	desirable.
As it is now, most tenants are export oriented	In EZ, duty free areas and custom duty areas
industries invested by overseas and local industries.	are separated and the linkage of export
	industries and industrial clusters and
	domestic industries are expected.
Investment by government and capital of	To make much of utilizing private sector
government. Government acquires and provides	and/or Public Private Partnerships. (Legally,
land to develop industrial zones.	development by government is feasible.*).
Various incentives are given. BEPZA • EPZ makes	In the Act EZ, the same service is provided as
a one stop service by one window, simplifying	EPZ with various incentives and a one stop
various procedures.	service in procedure. Concrete conditions
-	and details are now under study (assisted by
	IFC).

$\Gamma_{1}$	Composicon	of Docio	Conconta	hotwoon	FD7 and F7
rigure 5.28	Comparison	OF DASIC	Concepts	Delween	<b>FF</b> and <b>F</b>
			00		

Source: Prepared by JICA Study Team with reference to IFC public matter.

*The area of one EZ: 100 hectares The Act (provisional English version) states that the Bangladesh government acquires land for EZ.

**Incentives: Corporate tax is exempted for 5 years. The lease period is renewed by 20 - 25 years. Other general conditions are the same as EPZs.

⁶ International Finance Corporation/Bangladesh Investment Climate Fund, "Investment Opportunities Economic Zones in Bangladesh: The New Regime"

#### (2) Overview of Bangladesh Economic Zone Act.

The Bangladesh Economic Zone Act. Act No. 42 of 2010 of Parliament received the assent of the President on 1st August, 2010. (There was an unofficial English Translation but not an official English translation.)

The gist of the Act based on the unofficial English translation is as follows:

The government may establish any of the following categories of economic zones such as:

- a. Economic Zone established through public and private partnership with local or foreign individuals, groups or organization
- Private Economic Zone established individually or jointly by local, non-resident b. Bangladeshis or foreign investors, groups or business organization groups
- Government Economic Zone established and owned by the Government c.
- Special Economic Zone established privately or through public private partnership or d by the government for the establishment of any kind of specialized industries or commercial organization.

Land Acquisition for Economic Zone.-

If any land is required for an Economic Zone or for the construction of infrastructure such as - roads, bridges etc. for that zone, the Government may acquire such land under the Acquisition and Requisition of the Immovable Property Ordinance.

Division of an Economic Zone into Several Areas.-

The Authority may issue necessary orders to prepare a Master Plan for the land related to an Economic Zone dividing it into following areas: Export Processing Area, Domestic Processing Area, Commercial Area, Non Processing Area

#### Special Tariff Benefit

The Government may provide tariff benefits to the Economic Zone or any area of it, for a specific period, and may establish special arrangement to facilitate import and export operations of organizations established within the Economic Zone.

#### Financial Benefits, etc.

The Government shall provide the same type of financial incentives and benefits to industrial units within Economic Zones as provided under Bangladesh Export Processing Zone Authority Act, 1996.

#### Other Benefits

The Authority shall make arrangements for the provision of necessary services to Zone Developers and Industrial Units required for the operation of an Economic Zone, e.g. all legal documents etc. including permission of Economic Zone site selection, declaration of capital and dividends, resident and non-resident visas, and work and construction permits through a One-Stop Service. The Authority shall make arrangements to allot or lease suitable plots for setting up industries on complete commercial principles.

Power to Exempt from Application of Certain Laws.-

The Government may make any Economic Zone or any organization within an Economic Zone exempt from all laws mentioned below or may specify which zones shall be subject to all or part of the rules associated with these laws, subject to necessary modifications and amendments such as the:

Municipal Taxation Act, Explosive Act, Stamp Act, Electricity Act, Boilers Act, Foreign Exchange Regulation Act, Income Tax Ordinance, Building Construction Act, Land Development Tax Ordinance, Local Government Act, Fire Prevention Act, Value Added Tax Act, Local Government Act, and Any other Act as specified.

#### Land Allotment

When any individual is permitted to establish an industry or commercial organization in an Economic Zone, the Authority shall allot land, building or site within the Economic Zone, or shall rent or lease it.

Others:-

Establishment of Authority, Office of Authority, Responsibility and function of Authority, Governing board, Executive board, Secretary and Staff, Function, Policy Implementation of the Governing Board, Executive Board, Appointment of Secretary, Officers, Staff, Budgets, Account and Audit, Compliance to Environment, Applicability of Law on Workers Welfare Association and Industrial Relations, Identification of Courts for Civil Cases.



# (3) Economic Zones Regulations

The Bangladesh Economic Zones Regulations 2011 (DRAFT) was made with the support of the IFC, DFID, and EU and was under discussion for completion. (as of January, 2012)

# (4) New Regulatory Authority For Economic Zones

The following are quoted from an IFC publicity matter regarding EZ.

New autonomous Authority, Bangladesh Economic Zone Authority (BEZA) in the Prime Minister's Office reporting to a Governing Board

New mandate as Economic Zone Regulator rather than Developer, Manager and/or Operator

- New focus on regulating/approving/monitoring zone development
- New organization and management structure
- Senior management is private sector driven Dynamic private sector mentality
- Plan for one-stop-shop to be imbedded into the Authority
- Staff trained to fast track development and investments

(5) The progress and the issues of Economic Zone

The first project will be the High-tech Park which is constructed on land of 250 acres in the Kaliakor district. The project has been planned under study over 2 years with the cooperation of IFC. For this project, Price Waterhouse Coopers conducted and completed a Feasibility Study in August, 2009.

This project will be developed and operated on basis of PPP (Public-Private- Partnership). At present 6 companies in Malaysia, India and Korea etc., were invited for proposals for tendering by the High Tech Park Authority, which will be the implementing organization for the tendering.

On the other, as to the purely private sector investment, the Korean EPZ is the existing Private EPZ. However, development of the Korean EPZ had been suspended and much delayed. This project has had the potentiality of big risks. In this respect, there are some opinions among overseas investors that the investment in EZ by way of "Private Economic Zone" must be studied and considered very carefully. It shall be clarified that similar risks as the Korean EPZ will definitely be avoided in the case of the new project of EZ.

# 3.6.5. Institutional Structure of BEZA

(1) Vision, Mission

BEZA's mission is to promote and manage EZ (Economic Zone).

(2) Organizational Structure, Number of Staff and Budget

BEZA was just established in the Prime Minister's Office in November 2011. It has only 1 staff as of the end of December 2011 and it will increase the number of staff immediately. The amount of budget is not available.

(3) Brief Description of the Industrial Policy (Specific Program)

As it has been mentioned earlier, the Bangladesh Economic Zone Act (Act No. 42 of 2010) was approved on the 1st of August, 2010. Its implementation regulation, Bangladesh Economic Zones Regulations 2011 has been drafted and distributed to donor communities at the end of December 2011. BEZA is consolidating the comments from the donor communities as of the end of January 2012. As it has been mentioned in the previous section, EZ aims to promote diversified industries and strengthen industrial linkages between export oriented industries and domestic industries (including industrial clusters). It also aims to promote PPP scheme in the zone development and offer similar incentives as those of EPZ.

# (4) Issues to be addressed

Considering the past track record, it is BEPZA that has already accumulated the management and technical knowhow of industrial estates in Bangladesh and have professional human resource. In

this regard, it is a challenge to make the smooth transfer of the above knowhow from BEPZA to BEZA and ensure information sharing between both institutions. On the other hand, FBCCI is skeptical to have a new organization like BEZA and has argued that BEPZA as an institution to have already accumulated the business knowhow should develop EZ as well.

### 3.6.6. Private Export Processing Zone and Korean Export Processing Zone (Korean EPZ) (1)Private Export Processing Zone (Private EPZ)

Private EPZ shall be governed by "The Bangladesh Private Export Processing Zones Act, 1996 (Act No XX of 1996) established in 1996 and under the custody and management of the Private EPZ Governor's Board located in the Prime Minister Office.

At present, there are 2 Private EPZ projects, the Korean EPZ and Rangunia EPZ. The Korean EPZ is located in Chittagong. Youngone, Korean company purchased the land from the Bangladesh Government and is developing a Korean EPZ now. Bangladesh individual developers are inducing investors such as Japanese companies to the Rangunia EPZ project, which is now at the stage of planning preparation.

According to the Private EPZ Governor 's Board (Mr. Abu Muhammad Yousuf, Director, Executive Cell), the Bangladesh Government will not develop new Private EPZs (under the scheme of the Private EPZ Act) any more. The Study team felt that, other than Mr. Yousuf, the office was almost empty. It deems that the future direction in developing export oriented industrial zones will be headed toward EZs in a broad sense instead of Private EPZs. The trend from now on will be followed in the next research.

(2) Current situation of Korean EPZ

The Korean EPZ has vast areas of 2,492 acre in total scale, which is said to be broader than the total areas of all EPZs in Bangladesh. When the Study team visited the Korean EPZ in January, 2012, only one company, a Youngone group company has invested in the Korean EPZ. The land of the Youngone group company occupies 25 acre, where the construction of three factories in Phase 1 has been completed. The company started to make practical training of manufacturing to the employees in January, 2012. Other land areas were under development.

#### (3) The background and the issues of Korean EPZ

The background

In 1996	The Private EPZ Act was established
	Youngone / Korean EPZ Corporation made a contract for purchasing land and paid
	for the land, and thereafter started developing.
In May, 2007	Operation License permitted
In 2009	Environment Inspection passed
In 2010	Bond area etc. approved
In 2011	Phase 1, Youngone builds shoes factory.

In January, 2012 Trial manufacturing and Training of employees has started.

Current situation and plan of development

Total costs of development in Korean EPZ is said to be US\$200 million. The Korean EPZ has invested US\$30 million. It has already constructed roads, prepared a water pond, water supply, power supply, and ground leveling for Phase 1, administration building, rest house, in-service training facility, guest house, golf course and planted trees in the land. The future plan includes construction of an IT Park (100 acre), residential area (25 story high apartment building x 4), hospital (500 beds), inducement of engineering college (3,000 students), 20,000 collective population, and 10,000 residents. It aims at becoming an industrial zone kind to the environment by arranging green land. Furthermore, there is a plan of developing industrial clusters where SMEs such as Light Engineering Industry will occupy. Accordingly, the grand plan of the total Korean EPZ will provide job opportunities to employ 200,000 directly and 100,000 indirectly, totaling to 300,000 employees.

The issues that Korean EPZ faces

According to KEPZ Corporation, President, Mr. Jahangir Saadat:-

Youngone / Korean EPZ purchased land a long time ago, but the government has still not issued



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the deed of transfer to them even up to now, and consequently, registry cannot be transferred to Youngone / KEPZ Corporation.

Although many overseas investors come to ask about the investment in the Korean EPZ, the Korean EPZ explains that the Korean EPZ cannot make contract with potential investors because Youngone / Korean EPZ is not the official land owner in registry. The government says that the deed of transfer may be issued provided that the Korean EPZ completes development of the whole land area within 2 years. However, the Korean EPZ cannot accept such conditions which will be impossible practically speaking.

(4) The evaluation on Private EPZs by the Study team

It is construed that new project of Private EPZ based on the Private Export Processing Zone Act will not be developed any more but new projects of Private EPZ as one category of EZ based on the Economic Zone Act, 2010 will be the main stream for development.

It is said that the reason why the Korean EPZ has been suspended and delayed for development is due to political reasons or political relations. Regrettably, the Study team could not directly hear a clear explanation on that point from the parties concerned - Private EPZ Governor's board (Mr.Abu Muhammad Yousuf, Director) and Korean EPZ Corporation (Mr. Jahangir Saadat, President)

In general business circles, it would be deemed as a breach of contract, if deed of transfer would not be issued, despite completion of payment as per the contract. Somehow it is likely that there is no suit or dispute at court on this matter. Over many years, there were a few changes of political power. Judging from such factors, the reason would not be simple matters. There may be related to various situations including terms and conditions of the contract. Both the parties of Youngone / Korean EPZ and the government had been patient on the issue for a long time. However, the point is that this is not a problem only between the two parties: The land of the Korean EPZ is precious and spacious which looks like a candidate of attractive and useful land for development of industrial zones particularly for export oriented industries. The delay of the development has caused the loss of opportunity and time. This is deemed to be inefficient in the development of the national economy in the country.

# 3.6.7. Future Challenges for the Development of Economic Zones

(1) Implementation of EZ Development

a) Consistency: Special Economic Zone Development needs an inclusive perspective such as land development, economic development, and regional development

b) Clarity: With the government leadership, corporation with the private sectors is required. Roadmapping of grand-design of Special Economic Zone Development is the key for the clarity of the project.

c) Transparancy: The procedure of development by private developer should be clear and transparent.

(2) Efficient and Simplified Administration System for Foreign Investment

The foreign investement system of Bangladesh has several sectors: BOI for domestic investment, BEPZA and Private EPz Governor's Board for foreign investement to EPZ, and BEZA for SEZ. PPP Office is planning to make its own PPP project in EZ. The system is complicated and bureaucratic and lack of nterdisciplinarity and network. Thus apparently it is not efficiently working. It is not clear that which organization is in charge of inclusive administration of investement, and how to realize it. In order to make BEZA organized in more efficient way, BEZA probably needs reorganization.

(3) The Expectation for New EZ

Designing the industrial location and clusters The perspective related to each regional characteristic Consensus between private and public sector and trancparacy of the plan





Linkage of domestic and foreign industry

Linkage of industry and community, from the point of view of environmental development Application of bonded factory in the case of investment from foreigncountry to non-special economic zone

Development of matching system for private sector developers and future tenants Encouragement for both domestic and foreign investment to Bangladesh, by organizing preferential and flexible treatment for a project of big impact for foreign investment Development of organizational framework, team building of expert human resources in particular.

(4) Others

Though Korean EPZ has a large scale and located close to Chittagong International Airport, it is not developed as it is expected. Thus, reconcilication between the government of Bangladesh and Yangong/Korean EPZ as well as the regislation of Korean EPZ as a new Economic Zone are the key. If it happens, a rapid EPZ developmet and a huge impact on development investment will be highly expected.

# **3.7 Other Private Sector Institutions**

In this chapter, JICA Study Team has analysed the current situation of the policy related to public sector development and political institution. In this section, however, the main private sector development coorperation organization will be analyzed such as Federation of Bangladesh Chamber of Commerce and Industry (FBCCI) and Institute of Managemenet Consultants Bangladesh (IMCB)

# (1) Federation of Bangladesh Chamber of Commerce and Industry (FBCCI)

# 1) Function and Role (Vision and Mission)

FBCCI was established to organize 68 chamber of commerce and 277 association of commerce, based on Organization Ordinance (1961) and Companies Act (1913). The FBCCI is supposed to gain the interest of workers in Bangladesh, as one of the most prestigious organization. In addition, the FBCCI works for helping the development of foreign and domestic commerce, industry, agriculture, tourism, human resource, and telecommunication. FBCCI consultst and accommodates for for investment promotion, economic cooperation, and specific problem solution as foreign correnpondent counterpart, representing Bangladesh.

As for the relation between Japan, chamber of commerce of Japan and Bangladesh (The Office is in the JETRO Dhakka Office), holds regular conferences and they work on commun problems and improve the investement environement.

# 2) Organizational framework (Organization chart), staffs, budget

FBCCI constitutes of the president, 2 vice-presidents, 41 commitioners. The total budget of 2011 fiscal year was about 3200 million taka.

# 3) Outline of FBCCI activities

FBCCI has 57 small scaled commissions, which is in charge of these fields below: Buget /Tax management(customs, income tax, value added tax), finance, capital markets, Promotion of small and medium enterprises, craft industry, ethnic minority, international exchange, trade, development partenership, globalization, FTA.WTO/UNCTAD, industrial property right, fabric industry, RMG, national economic policy, midium development plan, poverty reduction, MDGs, Vision 2021, domestic trade, food problem, etc.. And also, as a representative of private secror, the experts of FBCCI have participated in 79 govenmental commimssions.

4) Issues to be addressed





FBCCI are not involved in activities for ensuring a direct profit for their staffs or human resources development. In order to change this, FBCCI has to realize its rule for economic development and its expectation from the partener companies. FBCCI's responsibility to represent the opinipn of private sector and offer a proposal to the government will surely be reinforced. Thus, human resources development is the key for the future vision of FBCCI.

## (2) Institute of Managemenet Consultants Bangladesh (IMCB)

# 1) Vision and Mission

IMCB was founded in 1997, based on Societies Registration Act 1980. The private sector consultants constitute IMCB. The total number of staffs is about 100, including: private consultants, scholars, researchers, and politicians. The membership extends individual member, business member, membership associate, and parener associate. IMCB is entitled by the Ministry of Commerce as an association to offer marketing consulting service. IMCB publishes licence called Certified Management Consultant (CMC)to person succeeded in their exams. IMCB is also one of the members of International Council of Management Consulting Institutes (ICMCI) in the United States, as a representative of Bangladesh. They are involved with numerous educational activities. The vision of IMCB is to be an outstanding association by developing professional and competent marketing consultants. Their mission is as following: 1.Improving the quality of marketing consultants and consulting service in Bangladesh 2.Improving the social status of marketing consultants 3. Involving the advocacy activities for clients in Bangladesh to let people know about CMC value 4. Enlarging business chance of IMCM mebers 5. Participating activities to protect interests of marketing consultants 6. Organizing guideline, information service to offer the confortable working environement for member consultants

## 2) The current situation of Business Development Services(BDS) in Bangladesh

In Bangladesh, generally, recruitment of consulting contracts is based on public tender method. As for project evaluation method, QCBS (Conprehensive evaluation combining technical and price evaluation) is often used. There are some institutions who is not enough competent to evaluate the project proposals, even corruptions related to project evaluation are found. In the case of consulting project from governmental sectors, the price of each contract is quite small.

Public aid agency of Bangladesh such as BIM or BITAC, there is competition in the field of human resources development. There are two cases: the intervention of private sector consultant to a project on public institution, and the intervention that public sector consultant participates in a private sector project. The background of this problem, for example, for an expert engaged in public aid institution is practically allowed to work as part-time worker in external project of the institution. According to IMCB, the government of Bangladesh is not efficiently organized for making specific plan and administration of project progress, while they are good at making good policies. For IMCB, this is one of the major tasks to tackle with.

#### 3) IMCB's activities and future vision

As for IMCB, they are inspired by Vision 2021 of the government of Bangladesh:"Join in developed countries by 2021". In order to realize it, IMCB has actively involved with various developmet projects by the government of Bangladesh, in the objective of improving industrial development policy with public sectors' initiative. IMCB has participated in EPZ development project from early period such as selection of location. IMCB's projects extend not only their own one, but World Bank, Asian Development Bank, and binational aid. As for a project related to Japan, IMCB is eager to participate in JICA's project. IMCB once submitted their project letter to JICA Office of Bangladesh to get involved with them. In addition, IMCB is also interested in Japanese companies venture projects in Bangladesh. As consultanting relation between Japan and Bangladesh has not interacted that much so far, IMBC expects to develop the cooporative relation between Japan. IMBC is willing to accept JICA aid project for consuting industry development in Bangladesh.





# 3.8. Policy and System Analysis based on PFI framework **3.8.1.** Investent Policy

In Bangladesh, there are BOI, BSCIC, BEPZA, and PPP office as investment institution.Each institution has their own role and making policies based on transparency, property protection, and impartiality.

According to World Bank's "Doing business" (2012), Bangladesh is ranked in each field as following: Starting a Business 86th/183 countries(5th /8 countries in South Asia), Dealing with Construction Permits 82 th (2 th), Registrering Property 173th(8th), Getting Credit 78th(4th), Protecting Investors 24th(1st), Enforcing Contract 180th(7th, Trading Acorss Borders 115th (4th). As for the Investors Protection, Information Disclosure, responsibility for enforcement are highly evaluated. On the other hand, the evaluation for Registering Property, Enforcing Contract is quite low as it takes too much time and care.



Source: World Bank, "Doing Business (2012)"

# **3.8.2.** Promoting Investment and Facilitation

There are various investment promotion policies launched by BOI etc. In order to promote investment, BOI is preparing "Onestop Service" which makes investment procedures simple. It deserves to be highly appreciated.

On the other hand, there are still numerous complicated procedures in government, such as acquiring business licence, trade licence, and work visa. "Onestop service" enables investors to remove other those procedures once they apply for BOI.

In addition, some incentives are offered for EPZ development, such as preference of corporation tax, and access to Bonded Warehouse. In contast, BEPZA is criticized for their rigid attitude toward some tenants of EPZ, as they demand tenants to make labor union and improve saraly of workers.

It is expected to think about the whole picture of development of Bangladesh instead of sticking only to EPZ, and to make a more attractive framework to promote investors.

# 3.8.3. Trade Policy

As for trade policy institution, there are the Ministry of Commerce, EPB, and BPC. The problem is that they do not have any written rules for each policy, such as trade policy by the Ministry of



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Commerce. The discretion is on each person in charge and transperancy is not effectively respected.

EPB offers some information related to market development. However, the support to understand actual trade practices has not been proviced for middle/small businesses, such as contract and negotiation skills with international traders.

## **3.8.4.** Competition Policy

In Bangladesh, competition policy has not been developed yet.

# 3.8.5. Tax Policy

Revenue criteria is quite important to analyse one nation's economic development. The percent of GDP to tax revenue was 5% in 1980's, but it has shown an obvious growth later on- it marked 7% in 2000's, and most recently, it rised to more than 9%.

In comparison of the percentenge of GDP to tax revenue, India and Butan mark more than 15% and other countries exceed 10 %. On the other hand, Bangladesh has stayed less than 10% such as 9.2% (FY2009-2010). It is said the certain big amount of tax is not levied. There are two reasons: the percentage of direct tac to whole tax revenue is low as 3%, 2) value-added tax rate is relatively staying low.

8		,
Fiscal Year	Percentage of GDP to Tax Revenue	
1982-1983	5.4 %	
1992-1993	6.6 %	

7.8 %

9.2 %

Figure 3.30 Change of the percentage of GDP to tax revenue in Bangladesh

Figure 3.31	Comparison	of Percentage of	GDP to 7	Tax Revenue	(2009-2010)
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Country	Percentage of GDP to Tax Revenue
Bangladesh	9.2 %
Butan	17.8 %
India	17.2 %
Nepal	12.6 %
Pakistan	10.2 %
Srilanka	13.3 %

Source: Policy Research Institute of Bangladesh,

"An Evaluatiob of Tax System in Bangladesh", 2010

#### **3.8.6.** Corporate Governance

2002-2003

2009-2010

There are several indexs for evaluating one nation's governance. Especially for developing countries, we use "Governance Indicator" developed by World Bank and IMF, as it enables compare with South/Southen East Asian countries.

Originally, governance indicates tradition, system, and process of authority utilization in one nation. "Governance Indicator" has 6 items.

"Voice and Accountability": which a country's citizens are able toparticipate in selecting their government, as well as freedom of expression, freedom of association, and afree media.

"Political stability and absence of violence": measures the perceptions of the likelihood thatthe government will be destabilized or overthrown by unconstitutional or violent means, includingdomestic violence and terrorism.

"Government effectiveness": captures perceptions of the quality of public services, the quality



of the civil service and the degree of its independence from political pressures, the quality of policyformulation and implementation, and the credibility of the government's commitment to such policies

"Regulatory quality": captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development

"Rule of Law": captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.

"Controle of Corruption": captures perceptions of the extent to which public power is exercised for privategain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.

Evaluation Item		Bangladesh	India	Indonesia	Myanmar	Nepal	Pakistan	Sri Lanka	Vietnam
Voice and accountability	Evaluation	0.3	0.4	0.1	2.1	0.5	0.8	0.5	1.4
voice and accountability	Rank	38	59	48	1	31	27	32	9
Political Stability	Evaluation	1.4	1.3	0.9	1.3	1.7	2.7	0.8	0.1
Folitical Stability	Rank	10	11	19	11	6	0	21	51
Converse of Effective and	Evaluation	0.8	0.0	0.2	1.7	0.8	0.8	0.2	0.3
Gouvenment Effectiveness	Rank	22	55	48	2	25	26	49	44
Bagulatom, Quality	Evaluation	0.9	0.4	0.4	2.2	0.7	0.6	0.2	0.6
Regulatory Quality	Rank	22	39	40	1	24	30	45	31
Dula of low	Evaluation	0.8	0.1	0.6	1.5	1.0	0.8	0.1	0.5
Rule of faw	Rank	27	55	31	3	16	26	53	39
Controle of corruption	Evaluation	1.0	0.5	0.7	1.7	0.7	1.1	0.4	0.6
controle of contription	Rank	16	36	27	0	29	12	41	33
Total	Evaluation	5.2	1.9	2.9	10.5	5.4	6.8	2.2	3.3
Total	Rank	134	255	213	19	131	121	241	207

Figure 3.32 Situation of Governance in Bangladesh, based on Governance Indicator

Source: Prepared by JICA Study Team based on World Governance Indicator Project URL: http://info.worldbank.org/governance/wgi/index.asp

The six aggregate indicators are reported in two ways: (1) in their standard normal units, ranging from approximately -2.5 to 2.5, and (2) in percentile rank terms from 0 to 100, with higher values corresponding to better outcomes. The total appeared below in Figure 3.32 is simple total of each item.

General evaluation of Bangladesh compared to South/South-East Asian countries is low next to Myammer, Nepal, and Pakistan. Governnance evaluation of Bangladesh is overall low, while India, Sri Lanka, Indonesia and Vietnam mark more than 200 in total ranking.

"Voice and Accountability", Bangladesh is marked high rate next to India, and Indonesia. Apparently, the frequent regime change and freedom of political activities were highly evaluated.

"Political stability and absence of violence": Bangladesh is ranked low next to Pakistan and Nepal. Political stability of Bangladesh is not respected especially after the independence, assasination of politician and coup d'etat attempt by army. In addition, army is closely connected with various political institution and relaed association.

"Government effectiveness": Bangkadesh is ranked low next to Myammer. The major tasks should be the feseability of government policy and lack of coherent policy.

Regulatory quality: Bangladesh is ranked low next to Myammer. Various problems are pointed out such as the lack of speed and action plan for making government policy

Rule of law: Bangladesh is ranked law next to Myammer, Nepal, and Pakistan. The legitimate system of the government is not yet organized, for example, the contract of previous regime is not respected in a next regime, etc.

Controle of corruption: Bangladesh is raked low next to Myammer, and Pakistan. The corruption is constantly going on at municipal process or customs clearance.



The current governance situation in Bangladesh is evaluated overall low, which is assumed to be a great risk for promoting investment from Japan and European/American companies. A steady improvement in this field is highly encouraged in Bangladesh.

## 3.8.7. Policy for promotion of responsible company's behavior

So far, the activities to promote companies' behaviors have not started by the government. Actually, it is rather private companies who realize the importance of CSR and quality governance in order to develop their activities globally.

### 3.8.8. Human resources development

The know-how offered by the assistance from government such as BSCIC and BITAC is already familier with big companies, so that the sufficient aid is not given to private companies. In the field of human resources development, donners (ILO and EU) are taking initiative to meet the professional technical training needs of modern industry. They are organizing Technical and Vocational Education and Training (TVET).

## 3.8.9. Administration of infrastructure and finance

In finance market, the Bangladesh Central Bank is taking a major role. As through Bangladesh Central Bank, the government of Bangladesh is closely committing to bank system.

Currently, in Bangladesh, there are 4 national banks of commerce, 4 national specific banks, 30 private bank of commerce, and 9 foreign commercial banks. As for branch banks, private commercial banks are principally located in the city, while national commercial banks cover suberb areas. About 60-70% of the total assets and bank balance share is by private commercial bank.

	Number	Number	Number of branches			Percentage of total		
	of Banks				assets			of deposits
		Total	City	Suberb	Total	City	Suberb	
National	4	3,394	1,242	2,151	28.9	36.6	63.4	26.4
Commercial								
Bank								
Nartional	4	1,366	157	1,209	6.6	11.5	88.5	4.5
Specific Bank								
Private	30	2,427	1,619	808	57.6	66.7	33.3	61.9
Commercial								
Bank								
Foreign	9	59	59	0	7.0	100.0	0.0	7.2
commercial Bank								
Total	47	7,246	3,077	4,168	100	-	-	100.0

Figure 3.33 Bank system's sturucture

Source: Bangladesh Ministry of Finance, Finance Division URL:http://www.mof.gov.bd/en/

Bank system is the artery of economy. Through the bank system, mandate financial resource is given to company's activities. In this sense, apart from financial functions such as exchangeability of currency, lending rate is the most important for company.

The lending rate from commercial bank to private bank is more or less 12.5% as the weighted average⁷, on the other hand, it is assumed to be more than 20% according to the hearing from various industrial associations. The deposite rate is around 7.5%. The lack of well researched business plan by middle/small industry causes a high lending rate.

⁷ Bangladesh Ministry of Finance, Finance Division URL:http://mof.gov.bd/en/

In Bangladesh, only 48% of the whole population enjoy the electricity, which is lower compared to other developing countries. Bangladesh is aiming at supplying electricity to all the population, so that electricity sector in this country is quite important. The Ministry of Energy and Mine Resorce has the mission to offer sufficient and reliable electricity to the whole nation with proper price by 2020.

	FY 2010-11	Mission to 2015
Ability to generate electricity	6,727MW	11,456MW
Maximum amout of electricity	4,890MW	-
Net amount of generated electricity	29.247MkWh/year	-
Live wire	8,500 km	11,500km
Grid Substation		
400 KV and 230 KV 132KV	6,850 MVA 9,899MVA	
Distribution wire	2,700,000Km	2,760,000km
Percentage of electricity supply to population	49%	-

Figure 3.34 The current situation of electricity supply and the mission by 2015

Source: Ministry of power, energy and mineral resorces, power division, power sector scenario (URL: http://www.powerdivision.gov.bd/index.php?page_id=262)

In the objective of improving electricity generation capacity, 32 projects of power plant construction are ongoing. 14 project s are from the public sector and 18 projects are from private sector. Other 40 projects are examined, 12 projects out of them are from public, and 28 projects from private sector. Apart from them, 3 solar and wind electricity generation are also being examined.

In order to improve the distribution capacity of electricity, Power Grid Company of Bangladesh(PGCB) is in charge of administration, maintenance, and development of electricity distribution. PGCB is already running 11 projects with the aids from ADB, JICA, and the government of Bangladesh.

The consruction for distributing wire is also going on in rural area. Private investors are skeptic about these projects, for example, the possibility of keeping enough energy like gas for generating electricity, and the capacity of the government for the whole development project. They assume that rather private sector is capable of realizing all these projects. The regular maintenance of facility and minimalizing system loss of facility capacity are quite important.

In addition, the blackout is a serious problem. Because of the lack of electricity supply for gewnerating electricity, blackout frequently happens in Bangladesh. Most of private companies except those in EPZ, have to buy self-generator or purchase electricity from private electricity company. If the blackout happens at the process of producing, most of the products will be completely damaged. The stable distribution of electricity enables private investors to reduce enormous cost.

# 3.8.10. Public Governance

When a regime changes, a contract with previous regime will not be respected. That is one of the biggest bottlenecks for investors, who are responsible for big-scaled investement for a long/mid-term.





# 4. Donors' Cooperation Activities related to Private Sector Development in Bangladesh

# 4.1. Assistance in Private Sector Development Programs by JICA

## 4.1.1. 4.1.1 Assistance Activities for Private Sector Development in Bangladesh

JICA's assistance for private sector development in Bangladesh centers on Yen Loan projects, Development Studies such as master plans and feasibility studies as well as the technical cooperation scheme as dispatch of experts. Although the concrete areas are sub-sector studies of export promotion, small business financing, industrial development, regional industrial development master plan, dispatch of experts in investment promotion and bank sector, comprehensive programme that covers the private sector overall has not yet been conducted. The main projects of JICA's private sector development in Bangladesh are shown below.

## Figure 4.1 Main projects of JICA's private sector development cooperation in Bangladesh

No.	Project	Period	Project Summary						
Yen I	Yen Loan Projects								
1	Finance Sector Plan for Small and Medium-Sized Enterprise Promotion	EN Signed FY2011 Loan: 5 billion yen	Provide funds for finance to small and medium-sized enterprises though participating financial institutions such as local banks.						
Devel	lopment Studies								
1	The Study of Small Industry Development	1979 ~ 1980	Studied situation and necessity of small industrial development and proposed on measures for major industry sub-sector development.						
2	The Study on Industrial Development of Chittagong Region	1993 ~ 1995	Considered industrial development plan in Chittagong area and developed special economic zone development implementation plan. Also, export processing zone is under construction by Korean private capital based on the proposals of this report.						
3	The Study on Potential Sub-Sector Growth for Export Diversification	2007 ~ 2009	Selected 2 industries, Jute products and software, out of 6 sub-sectors (food processing, Jute products, medical goods, software, metal and machinery processing, electricity and electric products) of export policy (2003-2006), and developed pilot project of the sectors and industry promotion master plan.						
Other	Studies								
1	Development Study Method for Industry Promotion Assistance in Less-Developed Countries and Low Income Countries (Project Research)	2003 ~ 2004	After situation analysis on industry development and trade investment promotion of Bangladesh and sorting out and analyzing issues of enhancement of international competitiveness of major industries, we systematically sorted out and proposed prioritized industry assistance areas and its assistance approach.						




2	Project Identification Study of Private Sector Development	2004 ~ 2005	Analyzed situation and issues of Bangladesh private sector development and reviewed PSDSP activities that are mainly conducted by the World Bank and the UK Department for International Development (DFID) in detail to propose possible assistance programmes related to PSDSP from Japan.
3	Potential for Import Substitution of Spare Parts Production for 13 Selected Sectors	2007 ~ 2008	Though study on buyers and suppliers, analyzed problems and future prospective of machinery parts in 13 sectors as import substitutes, and developed proposal for industry promotion for the parts by selecting 158 kinds of parts that can be produced in Bangladesh.
Expe	rts Dispatch		
1	Dispatch to the Board of Investment (BOI) for Investment Promotion	1993-1999	Establishment of "Japan Desk", prepared investment related materials, investment promotion to companies that visited BOI, public relations, and organized seminar.
2	Same as Above	1998-2000	Advisory and proposition on investment promotion, held investment seminar, and conducted study on investment.
3	Same as Above	2000-2002	Same as above
4	Dispatch of adviser for Two-Step Loan (TSL) business implementation	2001-2003	Studied the situation of disposal of bad debt that financial institutions have trend survey on financial reform, study of prospective companies and environment study of TSL.

Source: Prepared by the Study Team based on various materials

## 4.1.2. 4.1.2. JICA's Approach to Private Sector Development Assistance in other regions, mainly South East Asia

#### (1) Overview

Japanese ODA stems from war reparations to Asian countries and thus has been concentrated in Asia, especially East Asia, which can be observed over a period of time due to historical and geographic background (see Figure 4.2). In addition, the ODA breakdown by sector in FY2009 shows that 33.7% of ODA was implemented in "Economic Infrastructure Service", which includes Electricity, Transportation and Communication, and 29.3% was implemented in "Social Infrastructure Service", which includes Water and Sewerage, Education and Health Care. Considering that Economic Infrastructure Sector and Production Sector, amounting to approximately 41%, is assistance to the area which has great relevance to "Private Sector Development Assistance", this sector has been given a great priority.





Figure 4.2 ODA (actual) by Region (FY2009)

Source: ODA White Book of the Ministry of Foreign Affairs (FY2010) Note: Calculated based on the sum of the amount of donation and loan.



Source: ODA White Book of the Ministry of Foreign Affairs (FY2010)

(2) Planning/Advice to Industry and Trade Promotion Policy, and Export Promotion Plan Policy support in advancement and promotion of industry, investment and trade is Japan's area of specialty, which emphasized export-oriented industrial policy. As shown in the examples of Indonesia and Kenya, the strength can be observed in restructuring of export promotion policy and system, and formulation of promotion plan and action plan by specific sector. Also, as seen in case examples of Vietnam and Myanmar, there were cases of assisting transition to market economy in wide area such as finance, banking, agriculture, industrial trade, small and medium-sized enterprise and reform of state-owned enterprises, and assisting economic structure adjustment policy.



No.	Country	Project	Period	Form	Summary
1	Central and South American Countries, Asian Countries, Africa and Middle East Countries	Practical Operations of Trade and Investment Promotion	FY2002	Group	Targets middle management of investment promotion in both the government and quasi government, collected inclusive knowledge and information on trade and investment issues and also discussed each country's investment promotion policies through discussions. Aimed to contribute promotion of investment acceptance and economic and industrial promotion by export advancement of participating countries.
2	Indonesia	Follow -up Study for Supporting Industry Phase 2 (Export Promotion)	1999.07 ~ 2000.02	Dev-Study	Targeted six industries (textile and textile products, food and beverage, wood products, electricity and electric parts, automotive parts, machinery parts) and studied the environment surrounding exporting companies and the current situation of exporting companies, and then proposed on restructuring of export industry policy, improvement of export competitiveness and action plan.
3	Indonesia	Investment Promotion Policy	2001.04 ~ 2003.04 (Plan)	Long- Expert	Assumed appropriate counseling to potential investors in Japan for investment promotion as well as policy advice to Indonesia's Investment Coordinating Board (BKPM) based on demands and problems raised by Japanese investors.
4	Myanmar	Policy Assistance for Economic Structure Coordination	2000.12 ~ 2003.3	Dev-Study	Aimed to nurture environment for political reform for the democratization of the current regime, through supporting economic reform by Myanmar's current regime with intellectual exchange and human resource development. Having Mr. Konosuke ODAKA, an emeritus professor at Hitotsubashi University, as the chairman of Japan side and analysed and made policy proposals in four areas, finance and banking, ICT, agriculture and farming community. For industry trade area, currently deliberating four pillars: industrial vision development, cultivation of private companies, export promotion and foreign capital inflow.
5	Vietnam	Study for Market-Oriented Economic Reform Assistance Development Policy	Phase 1, 1995.08 ~ 1996.06 Phase 2, 1996.07 ~ 1998.03 Phase 3,1999.09 ~ 2001.03	Dev-Study	To Vietnam, which aspires transition from socialist economy to market economy, we made concrete and strategic proposal on handling various problems that come with economic transition and the subsequent economic development plan. Conducted as collaborative study between Japan and Vietnam, having Mr. Shigeru ISHIKAWA, an emeritus professor at Hitotsubashi University, as the chairman of Japan side and analysed and made policy proposals in areas of agriculture and farming community, trade industry policy, fiscal-monetary policy issues, government-owned company reform, promotion of small and medium enterprises, macroeconomic operation, handling Asian economic crisis. Especially the industry and trade subcommittee is proposing industrial development measures for long-term development strategy formulation and studying influence from free traded.
6	Bolivia	Commercialization and Trade Promotion of Craft Products	2003.03 ~ 2003.07	Short- Expert	Conducted study on needs in Asia, Europe and American market for handicrafts and mport standard, also studied production situation of handicrafts in Bolivia and formulate strategies for export promotion of Bolivian handicrafts to international markets.
7	Paraguay	Economic Development Study	1998.10 ~ 2000.12	Dev-Study	In the midst of economic environment change by inter-regional financial liberalization that came from accession of Mercosur, we investigated and analysed potential competitiveness of each industry for the sake of economic independence and development of Paraguay, proposed measures to promote economic development by export promotion of agricultural multilateralization and industrialization.
8	Kenya	Export Promotion Planning Study	1990.09 ~ 1991.09	Dev-Study	Conducted study and analysis on system, organization and industry for export promotion in Kenya and based on this, made export promotion master plan and formulated various action programmes.

Figure 4.4 Case Examples of JICA's Planning/Advice to Industry and Trade Promotion
Policy, and Export Promotion Plan

Source: JICA website

## (3) Implementation of Individual Measures

Measures for JICA's individual private sector assistance take the approach of legal systems development and capacity building of legal system enforcement and implementation. As for the maintenance of legal systems, JICA targets customs policy, competition policy, industry property right etc. in ASEAN Countries such as Malaysia, Indonesia and Vietnam, and advice drafting legal systems and maintenance of detailed rules for operation, mainly sharing experiences from Japan.

NO.	Country	Project	Period	Form	Summary
1) In	provement of Legal	Systems			
9	More than one coun	Customs Administration	2002.08 ~ 2002.10	Group	We aimed to contribute to the development of customs administration technology in participating countries though introducing customs system and technology in Japan as well as training to compare system and technology of Japan and their country, also we aimed to contribute to deepen mutual understanding from interaction among customs officers and to effectual rapprochement.
10	Malaysia	Competition Policy and Legal Systems	2000.11 ~ 2000.12	Short- Expert	Developed competitive policy and produced draft for Competition Law, which are befitted to liberalization and relaxation of regulations in Malaysian economy.
11	Indonesia	Industrial Property Right Public Administration	2001.02 ~ 2003.02	Long- Expert	Provision of direction and advice on industrial property right administration in general. (1) Provision of direction and advice on industrial property right in general. (2) Provision of direction and advice on private sector human resource development projects. (3) Provision of direction and advice on comprehensive office functions project and patent information. (4) Provision of direction and advice on JAPAN Trust Fund project of WIPO, an U.N. agency.
12	Indonesia	Assistance in Planning Relaxation of Regulations and Competitive Policy	2001.04 ~ 2003.03	Long- Expert	As competition policy is an new approach in Indonesia, made the Indonesian government recognize the importance of corporate competition law in economic recovery and advised arrangement of system for the government to tackle and maintenance of detailed rules for the operation of competition law.
13	Vietnam	Tariff Policy and Customs Administration	2001.07 ~ 2003.07 (Plan)	Long- Expert	Assist the early introduction of international standard customs procedures and smooth implementation. (support the introduction of computerization, technical cooperation for the introduction of international standard customs procedures, government decree that comes with enforcement of customs law, advice on maintenance of transmittal etc.)

## Figure 4.5 Case Examples of JICA's Legal Systems Development Assistance

Source: JICA website

For capacity building of enforcement and implementation of legal systems, JICA engages in technical transfer of customs system improvement, counter-measures for violation of intellectual property right, capacity building of legal system enforcement related to industrial property right utilization, with a focus on Indonesia and Thailand.

#### Figure 4.6 Case Examples of JICA's Capacity Building Assistance on Administrative nnooduno

	procedure								
No.	Country	Project	Period	Form	Summary				
2) C	Capacity Building in Administrative Procedure (Legal Execution/Operational Capacity Building)								
14	Indonesia	Planning Study for Customs System Improvement	1997 ~ 1999	Dev-Study	In order to improve swiftness and accuracy of Indonesia's customs operation and promote trade, designed the system for the establishment of "Customs Integrated System (CIS)" and proposed policy draft for the improvement of "Custom Systems (CSS)" as well as conducted technical transfer to persons involved in the country.				
15	Indonesia	Improvement of Customs Special Operations (Regulation Measures for Goods which Violated Intellectual Property Right)	FY2002	Short- Expert	Engaged in necessary technical transfer to Indonesia, where they don't have regulatory technique for goods with violated intellectual property right, that needs complicated legal measures, for the improvement of operation in that area.				
16	Thailand	Industrial Property Right Information Centre	1995.07 ~2000.06	Tech-PJ	Aimed for capacity improvement of usage of industrial property right, through establishment, operation, maintenance management, previous technical studies that used the system and information dissemination.				

Source: JICA website

(4) Enhancement of Competitiveness of Private Sector



No.	Country	Project	Period	Form	Summary
1) Co	operation to facilitate	and Assist Trade and Investm	ent Activities of Pri	vate Secto	r
17	More than one countries	Plant Quarantine (Insecticidal Technology of Tephritidae)	2002.09 ~ 2002.10	Group	For the trade promotions of fresh fruits of their countries, we provided Japan's latest Insecticidal Technology of Tephritidae, and eventually applied and improved the technique in with the conditions of each country to make complete insecticidal data for Tephritidae that parasitized fresh fruits.
18	More than one countries	Operation of Trade Insurance Systems	2002.09 ~ 2002.10	Group	Organized training on trade insurance system and its operation to governmental officials or related organizations of trade insurance of each country, we intended to contribute their maintenance of their trade insurance system.
19	Asian Countries	Export Trade Control Practical Operations	2002.11 ~ 2002.12	Group	Introduced legal systems, process and actual cases which are necessary in export screening for administrative officers engaged in screening affairs of security guaranteed export management, made trainees understand the necessity of the maintenance of export management systems, and had a goal to contribute to early introduction of the system in Asia.
20	Indonesia	Export Promotion (Market Analysis, Development)	2001.08 ~ 2003.08	SV	Along with technical transfer of necessary technology and knowledge for overseas market development to local staffs and export workers, Conduct training to companies, research on overseas market, analysis and development in order for Indonesian products to be able to have competitiveness in overseas market, especially Asia.
21	Indonesia	Export Bank Operation	2002.03 ~ 2004.03 ( Plan )	Long- Expert	Former expert gave advice on short-term trade finance which per se is the unique area of private commercial bank, and which has been practiced as emergency measures in Indonesia, where financial intermediary function became dysfunctional after Asian currency crisis. Current expert's service is giving advice and support on primary services of export banks including export related medium to long-term finance and bond.
22	Indonesia	Local Trade Training Centre	2002.07 ~ 2006.06 (Plan)	Tech-PJ	Indonesia Export Training Center (IETC) was established by grant aid in 1989 and "Trade Training Centre Assistance Project" (Tech-PJ) was operated from 1989 to 1993. The cooperation was in four areas; trade training, commercial Japanese language, export inspection and display training. After that, "Trade Centre Human Resource Development Plan" (Tech-PJ) was conducted and training programmes to provide mainly medium-sized Indonesian companies of necessary knowledge, experience and know-how for trading were planned. With a goal of being able to operate, we conducted 1) course planner development, 2) information provision to instructors, and 3) provision of trade-related information to the exterior.
23	Malaysia	Trade Development Corporation	1997.07 ~ 1999.06	Tech-PJ	Reorganized Malaysia Export Centre (MEXPO) to enhance and strengthen its functions and in human resource, and aimed to contribute to the strengthen export competitiveness of Malaysia by establishing organization with the following four departments: research department, information service department, exhibition and business negotiation, PR and publication department, and export promotion department.
24	Thailand	Development Plan of Waterfront Areas of Laem Chabang Port	1984.01 ~ 1985.03	Dev-Study	Developed long-term M/P and implemented F/S as short-term plan on ports, industrial estate, residence and other associated facilities including diversion of water envisaged in Laem Chabang area. Construction was done based on the M/P and F/S between 1988 and 1991.
25	Thailand	National Measurement Authority	2002.10 ~ 2004.10 ( Plan )	Tech-PJ	Intended for technical personnel development of national measurement standard organization for system establishment of measurement standard with international equivalence by maintenance of national standard in Thailand to strengthen export competitiveness of Thai industries.
26	Sri Lanka	Quality Improvement Plan of Textile Product	1996.04 ~ 2001.03	Tech-PJ	Intended to improve technical capabilities of fiber training and service centre and training centre for strengthening of competitiveness in both price and quality of fiber products, which is the biggest export industry of Sri Lanka.
27	Paraguay	Trading Business/Marketing	2002.04 ~ 2003.04	SV Group	Trade practical SV practically instructed management, theory and research on inventory, delivery, post and insurance and also carried out activities for strengthening partnership with Pro Paraguay (his/her office) with companies for export promotion of private companies. Marketing SV conducted training on information gathering, market analysis and business building necessary for export

Source: JICA website

As shown in the figure above, the trade and investment facilitation assistance is the area that Japan has numerous assistance tools. Among them are trade insurance, export finance, trade human resource development, mesurement standardization, trading business. In particular, the grant aid and technical cooperation project of trade training center in Indonesia are highly appreciated by Indonesian counterparts as effective for trade human resource development in small and medium-sized enterprises and promotion of participation to export market, and also as sound and comprehensive trade training centre.

Additionally, in private corporate management and technical assistance, JICA provides technical assistance of Japanese management techniques, productivity improvement, technical cooperation of supporting industries of molding and die technique, as well as technical cooperation of export products development in agricultural products, processed food, light industry products and handicrafts.



No.	Country	Project	Period	Form	Summary
2) C	ultivation of Active I	Private Sector			
28	Asian Countries	Asian Business Administration	2001.06 ~ 2001.07	Group	Designed to contribute to each industry's development and economic development by introducing development factors of Japanese economy and underlying Japanese management to business managers of each country.
29	Indonesia	Development Plan of Supporting Industry of Molding Technical Area	1999.04 ~ 2004.3 (Plan)	Tech-PJ	Intend to strengthen function of The Metals Industry Research and Development Center (MIDC) and promote supporting industry such as molding technology area, and to transfer technology mainly by OJT in prototype, round-training and seminars to counterpart. Also, provide direct training to local small to medium-sized molding companies.
30	Indonesia	Product Development of Processed Food	2001.10 ~ 2002.10	sv	Provided advice to IRDABI, which conducts training to development research of agro-industry and local small and medium-sized enterprises on food safety system and food standard as support for IRDABI to conduct training on food safety standard, packaging, improvement of quality to satisfy export standard.
31	Philippines	Mold Technical Improvement	1997.09 ~ 2002.08	Tech-PJ	Conducted "The Philippines Metal Molding Technical Centre Project (Tech-PJ)" to The Metals Industry Research and Development Center (MIRDC) between 1980 and 1986. At present conducted cooperation for MIDRC to be able to provide training and technical assistance on plastic mold to molding engineers.
32	Thailand	Productivity Improvement	1994.02 ~ 1999.02 (f/u1999.02 ~ 2001.02)	Tech-PJ	For trainers development to widespread productivity movement in all over Thailand, conducted technical transfer to Foundation of Thailand Productivity institute (FTPI), the counterpart, in three areas: "productivity consulting technology", "human resource development and employer- employee relationship" and "widespread promotion". Since 1999, we follow up in the area of "productivity consulting technology" and "human resource development and employer-employee relationship".
33	Kenya	Export Product Development	2000.11 ~ 2002.11	Long- Expert	In addition to existing traditional agricultural products and light industry products, trained and advised on development and quality improvement of new export products of handicrafts, which have higher values.

Figure 4.8 Case Examples of JICA's Private Company Management and Technical Assistance

Source: JICA website

(5) Maintenance of Basic Conditions of Trade and Investment Promotion

In Maintenance support of basis conditions for the promotion of trade and investment, JICA assists in four areas: 1) maintenance of legal systems for commercial transactions, 2) development of economic infrastructure, 3) improvement of business environment in domestic industry, and 4) human resource development.

The representative project of legal system maintenance for commercial trades, as part of market economic reform assistance, includes drafting civil law, code of civil procedure, commercial law, company law, and policy dialogue with attorney general, holding seminars and workshops, accepting trainees in Vietnam and Cambodia.

As for development of economic infrastructure, JICA has conducted study on development of hard infrastructure including power plant, energy and transportation and assist in the maintenance of soft infrastructure including production statistics, industrial standardization, measurement, inspection, quality management and intellectual property right.

Major assisting project in improvement of business environment in domestic industry is the development of exhaustive master plan on SME promotion policy, SME finance, supporting industry development and export promotion in Vietnam, in the midst of transfer to market economy, and Thailand and Indonesia, after Asian financial crisis.

In industry human resource development, JICA provides management improvement of higher education administration, Japanese language education and management practical education through Japan Human Resource Development Centre, improvement of curriculum of vocational training and technical advice such as capacity building of trainers to vocational training technical schools.



## Figure 4.9 Case Examples of JICA's Assistance on Development of Basic Conditions for **Trade and Investment promotion**

No.	Country	Project	Period	Form	Summary
(1) lr	mprovement of Legal	Systems on Commercial Tra	nsaction		
41	Vietnam	Development of Legal Systems Assistance	1996 ~ 2003	Long- Expert, Training (Tech-PJ)	Activities include organizing dialogues with attorney general, workshops, seminars and accepting trainees on various laws such as civil and commercial law, company law, ASEAN investment law, civil procedure code, civil execution law, maritime law, antimonopoly law, company law and security exchange law, intellectual property right.
42	Cambodia	Development of Legal Systems Assistance	1999 ~ 2003	Long- Expert, Training (Tech-PJ)	Draft writing of civil law and civil procedure code, dialogue with attorney general, organizing related seminars and workshops, acceptance of trainees in justice administration, prosecution operation, judicature and lawyer associations activities.
(2) Ir	mprovement of Econo	mic Infrastructure			
43	Philippines	Planning Study for Productivity Statistics Development	2000.08 ~ 2002.03	Dev-Study	Carried our production dynamics statistics study that contributes to economic and industrial policy planning and corporate management in the Philippines and developed each index based on them.
44	Thailand	Expansion Plan of Metropolitan Area	1994 ~ 1995	Dev-Study	Developed improvement planning of electricity distribution system in Bangkok metropolitan district. Followed by the development study, the project was undertaken by yen loan.
45	Vietnam	Master Plan Study for Industrial Standardization, Measurement, Inspections and Quality Control	1997.02 ~ 1998.02	Dev-Study	Conducted maintenance of system overall such as standardization in Vietnam and developed M/P including organization reform of the implementing agency, proposal on technical infrastructure development of metric and examination, with the goal of Vietnamese system can obtain international credibility, intended to penetrate standardization and quality management into industries.
46	El Salvador	Planning Study for Reactivation of Port of La Union Province	1997 ~ 1998	Dev-Study	F/S study on port facilities of La Union Province, whose ocean wave condition is gentle and which is relatively deep water. The project was realized by yen loan and it has become the first full-scale container port in El Salvador.
(3) Ir	nprovement of Busine	ess Environment of Domestic	Industry		
47	Indonesia	Assistance for Small and Medium-Sized Enterprise Promotion	1999.12 ~ 2000.07	Short- Expert	Designed to contribute to the recovery of Asian financial crisis of 1997, Professor Shujiro Urata of Department of Social Science in Waseda University as a senior-level advisor, made proposal to the Minister of Economic Coordination on small and medium-sized enterprise finance, human resource development and supporting industry and export promotion.
48	Thailand	Assistance for Small and Medium-Sized Enterprise Promotion	1999.01 ~ 1999.06	Short- Expert	For the recovery of Thai economy after the financial crisis, dispatched former director general of the Ministry of International Trade and Industry as policy advisor to Minister of Finance and Minister of Industry, to make proposal on policy in general including master plan for small and medium- sized enterprise promotion and small and medium-sized enterprise finance.
49	Vietnam	Planning Study of Small and Medium-Sized Enterprise Promotion	1999.03 ~ 1999.12	Dev-Study	Developed exhaustive master plan for small and medium-sized manufacturing in transitional economic countries without basic policy or organization related to the promotion of small and medium-sized enterprises.
(4) ⊦	luman Resource Deve	elopment			
50	Indonesia	Higher Education Administration	2002.10 ~ 2004.10	Tech-PJ	Designed to realize operation improvement of Indonesian higher education institutes, activation of education research, effective implementation of supporting business and appropriate policy making, operation improvement study research of higher education institutions and liaison and coordination with related institutions of Japan are conducted.
51	Uzbekistan	Japan Human Resource Development Centre	2001.08 ~	Expert	Management operation education to activate private corporate activities and courses for corporate executives and government officials on policy making are conducted. Japanese language education is also provided.
52	Jordan	Vocational Training Technical Institute	1997.10 ~ 2002.09	Tech-PJ	Establish operation and management system such as implementation system and training courses of vocational training technical institute and maintain necessary facility, equipment and utilities for training and so best suited training course is implemented, then abilities of trainers of the institute would increase and develop quality engineers.

Source: JICA website



Abbrev. Of Form	Form
Tech-PJ	Technical Cooperative Project
Short-Expert	Short-Term Experts Dispatch
Long-Expert	Long-Term Experts Dispatch
3rd-Country	Third Countries Training
JOCV	Japan Overseas Cooperation Volunteers
Indivi-Train	Individual General Training
Reg-Spec	Regional Special Training
Dev-Study	Development Study
SV	Senior Volunteers
Grass-Roots	Grass-Roots Technical Cooperation
Grant	Grant Aid
Group	Group Training
Train-Country	Special Training by Country

#### Figure 4.10 Abbreviations of assistance forms

Source: JICA website

#### 4.2 Cooperation Activities for Private Sector by Other Japanese Government-related **Organizations**

## 4.2.1 Assistance Activities by Japan External Trade Organization, JETRO

(6) Overview of JETRO's Activity

JETRO works to contribute development of Japanese economy and society through promoting trade, investment, and study developing countries. Major activities are as follows;

1) Assisting Japanese firms expand overseas : JETRO offers business support to Japanese firms, especially small and medium-sized enterprises, such as development of overseas market, support in countries where they are doing business, and providing business information overseas. Particularly, JETRO focuses on (1) Machinery, Machinery parts, Electronic parts, and Environmental Energy, (2) Agricultural products, Food (3) Creative Industry, (4) Promoting export in the field of Infrastructure system, and sending information of 'Japan Brand' abroad.

2) Promoting Investment to Japan: JETRO is doing activities to encourage foreign firms to do business in Japan, and to facilitate to establish their office in Japan. Especially, the activities are focused on newly-establishment of the Asia Head Quarters, Research and Development Center, and also growing industries such as environment, energy efficiency, health, and welfare, and having effect on employment. For instance, JETRO supports foreign companies to resolve their problems such as various kinds of procedures, regulations, business issues, and provide space for office and conference, organizing event and public relations to promote investment to Japan in Japan and overseas, support business matching between companies in Japan and overseas, and arrangement for visiting potential countries to invest in.

#### 3) Study and research activities

(7) Metro's Assistance Activities for Developing Countries

Under international agreement and requirement of partner countries or Japanese government, JETRO is aiming at assistance through expanding trade by business development in for developing countries. Particularly, having Japanese market inspection parties and business missions, and support to participating to exhibitions for developing countries. On the other hand, they are doing import verification projects, sending experts, sending business missions, and support business activities on site.

	Figure 4.11 D	usiness Developing	1 10ject (2011)	
	Export industries	Institution	Supporting	BOP business
	development	development	industries	assistance
	assistance	assistance	development	
	(including One	(private sector	assistance	
	village One	etc)		
	product)	0.00.)		
TICAD	• South and West			
TICAD	• South and west			
follow up	part of Africa,			
(Africa)	Natural products			
	(Spice, Nuts,			
	other food etc.)			
	industry			
	development			
	assistance			
	project			
	• South part of			
	Africa natural			
	Allica, llatural			
	products			
	(Cosmetics)			
	industry			
	development			
	assistance			
	project			
	• South part of			
	Africa, Natural			
	products			
	development			
	assistance			
	project			
	• Fast part of			
	Africa Coffee			
	Annea, Conee			
	development			
	assistance			
	project			
	• Egypt, Glass			
	products			
	industry			
	development			
	assistance			
	project			
	• Develop-			
	and-import			
	formula			
	verification			
	project			
	- One village,			
	One product,			
	exhibition in an			
	airport			
	• FOODEX			
Project under	• Indonesia, One	<ul> <li>Distribution</li> </ul>	• Indonesia,	
international	village, One	function	Automobile	
agreement	product	enhancement of	industry human	
(including EPA)	assistance	Thai products	resource	

Figure 4 11 Rusiness Developing Project (2011)





				r
(Asia)	project	(Food, Thai	development	
	• The Pacific	world kitchen)	assistance	
*JETRO is	industrial	• Myanmar,	project	
specified as	development	industrial	<ul> <li>Indonesia Metal</li> </ul>	
trade and	assistance	development	molding	
investment	project	assistance	industry	
promoting	(artifacts)	project (Food)	development	
organization in	• Myanmar,	• ASEAN and	assistance	
EPA agreement	industrial	India,	project	
in some cases.	development	facilitating	<ul> <li>Vietnam,</li> </ul>	
	assistance	logistics	supporting	
	project (sewing	assistance	industry	
	business)	project	development	
		(Terminate in	assistance	
		2010)	project	
		<ul> <li>Indonesia</li> </ul>		
		industrial		
		development		
		assistance		
		project (chamber		
		of commerce)		
Required by	• Egypt, Glass		•	
partner	products			
countries'	industry			
government	development			
(Asia, Middle	assistance			
East, Central	project			
and South	• Peru, One			
America)	village, One			
	product			
	industrial			
	development			
	assistance			
	project			
	• Jordan,			
	Palestine			
	potential export			
	products for			
	Japan			
	acvelopinent			
	assistance			
	• Mongolia			
	industrial			
	development			
	assistance			
	project			
	(Cashmere)			
	• Service trade			
	promotion			
	assistance			
	project			
	(Wellness)			
	• Laos, industrial			
	development			
	assistance			



	<ul> <li>project (Textile)</li> <li>Cambodia, industrial development assistance project</li> <li>One village, One product exhibition in an airport</li> <li>Exhibition by countries</li> </ul>		
Required by			• BOP business
government			building
(India, East			assistance
Africa)			project

JETRO is helping developing countries for their environment and energy efficiency issues also. So far JETRO's assistance have worked out in the field of environmental preservation, pollution control, and energy efficiency in Asia, such as (1) Introduction of the system adopted Japanese 'Pollution Control Manger' system. (Thailand, Indonesia), (2) Assistance for building LCA toward building a recycling system (Thailand, Malaysia). Not only in Asia, but also in other area, JETRO organizes seminars for energy-intensive industries to aim at transfer Japan's energy efficiency technology, and diagnosis of energy efficiency and guidance for factories' operational efficiency improvement.

Moreover, JETRO is supporting the Pre-Feasibility Study for yen-loan projects and infrastructure development projects with private sector involvement in order to deal with development of investment environment such as infrastructure and global environmental problem in developing countries.

No.	Project	Country
1	Indonesia, Study for ETC introduction capability in Jakarta	Indonesia
2	Indonesia, Study for development of smart community in neighboring city	Indonesia
	of Jakarta	
3	Indonesia, Study for introduction of Jakarta – Bandung high-speed railway	Indonesia
4	Cambodia, Study for building smart grid	Cambodia
5	Cambodia, Study for introduction of symbiotic smart community with	Cambodia
	environment in Phnom Penh	
6	Panama Feasibility study for Route 3 project in Panama city	Danama
-	runania, reasoning study for reduce o project in runania eng	Fallallia
7	Malaysia, Feasibility study for Waste Power Generation and Heat supply	Malaysia
7	Malaysia, Feasibility study for Waste Power Generation and Heat supply business	Malaysia
7 8	Malaysia, Feasibility study for Waste Power Generation and Heat supply business Myanmar, Baseline study of water and sewage improvement in Yangon	Malaysia Myanmar
7 8 9	Malaysia, Feasibility study for Waste Power Generation and Heat supply business Myanmar, Baseline study of water and sewage improvement in Yangon Myanmar, Study for rehabilitation project on electric substation equipment	Malaysia Myanmar Myanmar
7 8 9	Malaysia, Feasibility study for Waste Power Generation and Heat supply business Myanmar, Baseline study of water and sewage improvement in Yangon Myanmar, Study for rehabilitation project on electric substation equipment in Yangon	Malaysia Myanmar Myanmar
7 8 9 10	Malaysia, Feasibility study for Waste Power Generation and Heat supply business Myanmar, Baseline study of water and sewage improvement in Yangon Myanmar, Study for rehabilitation project on electric substation equipment in Yangon Morocco, Study for enhancement of transportation capacity for Mineral	Malaysia Myanmar Myanmar Morocco

Figure 4.12	Infrastructure and System export promotion study project - Yen-loan and
	Infrastructure projects with private sector involvement (2011)

(8) Latest project related to Bangladesh

1) Develop-and-import formula Verification Project

JETRO have put out a call for develop-and-import formula projects of developing countries' products and implemented the projects to verify that developing countries enter into Japanese market by providing indirect support such as guidance in those countries, import samples,



development of sales channels, and public relations since 2007. Some projects are accepted in Bangladesh, which are natural soap and cultivation of bean sprout's seeds in 2010.

	Tigure 4.15 Develop and import formula vermeation project
Objective	$(\mathcal{P})$ Import and distribution from developing countries' products to Japan
	( <b>1</b> )Contribution to local society through guidance of products' development
Countries	Least developed countries, particularly Africa
Enterprise,	Japanese private company, foundation, incorporated association
Organization	
Period	In principle, one to two years
Support	1. Cost burden, 2. Provision of information

TP 4.10	D I I'	4.0 1	• • • •	• 4
Figure 4 13	Develon-and-in	nnort tormula	verification	nrolect
I Igui C Tilo	Develop and m	mport rormuna	vermeation	project

2) "Investment mission to Bangladesh and Myanmar" organized by JETRO, February 27th, -March 3rd, 2012

39 medium and small sized companies in manufacturing sector joined the mission, which was the biggest Japanese inspection mission ever.

## 4.2.2 Assistance Activities by The overseas Human Resources and Industry Development Association, HIDA

#### (1) Overview of HIDA's activity

HIDA works for promoting industrial globalization, trade and investment promotion, international economic cooperation, and aims at contribution to economic growth and friendly relationship of Japan and countries overseas. The Association for Overseas Technical Scholarship, AOTS, and Japan Overseas Development Corporation, JODC merged into HIDA in March 2012, and currently training program inside and outside of Japan are provided by AOTS division and experts are sent from Japan by JODC division.

#### 1) **AOTS** Division

Training activities consists of three pillars as follows;

Government Subsidized Activities

One of major government subsidized projects is a training program for cultivating industrial and economic human resources, which is conducted by inviting engineers and managers to Japan, or sending instructors to overseas. This program focuses on production activity by private enterprises in developing countries and realizes transfer of technical skills required in developing countries through cultivating industrial human resources, and subsidy from ODA is applied to part of its cost.

In Japan, practical training is conducted for engineers and managers invited from developing countries to learn production technology, and managerial method required for manage enterprises and plants. When it is difficult to invite to Japan because of the some local situation, instructors are sent from Japan and transfer a certain technical skills to many participants at one time.

## **Entrusted Training Activities**

AOTS Division undertakes entrustment project from the government and public organization. One of the major projects is the cultivation of industrial property human resources assistance project (intellectual property right). Japan Patent Office originally plans this project aiming at developing the foundation of human resources for intellectual property right in Asia and the Pacific area and promoting settlement of this system at local site and commissioned to Japan Institute for Promoting Invention and Innovation (JIII), and the intellectual property right training program have been organized every year since 1996 by JIII and HIDA who is decommissioned by JIII.

Another major project is a trade and investment facilitation assistance project commissioned by Ministry of Economy, Trade and Industry in 2011. Four verification projects are implemented by Japanese private enterprises and public interest foundations which have technical skill and know-how with an objective of contribution to develop economic system facilitating trade and investment of developing countries.



	i igure ni i i i ude una investment i demtadon i issistance i roject in <b>2</b> 011					
1	Demonstration experiment for promoting probe technology export	Vietnam				
2	Verification of development and broad use of Geographic Information	Congo				
	System in Congo	-				
3	e-Money business platform utilizing smart center	Bangladesh				
4	Demonstration experiment of certification system of solar power generation	Malaysia				
	device					

Figure 4.14 Trade and Investment Facilitation Assistance Project in 2011

Research project of overseas industrial engineer training program in Japan was conducted in 2010, which was commissioned by Japan Society for the Promotion of Machine Industry aiming at developing machinery industry. There were some participants from Bangladesh to one of these programs which was a manager training program in metal molding industry for establishment and operation of association of metal molding industry in 2010. HIDA was commissioned by Ministry of Economy, Trade and Industry in 2009-2010 and conducted Asia human resource fund common curriculum management center project and provided training for students from Asian countries.

#### New Global Cooperation Activities

AOTS introduces Japanese technology and system such as environment and new energy and provides opportunities of business networking events between developing countries and Japan via seminar. It also conducted programs for support globalization of Japanese people.

As one of the activities in Bangladesh, AOTS worked together with Techno Research Institute was commissioned to conduct two of demonstration experiments projects, a demonstration experiment of computerization of microcredit for building social foundation and a demonstration experiment of capability of water supply market with simple water purifier for BOP in 2010. Besides AOTS has conducted training of production management and quality control in garment industry in Bangladesh, and finally their work finally paid off and Japanese major garment manufacturing company tied up with Grameen Bank and announced the establishment of a joint corporation for design, production and distribution to local market in July 2010. It is expected that training program stimulates direct investment from Japan and accelerates transfer of broader technology.

Furthermore, AOTS alumni societies have established "World Network of Friendship (WNF) " and promoted cooperation activities around the world. It is designed for developing countries to breakaway from the position as aid recipients, and to promote cultivating human resources and economic development by developing countries' cooperation and their own effort. WNF fund for this activities are dominated by each alumni and person who agreed with the objectives. Bangladesh alumni association held "Quality control management program for pharmaceutical companies" for Nepal alumni association, "Kaizen and 5S" for India alumni association, "Visit to Deming Prize winning company in India" for Bangladesh alumni association and also participated programs organized by other alumni associations such as "Africa and Asia entrepreneur tainting program" held by Malaysia alumni association, "TQM trainers' training program" held by Nepal alumni association.

## 2) JODC Division

#### Expert Dispatch Activity

a) Type of ODA (Expert dispatch activity for improvement of industrial technology): Experts are sent to enterprises and private sector organizations in developing countries for the purpose of supporting developing countries to cultivate economic and industrial human resources and Japanese companies to facilitate their business, and improvement of management and technical skills. Industries are selected which are expected to contribute to the industrial growth of the countries, such as manufacturing industries and supporting and linked industries particularly automobile parts, electric components, metal molding, production tools and machinery. Besides the manufacturing industries,



IT and service industries are selected for this activity.

b) Type of EPA (Expert dispatch activity for promotion of economic partnership): Experts are sent to companies which have expanded their business overseas and have been expected to improve technical foundation and cultivating supporting industries for countries which under economic partnership agreement and Japan. Other Activity

a) Activity as a secretariat of AEM-METI Economic and Industrial cooperation committee (AMEICC): Secretariat consists of economic ministers' of Japan and ASEAN countries, and works for AMEICC. AMEICC discuss specific economic and industrial cooperation in ASEAN area.

b) Overseas local corporation internship program: JODC provides students with opportunities to work overseas, and provides companies with opportunities to hire highly capable students for global business and prepared to companies' needs.

c) Trade and investment facilitation assistance activity (Expert dispatch activity): For the purpose of developing environment for activating trade and investment in developing countries especially East Asia, JODC send experts to local industrial associations and broad our economic system, technology and know-how based on economic development in Japan.

d) Expanding the base of industrial human resources assistance activity: For the purpose of expanding the base of global human resources willing to work for Japanese companies, JODC cooperates with local higher education institutions and familiarize Japanese companies' culture and business Japanese language, and matching activity between local students and Japanese companies. So far, this activity has been conducted for Thai and Vietnamese students.

#### 4.3 Cooperation Activities on Private Sector Development by Other Donors **4.3.1 Project Formation by Donor Collaboration**

(1) Flow of Private Sector Working Group Formation in Local Consultative Group (LCG)

More than 50 donors including multilateral and bilateral aid agencies and NGOs provide assistance to Bangladesh. In Bangladesh, Local Consultative Group (LCG), whose members are Economic Relation Department (ERD) of the Ministry of Finance, Bangladesh, 39 bilateral donors and multilateral donors such as the World Bank (WB), International Monetary Fund (IMF), Asian Development Bank, and the United Nations, hold meetings periodically to promote assistance coordination among donors. This meeting provides opportunities to coordinate assistance among donors and information sharing at practical officer level. The LCG general meeting has ERD director general and WB country director as co-chairs and discusses topics including national development strategy and status of the achievement of Millennium Development Goals (MDGs).

In Addition, following 18 working groups by theme are run to deepen dialogue and cooperation for specific sectors and by development issues:

- 1) Agriculture
- 2) Food Security & Rural Development;
- 3) Water Management;
- 4) Water Supply and Sanitation;
- 5) Education;
- 6) Health Nutrition and Population;
- 7) Energy;
- 8) Transport and Communication;
- 9) Urban;
- 10) Poverty;
- 11) Gender;
- 12) Governance;





- 13) Aid Effectiveness;
- 14) Private Sector Development and Trade;
- 15) Climate Change & Environment;
- 16) ICT Digital Bangladesh;
- 17) Macro-economic;
- 18) Disaster & Emergency Relief.

Above all, A.T.M. Murtozaa Reza Chowdhury of the Ministry of Commercial and Rubayat Jesmin of European Union (EU) take up the chairs in Private Sector Development and Trade working group at the present time of January 2012. According to the materials of the working group⁸, items to monitor private sector development area of Poverty Reduction Strategic Paper (PRSP) are the following 8 items:

- 1) Private Sector Development
- 2) Small and Medium Enterprises
- 3) Infrastructural Development
- 4) Improving Knowledge Base: Education, Training, Research etc.
- 5) Improvement of Governance including Civil Services Reforms
- 6) Utility Services Development including Safe Water Supply/Urban Development
- 7) Environment & Tackling Climate Change for Sustainable Development
- 8) Technology Policy including ICT and Bio-Technology

(2) Private Sector Development Donor Mapping

In private sector development assistance area of Bangladesh, comprehensive cooperative programme"Private Sector Development Support Project (PSDSP)" has been prepared by donor cooperation since 2004, and with DFID and WB's initiative and having regulation reform for private sector development, EZ development and capacity building of governmental organizations as major issues, concrete cooperation was initiated with a parallel issue for cooperation, sub-sector assistance and trade promotion.

Followed by the PSDSP, Bangladesh Investment Climate Fund (BICF), which is financed by DFID and EU and managed by IFC, is specialized for regulatory reform and EZ development. Also, in market facilitation using Business Development Service (BDS), Katalyst has been central, which DFID, SDC and CIDA have been implementing.

Moreover, in trade, there is Better Work and Standard Programme (BEST) which intends to improve quality and expand trade to EU market with initiatives from EU, UNIDO, NORAD and GTZ; in industry human resource development, there is Technical and Vocational Education and Training (TVET) which ILO and EU intends to establish technical vocational education training system to match the needs of modern industry.

Project	Project Objective	
Bangladesh Investment Climate Fund (BICF)	Relaxation of regulations of private sector, maintenance of legal systems of special EZ	DFID, EU, IFC
Katalyst	Improve competitiveness of small to medium-sized companies in selected sectors through improving market access, management and technical skills, quality control and production method.	DFID, SDC, CIDA

Figure 4.15 Major Private Sector Development On-Going Projects by Multi-Donors

³ "Donor Interventions That Contribute Towards PRSP Strategic Goals"

Better Work and Standard Programme (BEST)	EU, UNIDO, NORAD, GTZ	
Post Literacy and Continuing Education(PLCE)II	Focus on training of employment and employment possibility skill in the framework of literacy rate and informal education in response to demand of the local community.	SDC/ ADB/ DFID/ GoB
South Asia Enterprise Development Facility (SEDF)	Assistance in small to medium-sized financial organizations, access improvement to business service and business environment improvement in South Asian region (Bangladesh, Bhutan, North East India, Maldives, Nepal, Sri Lanka), with special focus on agriculture, RMG, light industry and IT sector.	IFC, DFID, NORAD
Technical and Vocational Education and Training (TVET)	Establish market-oriented and flexible technical vocational education training system to provide skills that match the needs from modern industry and to respond the needs of underprivileged young working population.	ILO/ EU

Source: Prepared by the Study Team based on "Private Sector Development Donor Mapping 2009" of IFC

#### 4.3.2 Approach of Private Sector Development Assistance Programme of Main Donors. (1) The World Bank

1) Major Private Sector Development Projects of the World Bank in Bangladesh

According to on-site interview and the donor mapping documents, WB's major projects in private sector development are as follows:

## Private Sector Development Support Project (PSDSP)

Followed by EPZ experience in Bangladesh and having capacity building of regulatory reform, EZ development and government institution related to private sector development as priority issues, supported in establishment of economic infrastructure needed for promotion of economic development driven by private manufacturing and service industry. Also a PSDSP2 construction project of high-technology Park of 263 acres in Gazipur and Kaliakair area, which is 40km in North West of Dakha, is in process and as of end of January 2012; it is in the process of international bidding of project developer with PPP scheme. This high-technology Park will be approved and developed as EZ.

## Investment Climate Assessment

Analyzed obstructive factors of business based on questionnaire survey from more than 2,000 private enterprises. The survey was conducted in 2002 and 2007 and the data of the one in 2011 has been analyzed.

## Enterprise Growth and Bank Modernization

The area of government institutions capacity building targets BEPZA, BOI, BSCIC and PC and maintenance of ICT infrastructure (corporate database), investment promotion seminar and employer-employee relationship counseling have been provided and closed in June 2009. In finance area, small-sized fund was established in the central bank, Bangladesh Bank, in collaboration with ADB for expansion of small and medium-sized finance.

**Investment Promotion and Financing Facility** 

Facility for long-term loan sublease to financial institution that participates in infrastructure project developed by PPP.

Bangladesh Telecom Technical Assistance



Mitsubishi UFJ Research and Consulting



World Business Associates Co., Ltd.

Through capacity building in policy, regulatory reform and organization, this technical cooperation is designed to improve performance of communication sector in Bangladesh.

2) Division of Rules of WB and IFC in Private Sector Development

- · As for loans, WB targets public institutions and IFC targets private enterprises in private sector development. (WB mainly engages in infrastructure loan, two-step loan for small and medium-sized companies)
- Therefore, as for EZ, if the development body is purely official institution, it basically become under WB, and if they are PPP or private sector, they go under IFC. However, even if private sector is the main developer, if it has highly public nature and has low profitability and thus it cannot be developed in private sector will be under WB loan, such as surrounding infrastructure.
- WB technical cooperation is also mainly capacity building of official institutions.
- IFC technical cooperation targets both the government and private sector.
- As for EZ of this time, IFC takes the part in law maintenance and enticement of investors.

(2) IFC

1) Overview of Private Sector Development Projects of IFC in Bangladesh (the following is base on on-site interviews)

Roughly, they are 1) Investment Service and 2) Advisory Service. The latter is technical assistance (TA). The former is the actual investment service to high potential companies and the latter further consists of four: a) Access to Finance, b)PPP, c)Sustainable Business Advisory and d)Investment Climate. South Asia Enterprise Development Fund (SEDF) covers a) to c) and Bangladesh Investment Climate Fund (BICF) covers only d). BICF provides advice to legislative of EZ. IFC has approach from both sides: sectoral and cross-sectional business environment.

2) Situation of EZ

- As for EZ, IFC has provided cooperation since 2007 and "Economic Zone Act" was enacted in 2010. At present this act's details such as concrete incentives is expected to be published in March 2012.
- Although Bangladeshi government has an intention to make EZ development by PPP, they expects Japanese general trading companies to participate in PPP, because they have extensive experience of industrial estate development in South East Asia.
- 3) Agro-Business
- BICF conducts regulatory review to find hinderance for investment by sector and provides proposal for legal development and simplification of problematic regulations. As for agro-products including juice, mangoes, pineapples, potatoes, dairy goods, commonly has problems in laws such as 1) cold chain and cold storage warehouse and 2) license for quality standardization and products approval.
- In the future, BICF will not just analyze agro but other thurst industries such as light engineering, shoes & leather, pharmaceutical products, ship building, ICT & software, home textile, toiletry in series.

## (3) ADB

1) Major Private Sector Development Projects of ADB in Bangladesh According to on-site interview and the donor mapping documents, ADB concentrates on three areas: infrastructure development, SME finance and PPP

#### SME Sector Development Project

Facility to improve financial access by SMEs, especially small-sized enterprises which are commonly called "missing middle",

- Rural Infrastructure Development Project
- Facility to develop road infrastructure, markets and local assembly house in rural area. Power Sector Development

Loan to expand supply capacity of Bangladesh power distribution network companies.

**PPP** Technical Assistance





Support for PPP policy and strategy making and financial and technical assistance to office management.

Post Literacy and Continuing Education (PLCE)II Focused on skill training for employment and potential employment in the framework of improving literacy rate and informal education to match the demand in local community.

2) Characteristics of ADB approach

- Until now ADB has not directly assisted private sector, but it has been indirectly assisting private sector development through support to public sector.
- Bangladesh normal interest rate is as high as over 20%, which makes difficult for SMEs to get necessary fund. Thus ADB supports SMEs by providing two step loans from ADB Fund (USD 66 million) through the central bank and commercial banks so that the necessary fund can flow into SMEs of textile and pharmaceutical industry. Currently it is conducting monitoring the distribution of loans by the participating banks.
- PPP operation provides PPP policy and strategy planning support and technical assistance. Specific example is support for technical training in Dhaka. The support is conducted from the view points of how to improve policy measures that would trigger industrial activation.
- In the future, the linkage between public sector and private sector support will become more critical. For instance, government policy planning support (by ADB) and business environment improvement support (by IFC and BICF) should be syncronized for infrastructure development (including expansion of transportation routes of roads and ports), which will be the key to industrial development.

## (4) EU

1) Overview of Private Sector Development Projects of EU in Bangladesh (the following is based on on-site interviews and the donor mapping documents)

- In principle EU's projects center on capacity building in trading and its independent flagship programmes such as: 1)Integrated Support to Poverty and Inequality Reduction through Enterprise Development (INSPIRED), 2)Better Work and Standard Programme (BEST), 3)Technical and Vocational Education and Training (TVET) Reform and 4)Trade Policy Support Programme (TPSP)
- Main collaboration project with other donors is Bangladesh Investment Climate Fund (BICF) with budget of  $\notin$  43.9 million. EU provides  $\notin$  5.8 million. Other participating donor is DFID and implemented by IFC.

2) Overview of INSPIRED

- Budget: €19.7 million (EU's contribution: €19 million)
- Implementing Organization: Bangladesh government
- Programme Period: At present in final stage of project making
- Programme Objective: to reduce poverty and inequality of Bangladesh by supporting SMEs.
- Programme Contents: •
  - Maintenance of business environment of SMEs (counterparts are SME _ Foundation and BSCIC)
  - Strengthening of SME competitiveness through grant aid by Business _ Intermediate Organization (BIO). (counterparts are BIO and SME cluster)
  - Improvement of financial access of SMEs (counterparts are the Central Bank, Bangladesh Institute of Bank Management and Bangladesh Bank Training Academy)

Although the above programme has been committed, it has not initiated yet and currently in the process of considering specific activities.

3) Overview of BEST

- Budget: €21.9 million (€16.9 million is contributed by EU, other donors include UNIDO, Norwegian government and German government)
- Implementing Organization: UNIDO, Norwegian government and GTZ
  - Programme Period: December 2010 December 2014 (4 years). This programme is

conducted with taking over the results of Bangladesh Quality Support Programme (BQSP), which was implemented from 2005 until 2010.

- Programme Objective: to contribute economic development and poverty reduction of Bangladesh through quality improvement of fishery products, fibre and textile, and expansion of export to the world market.
- Programme Contents:
  - Better Quality Infrastructure (BOI): Strengthening of infrastructure on _ national-level quality standard evaluation to fuse together to international quality infrastructure, through protection of consumers by improving product safety and quality and strengthening product competitiveness of Bangladesh to expand export to the world market.
  - Better Fisheries Quality (BFQ): to strengthen national quality infrastructure of fishery products and fishery processed products, especially frozen shrimps, to increase competitiveness to expand export to the world market mainly in EU market, by improving safety and quality standard of export market. Specific activities include establishment of quality standard of the Agency of Fishery to improve inspection capability and provide education in fishery products traceability, i.e. production record management, and improve research institution facility for bacteria inspection.
  - Better Work in Textile and Garments (BWTG): to increase competitiveness of fibre and RMG industry and improve its working condition and ultimately expand the industry to lead to better employment opportunities. Specific activities include capacity building to 1) Textile Training Institute, 2) Bangladesh Institute of Fashion Technology (BIFT) and 3) Textile Engineering College, and also enlightening activities to deepen understanding of working law.

4) Overview of Technical Vocational Education Training (TVET)

- Budget: €15 millio (€14 million is contributed by EU, another donor is ILO)
- Implementing Organization: ILO and the Directorate of Technical Education, the Ministry of Education
- Programme Period: December 2007 December 2012 (5 years)
- Programme Objective: to establish market-oriented and flexible Technical Vocational Education Training to match needs of modern industry and of unprivileged young working population.
- Programme Contents:
  - Review of TVET policy, system and law
  - Improvement of flexibility, quality and relevance of TVET
  - Strengthening of TVET organization through skill improvement of knowledge and skill of managers and teachers
  - Improvement of access by unprivileged group of people to TVET _

5) Overview of Trade Policy Support Programme (TPSP)

- Budget: €6.7 million (€6 million is contributed by EU, and the rest from the Ministry of Commerce, EPB, Bangladesh Foreign Trade Institute (BFTI))
- Implementing Organization: Ministry of Commerce
- Programme Period: June 2011 to June 2015 (4 years) •
- Programme Objective: to support establishment of consistent trade policy through capacity building of Bangladeshi major trade-related institutions.
- Programme Contents:
  - Capacity building on trade policy making of the Ministry of Commerce
  - Improvement of support capability of BFTI trade policy research and advocacy _
  - Development support of GSP-certified on-line application and approval system from export _ companies to EPB.

(5) Department for International Development (DFID), UK

Bangladesh is the largest recipient country for DFID in Asia. Their budget has increased to approximately to £100 million in the last 5 years. As far as private sector development programme



is concerned, DFID aims to support enabling business environment and small and medium enterprise development as well as generating employment for the poor who are represented by women.

The main DFID's private sector development approach is as mentioned as follows:

- Infrastructure development: a.
- b. Improvement of market access:
- Improvement of financial access; c.
- d. Improvement of workers' skills; and
- Improvement of regulatory environment. e.

1) Katalyst II (£11m from DFID; 2008 - 2013). A multi-donor Making Markets Work for the Poor (M4P) programme that improves productivity and competitiveness of small farmers and enterprises. In five years, Katalyst has contributed to generating 183,000 full-time equivalent jobs, by increasing enterprise competitiveness in 17 agricultural and non-agricultural sectors.

2) Prosper (Promoting Financial Services for Poverty Reduction): (£ 40m; 2007 - 2014). An ambitious programme that delivers microfinance services at scale for the ultra poor; supports a new Microfinance Regulatory Authority; and promotes knowledge development and dissemination, through the Institute of Microfinance. An independent impact study shows that households using microfinance as part of this ultra poor programme increase their income by 20% to 35%, compared to other similar households.

3) RISE (Regulartory & Investment Systems Improvement for Enterprise Growth Programme): (£ 40m; 2007 - 2014). Through the Bangladesh Investment Climate Facility, DFID supports Bangladesh to improve its investment climate in areas such as business registration, taxation, and commercial justice. Results have been wide ranging, including reduction in number of days to register a business and clear goods at a key customs house. DFID also supports IFC's South Asia Enterprise Development Facility to promote SME finance and encourage the private sector to provide innovative climate change solutions, in sectors such as textiles and seeds. DFID will provide a further £15m to complement the World Bank's \$120m loan for developing special economic zones in Bangladesh.

4) Health Challenge Fund: (£ 10m; 2011 - 2017). As part of DFID Bangladesh's newly approved support to the health sector we are undertaking to establish a Challenge Fund. This will pilot innovative approaches towards the delivery of high quality and cost effective maternal and child health services through non-state providers.

In addition to the above mentioned programmes, the following programmes are on the pipeline:

Skills and Employment: (£50m). A stage 1 business case has been approved for a major, new programme on skills and employment. This programme will strengthen private sector provision of training, certification and employment services; improve the regulatory environment; and develop the skills of youth, migrants and micro-entrepreneurs.

Financial Inclusion: (£20m). This programme will enable micro, small and medium enterprises to access the financial services they need to grow. The programme will improve regulatory capacity, build household level business management and financial literacy skills, and provide commercial banks and microfinance institutions with incentives to target new markets.





# 5. Findings on the Demand of Investment and Trade

## 5.1 Objectives and Methods of the Demand Survey

The JICA Study Team conducted a survey both inside and outside (including Japan and other Asian countries) Bangladesh on industries that have a high potential to make an investment in Bangladesh or that are assumed to be important to develop in Bangladesh.

As concrete industries, they chose:

- Textile and garment related products
- Agro-products or agro-processed products •
- Light engineering products (including auto-parts and bicycles)
- Footwear and leather products
- Pharmaceutical Products
- Software and ICT products
- Home textile •
- Ship building industries
- **Toiletries Products**
- Others (Electronics, Papers, etc)

In general, The JICA Study Team made a list of the superior enterprises of the industries above, and conducted equal spacing among the industries. To increase the collection, they have been sending the questionnaire to the additional enterprises as well. The team has also unified those enterprises that carry a side business within the industries above, such as Home textile and Textile.

Basically, The JICA Study Team mailed the questionnaire and received the answers. However, since the response rate from Asian countries were especially low, they also conducted surveys at some trade exhibitions in Bangladesh.

In addition, existence or nonexistence of trade with Bangladesh at this point does not affect when setting the samples. (And the enterprises domestically operating business in Bangladesh have already been making investment.)

## 5.2 Findings on Foreign Questionnaires and Hearing Surveys

- (1) Findings on Japanese Enterprises
- 1) Methods and Attributes of the Respondents of the Survey

The JICA Study Team mailed the questionnaire to 160 enterprises and collected from 28 of them. Industries of answeres coming from Light engineering, Textile and garment related products, Ship building industries. Others include multiple industries. Those enterprises with capital below a million yen had the highest response rate, and those with a capital above a million yen follow. Responses from SMEs are also included.

		,
Business Sector	n	%
Textile and garment related products	6	21.4
Agro-products or agro-processed products	0	0.0
Light engineering products (including auto-parts and bicycles)	9	32.1
Footwear and leather products	0	0.0
Pharmaceutical products	1	3.6
Software and ICT products	0	0.0
Home textile	0	0.0
Ship building industries	4	14.3
Toiletries Products	1	3.6
Others	7	25.0
Total	28	100

Figure 5.1 Attribute of the Respondents (Japanese enterprises, industry-classified)



Amount of Replacement cost (net asset)	n	%
>JPY100,000	4	14.3
JPY10,000-100,000	6	21.4
JPY100-10,000	7	25.0
<jpy100< td=""><td>11</td><td>39.3</td></jpy100<>	11	39.3
No response	0	0.0
Total	28	100.0

Figure 5.2 Attribute of the Respondents (Japanese enterprises, capitalization value)

#### 2) Findings on the Survey

Only the parts that are important to this investigation are to be extracted and explained. The whole questions and answers are attached to Attached List 1.

#### Interest in Investment

Although many respondents showed no interests in investment, a quarter of them showed some interest. However, there might be a possibility that most of the respondents answered the questionnaire because they were actually interested in investment. Therefore, a relatively high rate of interest has been shown compare to the impression of general society.





Reasons to invest (Enterprises that has an interest to invest in Bangladesh)

Within the survey, 70% of the enterprises which showed interest in investing in Bangladesh answered that they were willing to manufacture in Bangladesh and to export the products to foreign markets. On the other hand, 14/3% of them (only one company) were willing to sell their products inside Bangladesh. In addition, as the attracting factors of investment, all of them have adduced the cheap labor. (Multiple answers) Although this questionnaire could only be a reference since we haven't gotten many answers, we can assume the possibility that Japanese enterprises consider Bangladesh as a low cost production base and do not consider it as a market. According to the enterprises interested in investment, some of the constraining factors to invest in Bangladesh were: political instability, system or clarity in slow cumbersome administrative procedure, low skill level of workers, insufficiency of distribution infrastructure. The first two are deeply concerned in the matter of politics and administration while the other two needs to be raised within the society as a whole.



Figure 5.4 Purpose of future investment in Bangladesh











Target Countries of Investment and the Purpose (Enterprises not interested in Investment to Bangladesh)

As the JICA Study Team questioned the enterprises that are not interested in future investment to Bangladesh, some other Asian countries appeared to be their investment targets: Vietnam, India, Indonesia, Thailand, and Myanmar. The neighboring country, India, and the major powers of ASEAN such as Indonesia and Thailand are reasonable. However, the fact that the emerging countries in Asian business like Vietnam and Myanmar ranked high draws the attention.

For the reasons of investment, cheap labor was the most common answer as well as the respondents that are interested to invest in Bangladesh. They also tend to emphasize other factors: political stability, transparency of political activities, and smoothness of political and administrative procedures. Some of the respondents also have considered Asian countries not just as production base but also markets.

Considering both and , Bangladesh has a possibility to be a target as a low cost production base. Yet it could be assumed that it is not recognized as a big market with 150million people from Japanese enterprises no matter their existence or nonexistence of investment in Bangladesh.



Figure 5.7 Attractive Emerging Countries to Invest

**Figure 5.8 Important Factors for Investment in Foreign Countries** 



Trade with Bangladesh

At this point, most of the enterprises have not conducted importation from Bangladesh, though 14.3% of the respondents have future interest in importing from Bangladesh. There is one major fabric manufacturer that is importing from Bangladesh, and a rubber goods manufacturer, a hardware manufacturer, and two fabric manufacturers has shown interest in trading with Bangladesh. For the reasons not interested in trading with Bangladesh, more than half of the



enterprises adduced the lack of information, and the lack of products and service for their companies followed as well.

i igure 5.5 import status with Dunghadesh			
Import status	n	%	
Industries import from			
Bangladesh	1	3.6	
Industries which do not			
import from Bangladesh	27	96.4	
Total	28	100.0	

Figure 5.9 Import status with Bangladesh

Figure	5.10	Interest	in	importing	from	Bangladesh
I Igui v	C.I.C	Inter est	***	mporting	II OIII	Dungiuucon

Interest in importing from		
Bangladesh	n	%
Interested to import	4	14.3
Not interested to import	22	78.6
No response	2	7.1
N (applicable)	28	100.0

Figure 5.11 Reasons of not being interested to import from Bangladesh



Suggestions to Expand Investment and Trade with Bangladesh

To all enterprises, we asked for suggestions to expand investment and trade with Bangladesh. Some of the major suggestions were: improve the usability of industrial sites, provide more SEZ and EPZ, more fiscal incentives for investment and improve skills of workers. Since the respondents tend to consider Bangladesh as a manufacturing base, there were a lot of suggestions about physical use of land such as industrial sites and special wards. Moreover, some of them like more fiscal incentives could be covered with policies, while there are also some issues that need a rising of the society such as the improvement of the skill of workers.



Figure 5.12 Suggestions to expand/initiate investment and trade with Bangladesh

(2) Findings on Enterprises in Other Asian Countries

1) Methods and Attributes of the Respondents of the Survey

The JICA Study Team basically mailed the questionnaire to 20 leading enterprises for each country. However, because the response rate was extremely low, they also conducted surveys at trade exhibitions in Bangladesh to enterprises in other Asian countries. The team questioned 306 enterprises in total, and got 83 answers from them.

When breaking down by area, India responded the most and Thailand, Taiwan, China followed. Other Southern Asian countries include Nepal and Pakistan. As the industry, Light engineering products, Agro-products or agro-processed products, Toiletries held the most.

Origin of the surveyed industries	n	%
India	24	28.9
Other South Asian countries	23	27.7
China	8	9.6
Thailand	18	21.7
Taiwan	10	12.0
Total (N:83)	83	100.0

#### Figure 5.14 Attributions of the Respondents (Foreign countries, Industry-classified)

Business Sector	n	%
Textile and garment related products	2	2.4
Agro-products or agro-processed products	8	9.6
Light engineering products (including auto-parts and bicycles)	22	26.5
Footwear and leather products	2	2.4
Pharmaceutical products	2	2.4
Software and ICT products	1	1.2
Home textile	1	1.2
Ship building industries	1	1.2
Toiletries Products	6	7.2
Others	38	45.8
Total (N:83)	83	100.0

#### 2) Findings on the Survey

(As the findings on the survey of Japanese enterprises) Only the parts that are important to this investigation will be extracted and explained. The whole questions and answers are attached to Attached List 1.





#### Interests in Investment

60% of the enterprises were interested to invest in Bangladesh which is a rather high rate.

Figure 5.15 Interest to invest in Bangladesh



Reasons to invest (Enterprises that has an interest to invest in Bangladesh)

Many of the respondents had interests in both manufacturing and selling their products in Bangladesh. It would add up to more than 80% when including both the enterprises that consider Bangladesh as the only market and enterprises that are also considering selling in other foreign markets. We can see that Enterprises in Asian countries other than Japan take Bangladesh as an actual market.

The same thing could be said in the attracting factors of investment. Almost every enterprise with investment interest feels the attraction of the Bangladesh market. Yet, only 2/3 of them answered that cheap labor is the attracting factor, which means they don't make much account of low cost operation. In general, enterprises in Asian countries except Japan seem to see both wheels of manufacturing and selling in Bangladesh.

In addition, for the constraining factors, the exceptionally high political instability, lack of essential utilities, and low skills of workers were adduced. There might be an impression of a lot of policy changes and non-performance due to the regime change. There also might be a view that although their wages are low, their skills are even lower compared with other Asian countries.



#### Figure 5.16 Purpose of future investment in Bangladesh









Target Countries of Investment and the Purpose (Enterprises not interested in Investment to Bangladesh)

India is obviously the more attractive investment compare to Bangladesh, after excluding the enterprises that are not or iginally interested in foreign investment. These are some of the reasons: India has the potential of low cost manufacturing base, cluster infrastructure has already been settled in some industries, and India is overwhelmingly big as a market. Certainly, its location makes India easier to be the investment target as well.



Figure 5.19 More attractive countries or regions for investment



#### Trade with Bangladesh

Enterprises in Asian countries except Japan also have not been conducting much importation from Bangladesh. Moreover, over 3/4 of them had no interests in importing. In comparison with the interest in investment, they are not as positive on trading with Bangladesh. This could be because there is no need of importation when the companies manufacture in Bangladesh and sell their products in Bangladesh market.

Two major issues were adduced as the constraining factors of trading: the lack of products and services that the companies need and the lack of information. The first problem arises from the present condition of Bangladesh that it has not been incorporated in the international supply chain. For the second issue, even the companies of surrounding countries regard the internal affairs of Bangladesh as opaque because of its political instability.

Import status	n	%
Import from Bangladesh	3	3.6
Do not import from Bangladesh	80	96.4
N (Applicable)	83	100.0

Figure 5.21 Interest in Importing from Bangladesh						
Interest in importing from Bangladesh	n	%				
Interested to import	15	18.8				
Not interested to import	61	76.3				
No response	4	5.0				
N (applicable)	80	100.0				





Suggestions to expand Investment and Trade with Bangladesh

To all enterprises, we asked for suggestions to expand investment and trade with Bangladesh. Offer more information and improve the essential utility were the major suggestions.



Figure 5.23 Suggestions to Expand/Initiate Investment and Trade with Bangladesh

<Difference between Japan and Other Asian Countries>

- (3) Difference of Stance Toward Investment and Trade with Bangladesh Among Japanese Enterprises and Enterprises in Other Asian Countries
- 1) Different Perception among Japanese Enterprises and Enterprises in Other Asian Countries Difference of Interest to Invest in Bangladesh

While 3/4 of the Japanese Enterprises do not have an interest to invest in Bangladesh, more than half of the enterprises in other Asian countries show interest. Japanese Enterprises are either not willing to conduct business with Bangladesh or are not able to imagine so. Meanwhile, Enterprises in other Asian countries are willing to conduct business with Bangladesh, though they are concerned about some of the issues of investment. Difference of Purpose to Invest

To Japanese Enterprises, Bangladesh is considered as their production base, and they attach a great importance to cheap labor. Also the products made in Bangladesh are basically to be exported to other countries but not to be sold in Bangladesh. For other investing countries, Japanese enterprises tend to take into consideration a large area like South-East Asia and Southern Asia such as Vietnam and India.

On the other hand, enterprises in other Asian countries actually find the domestic Bangladesh market attractive. Even though they consider Bangladesh as a production base, they also give thought to sell their products in Bangladesh and not just in exporting markets. There's also a difference that they have stronger market eyes than Japanese enterprises and they clearly show their awareness toward India because of the geographical closeness.

2) Issues of Bangladesh as an Investment and a Trading Partner

Both Japanese and other Asian countries' enterprises are concerned about the political instability, the lack of information, and the lack of essential utility. Low skill of workers are also pointed out as a major issue, it does not come in the top though. However, location of industry and the lack of special wards such as SEZ are only concerned by Japanese enterprises which consider Bangladesh as their production base.

In addition, the common reason of not conducting importing business with Bangladesh was the lack of products and services that the companies need for their business. As the meaning of the question, the JICA Study Team assumes the situation that companies not being able to afford materials they need for production. This is, as we suppose, because Bangladesh is not incorporated in the international product manufacturing value chain.

## 5.3 Findings on Domestic Questionnaires and Hearing Surveys in Bangladesh **5.3.1** Purpose of the Domestic Survey in Bangladesh

The purpose of this survey is to identify the needs and demand trends of investment and trade with Bangladesh, and the impediments of the expansion from the view of local companies and foreign investors who have already invested in Bangladesh.





Bangladesh has received the investors' attention as a labor-intensive production base. The garments industry in Bangladesh is the typical case; it has called in foreign direct investments and has massively extended its exportation. Nevertheless, the knowledge-intensive and technology-intensive industries have relatively low interests from foreign investors. In the context of accomplishing the goal indicated in Vision2021, expansion of investment and trade will play a key role. The questionnaire aims to clarify the needs of investment and trade and the demand trends, and the interviews detect the more detailed situation through the hearing survey.

## 5.3.2 Research Design of the Domestic Survey in Bangladesh

the reason to invest in Bangladesh: The Domestic survey consists of three parts: the issues that need to be solved after conducting a business in Bangladesh: future issues to expand investment in Bangladesh. Every part includes sub-arguing points.



## **5.3.3** The Population of the Domestic Survey in Bangladesh

As the foreign survey, the questionnaire was distributed to 610 enterprises with 9 different industries, and 274 of them responded.

Sector	Tota	ul 🛛	Nature of ownership			Netasset					Location		
		\$	Foreign	Joint	Local	n.a.	Tk30cr >	Tk10- 30ar	Tk.50lac to<10cr	< Tk. 50lac	n,a.	EPZ	Non-EPZ
Total	274	100%	84	14	169	7	115	49	49	52	9	124	150
\$	100%		31%	5%	62%	3\$	42%	18\$	18%	19\$	3\$	45%	55%
Textile & Garments 1 related products	92	34\$	52	3	34	3	64	14	9	1	4	72	20
2 Agro or Agro-processed products	10	4\$	0	0	10	0	4	4	2	0	0	0	10
3 Light Engineering	61	22\$	5	1	52	3	5	1	12	42	1	5	56
4 Footwear and Leather products	32	12\$	12	1	19	0	18	3	9	2	0	14	18
5 Pharmaceutical products	11	48	0	1	10	0	2	6	3	0	0	0	11
6 Software and ICT products	12	4\$	0	2	10	0	1	2	5	4	0	0	12
7 Home textile and Terry towel	19	7%	6	4	8	1	8	11	0	0	0	16	3
8 Ship building	6	28	0	0	6	0	4	1	0	0	1	0	6
9 Cosmetics and Toiletries	7	3\$	0	0	7	0	1	1	4	1	0	0	7
Other products 10 (Plastics, Electronics etc)	24	98	9	2	13	0	8	6	5	2	3	17	7

Figure 5.25 Population of the Respondents (n: 274 enterprises)





The survey not only seizes the overall trend, but is also designed to seize the trend of each attribution as needed. For the attribution of the sample population the JICA Study Team set up 8 categories: industry, ownership (local business, joint venture business, 100% foreign capital business), firm size (capital size: large enterprise, medium-sized enterprise, and small-sized enterprise), location (EPZ and non-EPZ), employee number, import rate of raw materials,

export rate among sales amount, and major destination for export. As we can obviously see from the above figure, the JICA Study Team has gotten hold of 274 enterprises that are not biased to a certain attribution. In other words, these findings could be recognized as distinguishing features of Bangladesh in general.

#### 5.3.4 Findings on the Domestic Questionnaires and Hearing Surveys in Bangladesh

First, the JICA Study Team will take a view of the overall features of the domestic survey in Bangladesh, and then refer to the arguing points that need to be specially mentioned for each question from different point of views such as industries, ownership, firm size, location and so on.

From the view of ownership, a perception gap between foreign-affiliated firm and local companies could be seized, and from the view of firm size, we could see a perception gap between big enterprises and smaller enterprises. Also, a perception gap between export-oriented enterprises that are located in EPZ and domestic demand-oriented enterprises that are not could be seized from the view point of location. According to the need, the JICA Study Team will refer to these factors and clarify the bottle neck of furthermore expansion of the investment and trade demand of foreign investors. See the Attached List 1 for more detailed results.

(1) "Why invest in Bangladesh?"

In this section, there are three arguing points to clarify why they chose Bangladesh as their investment: purpose to invest in Bangladesh, the attracting factors of Bangladesh to invest, countries to compare when investing in Bangladesh.

Purpose to Invest in Bangladesh (in general)

For the purpose to invest in Bangladesh, 33% of the respondents mentioned "production and selling in Bangladesh", 51% of them answered "to produce in Bangladesh and export to other countries", and 15% answered "to produce in Bangladesh and conduct both exportation and selling in Bangladesh."

From the result, the JICA Study Team can deduce two important suggestions. First, the proportion of the enterprises that conduct both exportation and selling in Bangladesh is small. About 30% of the enterprises conduct both producing and selling in Bangladesh, and 50% of them produce in Bangladesh only for exportation,

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and that would add up to more than 80% of the population. In other words, it means that 30% of the enterprises consider Bangladesh as a market, and 50% of them consider as a production base. On the other hand, only 15% of the enterprises (42 out of 274) conduct both exportation and domestic selling. Theoretically, these enterprises are required to have a tolerable production capacity and a sales network for exportation, and also a sales network to the domestic market. In the findings, out of 41 enterprises that are correspond to both domestic selling and exportation, more than 80% of them had hired more than 100 employees, and most of them were medium-sized enterprises or bigger than that (Attached List 1.) As the purchasing power of the Bangladesh rises, higher quality and more expensive products will be wanted in Bangladeshi market. If the gap between domestic products and exports diminishes, the proportion of the enterprises that conduct both domestic selling and exportation are expected to increase.

Secondly, whether the enterprises consider Bangladesh as a market or as a production base mostly depends on the ownership. More than 90% of the respondents who mentioned both "producing and selling in Bangladesh" as the purpose to invest were local enterprises. Among foreign-affiliated firms and Joint venture business, more than 80% of the enterprises were investing in Bangladesh "to produce in Bangladesh and export their products to other countries." As a broad trend, many of the local enterprises consider Bangladesh as an attractive market while foreign-affiliated firms do not. The enterprises that only sell in the domestic market mentioned that "there is a language barrier to export and there is no network to the traders to export. We are expected to be required much higher level of quality. We first need to concentrate on the expansion of the share in the expanding domestic market." Meanwhile, the enterprises that only conduct exportation said that "if you produce something with high quality, the price will naturally raise. In the Bangladesh market, it won't be profitable to sell within this price at this point."

These views may be right as the JICA Study Team sees a certain section of Bangladesh statically. However, local enterprises that conduct both domestic selling and exportation see the Bangladesh market more dynamically. "A lot of foreign-affiliated firms have not been able to assess the potential of the domestic market correctly although they have been producing in Bangladesh. Indeed, a gap might actually exist between the quality and pricing of the foreign-affiliated firms' products and the demand in Bangladesh. Even so, the buying power of Bangladesh is improving, and the products of the foreign-affiliated firms will eventually be expected in the Bangladesh market. At the present time, we are feeling the move." Another local enterprise that also conduct exportation declares, "our company targets middle class and up. These upper classes have a different taste from the traditional dietary culture. For instance, in the past, there was no custom to eat jam, but now the middle class do eat jam especially orange jam. These products sell well even though the relatively expensive oranges are used."

It is very important perspective to be aware of the middle class and offer upper class products that suit these people. The gap between domestic products and exports will diminish if upper class products increase in Bangladesh market, and then the upper class will demand products with even higher levels. As this cycle continues, it is said theoretically that there won't be a huge separation between domestic products and imports.

In fact, there are some products which realized such cycle. For example, smart phones which cost a couple hundred dollars have greatly increased its sales within the Asia-Pacific region. Bangladesh is expected to have a high growth potential above other Asian countries. With the background of its great population, a high number-based extension is anticipated by the synergistic effect with the rise of penetration rate [Seed Planning, Inc. "Worldwide mobile phone market (2012)"].

If these deployments accelerate in other products, it is possible simultaneously to



realize the expansion of the demand that is driven by both foreign-affiliated firms and local enterprises and to capture foreign capital. Then a hierarchic cluster will be formed while involving where big enterprises and foreign-affiliated firms come on the top. If these movements were to become real, it might be possible for the country to enjoy a huge growth opportunity as a whole



## Figure 5.26 Purpose of Investing in Bangladesh (on the left: overall, on the right: by sectors)

As the purpose of investing in Bangladesh by sectors has been observed, it is possible to distinguish the industries only interested in the domestic market and the industries that are trying to correspond to both domestic market and exportation by ownership. Among Light Engineering, Ship-building, and Agro-processing business which mostly the local enterprises occupy, most of the enterprises mentioned "produce and sell products in domestic market" as their purposes. On the other side, among industries that include a lot of foreign-affiliated firms such as Textile and Garments, Leather and Footwear, Home textile and Toiletry, tend to be more exportation intensive [See Appendix 1].

Unlike these trends, there are industries occupied with local enterprises with high export orientation; those are ICT and Pharmaceutical firm [Figure 5.25 Population of the Within the present industrial structure of Bangladesh, ICT and Respondents.] Pharmaceutical could be categorized into knowledge-intensive industry. The followings are adduced as the common features of these two industries: They both have well-organized training functions for the youths. (Pharmaceutical education and IT education are substantial compared with other industries.): The younger generation have gained experience in foreign-affiliated firms and have come back and have been active in local enterprises. Also they can access to foreign-affiliated firms and the core know-how. (In IT section, they are bearing the function of out-sourcing of the foreign-affiliated enterprises, and in the Pharmaceutical section, they have the access to prescriptions of generic drugs.): They have backing of the government. These common features are not necessarily the preconditions for strengthening export competitiveness, yet it is considered as one of the models of the local enterprises to strengthen their export competitiveness.

The Attracticting Factors of Bangladesh to Invest(Overall)

As the attracting factors of investing in Bangladesh, 90% of the respondents mentioned "cheap labor," 68% of them adduced "positive attitude to labor," and 66% of them answered "securing of skilled workers." In this question, there were no difference among ownership, location, and the firm size.

For the overall result of the survey, 44% of the respondents found the domestic market (the size of the market) attractive. While only 16% of the export-oriented enterprises located inside EPZ found the Bangladesh market attractive, about 60% of the enterprises located outside EPZ found it attractive.



Figure 5.27 Attracting Factors of Bangladesh to Invest

Countries to Compare when Investing in Bangladesh India, Pakistan, China and Sri Lanka were adduced for the comparing countries. However, only 9 out of 274 enterprises answered this question. This might be because questionnaire asked the respondents to write down specific names of countries for this question while others were multiple choices.

#### (2) Issues of Business in Bangladesh

In this part, there will be two arguing parts to clarify the issues when conducting business in Bangladesh: issues on investment climate of Bangladesh, how to assess the function of government bodies concerning promoting investment and trade.

For the issues on investment climate, the JICA Study Team provided the following 18 categories: political circumstances, economic policies, status of security, investment policies, investment promoting plans, trade promoting plans, logistics, taxation, market, procurement of raw materials and semi-manufactured goods, supporting industry (backyard linkage), labor market, human resource development, finance, infrastructure, governance and administrative services. Each category consists of smaller groups, and each question of the smaller groups has choices of "Excellent," "Good," "Fair," and "Bad."

Issues on Investment Climate of Bangladesh

The following categories got relatively low sums of "Excellent," "Good," and "Fair." The lower the sum (in percentage) is, the more need of the issue to be solved. As the result (overall), logistics, infrastructure, and human resource development were recognized as the top issues within the categories.

In connection with logistics, the JICA Study Team got the following comments; "The major transportation method in Bangladesh has been transshipment. We cannot conduct container transport between Chittagong and Dhaka so we have no choice but to rely on truck transportation. There is also a possibility that the truck will be broken within the next two or three years. EPZ provides CFS inside its property and is able to carry in and out containers. Outside EPZ, in most cases, we cannot conduct FCL transportation other than in container depots. We hope for the development of river transportation." Also, there was a view of the matter of concern for further development of industry. ; "In the future, if the distribution amount increases, there is possibility that the lack of deep water ports for the large ships to anchor will be the bottleneck of economic development." A well-planned urban improvement based on the overall land route (roads and railways), sea routs, and airways is required.



As the matter of infrastructure, a lot of them had the same complaint. ; "The unstable supply of essential utilities like electricity, water, and gas has been the bottleneck of economic development. If there is a blackout in the middle of producing, all of the semi-manufactured goods in the production line will become rejects. An independent power plant is necessary for every factories, and these cost a lot."

Regarding the issue of human resource development, there were some severe voices from manufacturers which hire a lot of unskilled workers. ; "It is not rare that some of them don't have even the basic life-styles like wash hands before working. They need education from this level. Yet, they are better in catching up their jobs than the Chinese. Still, there's only a few of them who actually understand the role of the work they are doing. Although the wage is cheap, productivity of Bangladeshis reaches only 70% of the Chinese. Consider the fact that labor costs are rising rapidly, the raising of human resource such as thorough elementary and secondary education and completion of higher education will be an important issue.

From the view of firm size, there was a big gap between SMEs and medium and big enterprises among fundraising, tax burden, electricity and water supply, and administrative services. All of them were considered as issues for SMEs rather than the bigger enterprises. [Attached List 1]

As we see the issue from location, there had the biggest gap of recognition on infrastructure among enterprises located in EPZ and non-EPZ. Enterprises located in non EPZ consider the matter of infrastructure as an issue. [See Appendix 1]

NO	CATEGORY	SMALLER CATEGORY	% ( 1)	
1	Logistics	River Transportation Service	43%	
2	Logistics	Railway Service	44%	
3	Infrastructure	Gas supply	56%	
4	Logistics	License Procedure of bonded Warehouse	57%	
5	Human Resource Development	Job Training Service	60%	
6	Governance	Corruption	61%	
7	Human Resource Development	Education System	67%	
8	Infrastructure	Water Supply	72%	
9	Logistics	Land Transportation Service	73%	
9	Finance	Fundraising	73%	
11	Investment Policy	Protection of Intellectual Property Rights	74%	
12	Finance	Fund Approval	75%	
13	Trade Promoting Policy	License Procedure of Exportation	76%	
14	Infrastructure	Security of Industrial Sites	77%	
15	Political Circumstance	Political Circumstance	78%	
15	Reliability of Laws	Credibility of the Judicature	78%	
15	Taxation	Tax Related Administrative Service	78%	
18	Procurement of Raw Materials and Semimanufactured goods	Domestic Procurement of Raw Materials	79%	
18	Governance Ruling by Laws and Discipline			
18	Governance	Transparency of Business Management	79%	
18	Administrative Service	Cooperation Between Government Agencies	79%	
18	Administrative Service	Information Service Among Raw Materials	79%	

Figure 5.28 Issues on Investment Climate in Bangladesh (Overall)

Note: % in the parenthesis is the sum of "Excellent"+ "Good"+ "Fair"














Even when classified by industries, there is no huge difference of the structure that logistics, infrastructure, and human resource development hold the top issues. There are two points that need to be addressed in terms of the type of industries. First, in the industry with a lot of SMEs (such as light engineering industry), fund-raising has been adduced as a major issue. Enterprises smaller than middle-ranking ones from various industries said; "the interest rate of financing is almost 20%, and it should be about 10% for us to afford." The JICA Study Team found out that backings for fund-raising from various donors weren't widely spread enough among SMEs. In addition, some middle-ranking enterprise said that; "although we hope for financing, due to the decrease of foreign capital balance of central banks and commercial banks, we have no choice but to be refused."

Secondly, corruption, license procedure, and protection of intellectual property right (only for ICT) have been selected as major issues among industries conducting both import and export (such as garment industry, home textile industry and shipbuilding) and ICT. Some enterprise from ICT industry commented; "there were no regulations at the point of joining, though as the market gets bigger, licensing system was introduced in succession. About three billion yen cost for getting the license. Meanwhile, there are a lot of local enterprises that violate the regulation and they are neglected. Consequently, it has become difficult to offer services to our customers." In order to realize a speedy growth, cooperation of the official and the private sector is expected.

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Assessment of the Function of Government Bodies Related to Investment and Trade Promotion

The JICA Study Team collected from public agencies with four different functions: investment promotion (BOD), trade promotion (EPB), development and operation of EPZ (BEPZA), and backing of SMEs (BSCIC). The followings are arranged in decreasing order of the sum of "Excellent", "Good", and "Fair"; BEPZA, BOI, EPB, and BSCIC.

BEPZA, the competent authority of EPZ, got the best assessment. Yet some EPZ occupant enterprise said that; "there weren't many investors and the services were very good when we moved in. However their attitude has been hardening since now it's a sellers market. For instance, they've adopted obligation to establish a labor union and advance taxation (2010). They didn't have these requirements and that was the attracting factor of CEPZ. Nowadays, they have said that they will come up with some kind of correspondence if we can't follow the requirements. As an investor, a change in investment climate means a lot. We cannot help the change of conditions caused by the change of time. Nevertheless, isn't the CEPZ supposed to explain the change politely to the tenant enterprises and try to get the understanding of them?" Depending on the way of the alternation of conditions, there is a risk that investors change their investment from Bangladesh to another country. If the shifting is intensified, the overall investment won't expand since leaving tenants will increase even though you call in new investors. Rationality of policy change and full communication with the occupant enterprises will be very important on keeping up investment.

BOI, the institution which bears the function of the window for the investors, is also assessed pretty well. Yet, considering the one-stop service which is one of the appeal point for BOI, there seems to be some critiques.; "Certainly, the procedure to BOI could be completed in a window, and in this sense it is a one-stop service. However, once you get the investment grants from BOI, there are still a lot of procedures for the related authorities, immigration control, and establishment of utilities for offices and factories. These all have to be done by the investors. The true one-stop service for the investors is the service that unifies all of these procedures. " To realize the one-stop service including procedures other than BOI, BOI needs ability to adjust the various interests among the related authorities.

For EPB, the implementing body for trade promotion, got good assessments as well. There are many local enterprises willing to conduct exportation in the future and they are placing high expectation on EPB. For instance, there were some demands for practical training for trade and provision of information about trade (especially exportation). More specifically, there was a demand for information of exportation like this. ;"At present, EPB introduces some matching seminars but small enterprises won't be able to conduct exportation only by participating in those seminars. To actually conduct exportation, we are expecting more support from EPB like providing information for how to negotiate with unknown companies. Eventually we cannot utilize the assistance from EPB thoroughly." If EPB were able to grasp these present conditions of the enterprises correctly and provide a service construction as EPB from the view of "what kind of service meets the need of the enterprises," EBP will become able to support private enterprises greatly.

Finally, BSCIC, the institution which conduct upbringing support for SMEs, was assessed relatively bad. There were a lot of similar opinions as the following. ; "The service and know-how provided by BSCIC do not exceed the skills that we already have. Rather, we are better informed about new technologies. What we need are machines and its operation know-how to manufacture new products. We would like to expect supports that bring to us sales expansion and new technologies and know-how which lead to further interests."





Figure 5.30 Evaluation of Administrative Service of Investment and Trade Promotion

(3) Issues on Expanding Investment Scheme and Investment in Bangladesh in the Future In this part, we provide two arguing points to address the "future issues to expand investment": the existence or nonexistence of a plan to expand investment in the future, and the constraining factors of expansion.

The Existence or Nonexistence of a Plan to Expand Investment in the Future 85% of the respondents answered either "there is a plan to expand greatly" or "there is a plan to expand gently."



Figure 5.31 Future Investments and Trade Plan of Investors

As we see it by industries, all of them have a high standard of interest to expand investment.

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Figure 5.32 Future Investments Plan by Industries

Seeing from firm size, location, and ownership, high interests to invest are addressed generally. [Attached List 1] Although the growth speed and way differs from their each situation as a matter of course, the result strongly shows the dynamism towards growth of Bangladesh as a whole.

Out of 235 enterprises which answered that they will expand investment, 102 of them had not conducted exportation at the present, and among these 102 enterprises, 41 of them (about 40%) were planning to export in the future. Among 70% of 41 enterprises belonged to light engineering industries.





As the JICA Study Team breaks down the categories of light industries that are planning to export in the future, there were a lot of enterprises which belong to foundry industry. Foundry industry is a support industry for various industries such as automobiles, industrial machinery, powerplant, and shipbuilding. In the present circumstances, production and sales of used components for domestic automotives and farming machines are conducted. As we put the hearing results of enterprises conducting casting production together, the followings were the factors why they are considering exportation. "We are now focusing on growth of the domestic market demand. Product lines mainly consist of products such as pumps and liners which could be produced by old cupolas. Every enterprise produces similar products and do not divide works. The price will fall as the number of enterprises producing same product increases and the

supply reaches the demand. By only focusing on the correspondence to the domestic market, the growth speed of foundry industry will relatively dull. The present domestic products are prevailing over the competing countries like India and China in price, but it is not in quality. Therefore, the room for growth by producing the present products is limited to the point where we conduct domestic import substitution. To maintain and accelerate the speed of growth, at least we need to lift the quality high enough to the level of products in international market. We need to modernize the production facilities to produce high quality products which could handle exportation. In concrete terms, transformation from the present cupola to electric furnace is needed." In fact, there are a lot of hurdles such as facility standard, technology standard, funds power, and all sorts of know-how when raising the production level of products that could handle exportation. To clear these hurdles speedy, the JICA Study Team would like to make a special mention of the high expectation to JV with Japanese enterprises.

The Constraining Factors of Expansion

For this question, 87% of the respondents answered "infrastructure", 66% answered "land availability", and 60% answered "human resource development". This result coincides with (2) issues on investment climate in Bangladesh.



Below this section, the JICA Study Team will review what kind of enterprises and what kinds of issues are addressed by narrowing down the arguments to only the important ones. We will leave out the consideration by cross-section analysis since almost every attributes got high standard among infrastructure, land availability, and human resource development. To tell the conclusion first, many of the factors causing differences were the gap between local enterprises below middle-sized and other enterprises. This could be introduced as the most important view from the point of expansion of the range of industry.

First, the attribute of the enterprises holding marketing issues are the local enterprises below middle-sized. In terms of category, they are ICT and light industry. Among ICT, development applying Overseas Workers is conducted and demand like finding partners for offshore development is raised. In light industry, they are conducting second-handed selling by making molds from new products and information of the partners to make inroads into manufacture and sales of new products are needed.

Attribute of the enterprises with production technology issues is also local enterprises below middle-sized. Their industrial categories were shipbuilding, light industry,



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agricultural processing industry, and toiletry. For ship building as an example, almost all of the enterprises (about 200) other than Ananda and Western Marine, the big enterprises, conduct production of small ships for domestic market. Although they are trying to take foreign-skilled workers aggressively, the fact is that materials are pulled up by human power pulleys and welding and assembly are held on the sands. Needless to say, the lack of production technology is caused by the issue of fundraising. Let alone new capital investment, they are in great difficulty of handling funds needed for procurement of raw materials. In these situations, it is difficult to obtain Overseas Workers who have seen much developed technologies. JV with foreign-affiliated firms that could solve both issues of production technology and fundraising is expected.

There are a lot of industries holding expectations to JV such as light industry and shipbuilding. Yet, it is no longer the age that investment flows in just because of the low cost of production. As we focus on cost, how much of investing merits could be provided among total cost including infrastructure cost will be a key point to expand investment. In addition, appealing the attraction of the Bangladesh market such as products could be sold in domestic market will help calling in more investors.

#### 5.3.5 Overall Findings on Domestic Ouestionnaire and Hearing Survey

At this point, local enterprises consider Bangladesh as a market and foreign-affiliated firms consider it as production base. There is a difference in quality between products for domestic market and products for exportation. As it was clarified from the hearing survey, this difference is expected to reduce because of the steady increase of the middle and upper class. For these tendencies to be actualized, the expansion of exportation rate of local enterprises and products for domestic market produced by foreign-affiliated firms are assumed to make further progress. If it is able to promote the cooperation between local enterprises with many issues and big enterprises and foreign affiliated-firms with industrial competitiveness, there will be a chance to grow in both internal and external demands as a whole nation.

#### 5.4 Overall Findings on Foreign Survey and Domestic Survey

As the overall result, the domestic responding enterprises are more aggressive in Bangladesh business than the foreign respondents.

When considering the similar categories (interest to invest), the interest in Bangladesh business, especially business accompanying investment, could be showed as the following.

Enterprises conducting Investment > Non-investing Enterprises in other Asian countries > Non-investing Japanese Enterprises

It is natural that enterprises conducting investment already come in first since they have already conducted business in Bangladesh and Bangladesh enterprises are included, though considering the interest to additional investment, they are taking business in Bangladesh positively. When considering the domestic market together, Bangladesh business is expected to have an investing attraction once conducted.

On the other hand, except certain enterprises, Bangladesh is not yet on the list of strategic investment for Japanese enterprises. The main reason could be the lack of information about Bangladesh and the lack of interest to collect information strategically.

For the foreign survey, there seemed to be a difference of awareness of business in Bangladesh among Japanese enterprises and other Asian countries' enterprises. Meanwhile, in the domestic survey, there was a difference of awareness of issue between big enterprises/foreign-affiliated firms and SMEs.

The JICA Study Team could not assess the questionnaire completely in the same line since the situation of contrasting followings were not the same, though we put together some of the representative factors.



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		Perception for	or Bangladesh	Eggerpoon of	Issues					
Seg	ment	ufacturing loca	Market	invest	Transparancy , Fiarness	Infrastructur e	On site assistance	Lack of information		
Foreign companies	Japanese companies	Yes	No	Low	Strongly	Strongly		Strongly		
(not yet invested)	Other Asian companies	Yes	Yes	Middle	Strongly	Strongly		Strongly		
Domestically operating	Large and Foreign companies	Yes	Yes	High		Strongly				
business companies	Middle and small companies	Yes	Yes	High		Strongly	Strongly			

**Figure 5.35 Summary of the Findings** 

From the findings on the questionnaire and the hearing survey, there were several facts to point out very generally as the directivity of investment promotion for Bangladesh. First, in short terms, Bangladesh needs to provide information of its market and appeal to the foreign enterprises. Simultaneously, it needs to prepare industrial sites and special wards (EPZ and SEZ) and provide infrastructure with its effective operation. Of course, in medium to long terms, fundamental issues such as governance and road infrastructure are expected to be solved.





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ATTACHMENT

Policy Matrix on Private Sector Development in Bangladesh



# 6. Facts Findings, Development Strategy of Manufacturing Industry and its Challenges

# 6.1 Distribution of the Industries and Situation of the Industrial Clusters6.1.1. Distribution of Industrial Clusters along with BSCIC Data

Figure No. 6.7 which is shown in the page No.6-3, describes the distribution of Industrial Clusters in Bangladesh. This Map was developed by putting dots according to the numbers of registered SMEs in 51 Districts that were given by the Bangladesh Small & Cottage Industries Corporation (BSCIC). According to the data as of October 2011, total number of registered entity is 67,018, and the distribution of those entity by major cities are; Dhaka (10,457), Sirajganj (7,000), Jessore (6,600), Narayangonj (6,425), Tangail (5,120), Munshigonj (5,070), Comilla (4,831), Bogra (3,460), and Chittagong (2,760). Among those Clusters, major locations of the Manufacturing Industries excluding the Ready-made Garment Industry, are Dhaka, Chittagong, Jessor, Comilla, and Bogra, The Study Team further analyzed the distribution of those industries located at these key cities and found that Leather and Leather Products Industries are located at Dhaka, Chittagong, Light Engineering Industry is located at Chittagong, Dhaka, Jessor and Bogra, and Agro-processing Industry is located at Jessor and Bogra, while the Ready-made Garment Industry is located at Sirajiganj, Munshigonj, Tangail, Comilla, and Narayangonj. Results of the analysis are illustrated in the following Figure No. 6.1.



Figure 6.1 Distribution of Registered Entity(in %, As of October, 2011)

Source : BSCIC



Source : BSCIC



Source : BSCIC



Source : BSCIC

**Figure 6.4 Registered Entity** 



Source : BSCIC



Source : BSCIC



# Final Report for Preparatory Study of Private Sector Development Programme in Bangladesh Figure 6.7 Industrial Cluster Map in Bangladesh



Source : Prepared by the Study Team based on BSCIC Data

# 6.1.2. Actual Conditions of the Primary Industrial Clusters

The Study Team made an interview survey with the Ready-made Garment and other 8 major industries during the second site survey conducted from middle of January 2012 with a courtesy of Federation of Bangladesh Chamber of Commerce and Industry (FBCCI). With regard to the Leather



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and Footwear Industries, the Study Team met with Leather goods & Footwear Manufacturer Association of Bangladesh (LFMAB) on January 28, 2012 and gathered information on the issues that the industries face and on the requests for the support from the public sector. On January 29, 2012, the Study Team has visited to the Project Site where a group of small scale footwear manufacturers are located from Old Dhaka district. With regard to Light Engineering Industry, the Study Team has visited Foundry Owner's Association of Bangladesh (FOAB) in Bogra, Rajshahi District and conducted an observatory inspection tour to the foundry production plants in Bogra on February 4, 2012.

#### (1) Relocation of the Footwear Cluster Project

This Project aimed at the relocation of a footwear cluster which consists of 17 small scale footwear manufacturers from Old Dhaka to Jatrabari, South-eastern part of Dhaka City. The workshops in Old Dhaka were narrow and in unhygienic conditions although it was located at the heart of Old Dhaka and were having various issues such as the employment of child labor and adopting longer working hours (17-18 hours a day). This Project was launched by the initiatives of Dr. Atiur Rahaman, the former president of the Bangladesh Bank, based on the funds for Corporate Social Responsibility (CSR) contributed by the Janata Bank and others which was used for leasing the vacant premises of Joss Leather Industries. The relocation of the workshops was completed in May 2011. This Project is also qualified as one of the Business Promotion Councils by Export Promotion Bureau (EPB).

The shoes-manufacturers complex at the relocation site consists of a 3-store is factory building, training building which is under construction, and exhibition room. The complex is surrounded by paddy fields and seems free from environmental contamination, because the shoes manufacturing processes use only tanned leathers. The shoes manufacturers are about to commence its operations at an individual block being allocated within the 3-stories factory building. Scale of the manufacturers is rather small that employing a few number of staff at one manufacturer at the most largest case. All the production processes starting from cutting the raw leather along with the models of shoes and sandals, fastening and burning, and adhesion of various parts are conducted manually. Some technicians are working by sitting at a corner of the floor. Although the some manufacturers seek for overseas markets, quality of their products is not likely suitable to the requirements. They claimed the shortage of electric supply and difficulty in access to operational funds, difficulty in exploring the markets and many other constraints. It seems for the Study Team that this Project was launched by private banks and the objectives of the Project are focused for the reduction of poverty, thus it is rather different from objectives of the private sector development project undertaken currently by the Study Team.







Source: Both photos are taken by the JICA Study Team

#### (2) Relocation of Tannery Industry to Savar District

This Project has been initiated by the Ministry of Industries and the land development operation has been commended by the Bangladesh Small and Cottage Industries Corporation (BSCIC) since 2003. The Objective of this Project is to make a mass relocation of the Tannery Industries which are located at the Hazaribagh Area in Dhaka City, with the assistances of UNIDO of United Nations and Sweden International Development Authority (SIDA). However, the newly developed site of 200 acres of land at Savar district is yet to be occupied by any investors until today.



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The Project can accommodate Tanneries with 195 plots of land once it is completed. According to an Engineer belonging to BSCIC, all the infrastructure facilities such as Access Roads and Water Supply Systems have already been completed but Power Supply and Common Effluent Treatment Plant (CETP) which purifies waste waters from the Tanneries are not completed, thus they could not accommodate any investor until today. Although a Contract for the construction of CEPT has been awarded to one of the Chinese Contractors, they have not commenced any works at the Project Site. Furthermore, it is not fully agreed among the Contractor, Owner and the Tannery Industries regarding who will be responsible for the Operations of this CEPT after its completion. According to the Report from UNIDO, it is suggested that the Contractor shall be responsible for two (2) years from the completion of CEPT then the facilities may be handed over to BSCIC after necessary Technology Transfer on the Operation of CEPT is duly made from the Contractor to BSCIC.

#### (3) Foundry Cluster in Bogra

History of the foundry industry in Bogra may date back to a primitive cottage industry which had happened far before the establishment of a large foundry factory at the decades of Pakistan administration. The said large scale foundry being established by Pakistan Government was the stepping stone for Bogra to be known as one of the center places on foundry engineering in Bangladesh. Development of the industrial estate and accumulation of the foundry industry into the estate in 1980s by BSCIC are next events that realized the golden days of Bogra now. The Industrial estate developed by BSCIC accounts for about 33 acres and is divided into 230 lots. Presently, all of the lots have been sold, but new living facilities are still needed before people can start moving into the area. Including this estate, currently 56 foundry industries are located in the estate and at surrounding areas of Bogra. Out of 56 foundry industries, 10 industries are large firms with more than 200 employees, 21 industries are medium size and 25 industries are small-scale with less than 25 employees.

The range of foundry products covers brake drum for the automobile, beside those of agricultural machinery, machinery for fabrics and jute industries. However, those brake drums are not delivered to the automobile assemblers but to the operators of buses and tracks in the region for their repairing purposes. The casing for the motor-driven pumps and tube-wells are two major foundry items in the agriculture sector. Major supply of materials is sourced by iron scraps delivered from local recycle industry and ship-breaking industry, while iron pellets are imported from India. Supply of cokes which functions as fuel for melting raw materials is depending on the import from China and India. Meantime, there is no manufacturer in Bogra engaged in the production of aluminum die-casting products, but these products are produced by several manufacturers that located nearby Dhaka.

The production of foundry items is done by cupola furnace using cokes with the production capacity of 4 tons per an hour. This cupola furnace was introduced under the project being sponsored by the World Bank. Design of the furnace was done utilizing technology of Switzerland but installation of the furnace components was done by the manufacturer himself. Two units of this furnace were installed at Milton Metal where the Study Team has visited and are operated by one-shift workforce with 8 hours working time per one day. Production capacity of this furnace is approximately 30 tons per day which is equivalent to worth of 2 Million Taka. Two (2) hours is required from kindling to make pig irons by this furnace and the Study Team has observed the operations of casting these pig irons into the molds.

Final Report for Preparatory Study of Private Sector Development Programme in Bangladesh Photo 6.3 The Cupola Furnace newly installed



Source: Taken by the JICA Study Team

According to the owner of Plant, they wish to introduce Induction Furnace which is easy to control the quality of foundry products, in order to step in the production of ductile iron products in the future. In the course of observation tour to the foundry plant, the workers are handling pig irons of 1,400 degree centigrade without wearing any globe and shoes, which is in very dangerous working conditions. These conditions which are directly linked to the accidents and injuries at the working places, were also observed at the assembling plant of water pump.







Source: Both photos are taken by the JICA Study Team



Source: Both photos are taken by the JICA Study Team

As to the competitive advantage in the production cost, Bangladesh Foundry Industry has steel advantageous to that of China, although the energy cost in Bangladesh is 5 - 10% higher than that of China but the labor cost remains at 1/3 level against that of China which makes Bangladesh competitive for 15 - 20% against China overall. Thus, the Foundry Industry in Bogra has been enjoying a steady growth, while delivering its Foundry Products not only to the domestic markets but to the eastern parts of India. The Study Team has conducted a Value-chain Analysis on the production of Foundry Products at Bogra and its outcomes are reported in detail in Chapter 7.

As to the constraints that FOAB faces in the field of quality control, they have identified lack of the testing facility for physical durability test and chemical analytical test on their products. Currently, foundry manufacturers are conducting only visual inspection to their products prior to the shipment, while it is difficult to satisfy the inspection requirements with the present systems, when they have once introduced a mass production system to their production plants where more accurate specifications and inspection are applied for controlling its size and shapes. These testing facilities are not available even in the Bogra canvas of Bangladesh Industrial Technical Assistance Center (BITAC). In the technology development, they have received two Japanese experts in the fields of Foundry and Heat Treatment dispatched by Asia Production Organization (APO) 10 years ago, but no technical extension has been made thereafter. Preparation of the molds is currently made manually but they wish to introduce an automated mold production system in order to improve the quality of foundry products. In this context, they wish to have a dispatch of experts in these fields. With regard to the finance, they are also facing a difficulty in access to an adequate size of finance to meet the requirements for modernization of the production plants, since financing from local banks is rather limited and difficult to get sanctions. Rather, they are interested in the extension of loans or funds from JICA to be used for the development of private sector, if any.

#### 6.2 Selection of the Priority Industries in Bangladesh

#### 6.2.1. Methodology adopted in the Selection of the Priority Industries

In order to evaluate various types of major industries in Bangladesh, the following methodology has been adopted. Firstly, the top fifty (50) Industries were selected in its Gross Outputs shown in the Statistics of the Report on Bangladesh Survey of Manufacturing Industries (SMI) 2005 - 2006 which was conducted by Bangladesh Bureau of Statistics (BBS). These Statistics applied the classification systems along with Bangladesh Standard Industrial Classification (BSIC). After this these Industries were grouped by the similarity of their Business characteristics and were listed among the Industries according to the magnitude of their Gross Product. And those grouped Industries have been evaluated on Productivity such as Gross Added Values, Ratio of Added Value against Gross Output, Gross Assets and Number of Employees per firm as relates to the Added Value per Employee, Added Value against Total Asses used. Then such emerging Industries which fall out of the top fifty (50) major Industries, but are considered to be contributing to the National Economy are listed. The third evaluation points are to check the conformity with the Superior Planning Policies, magnitudes of Employment Opportunity Creation, Utilization Impact of National Resources, Connectivity with Upper and Lower Industries in the Economic Value Chain,

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Final Report for Preparatory Study of Private Sector Development Programme in Bangladesh and Magnitudes of Foreign Currency Earning. Finally, the Prioritized ten (10) Industries were selected according to the results of Questionnaire Surveys conducted in Bangladesh and Japan.



According to the statistical data that are available from the same survey data on the Manufacturing Sector done by BBS, it is apparent that the Total Gross Output and the Total Value Added in the private sector has been sharply increased in the periods from the years of 2000/01 to 2005/06 within the entire periods from 1973 to 2006. The trends of these performances are as shown in the figure 2.74 below. These phenomena are synchronized with the performance trends of garment industry in Bangladesh. The major industry in Bangladesh is, needless to say, represented by the garment and its related industries. In fact, almost 80% of the nation's foreign exchange earnings came from these industries, thus the Government of Bangladesh has been providing various incentives and supports with those exporters such as the formation and dispatch of a mission for exploring export markets and special sanction to the exporter that they can retain and use a part of foreign exchanges that they have gained for the development of new overseas markets.



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	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94	1995/96	1997/98	1999/00	2001/02	2005
Private Sector Gross Value Added		2008	3195	300	2800	3198	4782	5546	7032	9215	11639	12599	9 15868	17873	19054	37504	46446	47410	56341	65892	120793	161462	171190	206998	270738	70
Private Sector Gross Output		5462	5929	8174	6899	852	11730	13978	17395	23099	30522	3587:	40749	47220	50263	130080	153482	159568	177432	214920	293994	465706	522184	588965	857457	188
Total Gross ∖alue Added	3737	4569	6240	6682	10263	10263	13061	14130	15711	18832	23068	23956	29567	31954	32549	60663	65815	66412	73249	84459	143572	182233	203959	235443	290910	71
Total Gross Output	7350	11800	15930	18734	27120	27120	34784	40717	47630	50623	62042	69917	75483	41216	89177	177568	201836	208383	222868	256436	329682	508460	576655	639220	901937	1912

Figure 6.9 Trends of Gross Output and Gross Value Added in the Private Sector(1973-2005)



Source: Prepared by the Study Team based on Ownership of Establishment by Employment Size in year 2005-06 by BBS



#### 6.2.2. Analysis and Selection of the Priority Industries

(1) Productivity Analysis on the Major Industries

BBS has conducted the Survey on Manufacturing Industry over 34,700 Corporations in 239 business trades in 2005-06. The Study Team has conducted an analytical research works on the top 50 industries in the performance of its Gross Outputs. The results of these analysis were presented in the table No. : Top 50 major industries on the Gross Outputs in Bangladesh (2005-06) and No. : Productivity Analysis on the Top 50 Industries in Bangladesh (2005-06). Such Productivity Analysis have been conducted on the Value Added Ratio against the Gross Output, Labor Share (the Value Added per Employee), Return on the Total Fixed Assets, in addition to the Analysis on the Employee per Entity, the Total Fixed Asset per Entity and the Total Fixed Asset per Employee which are analyzed in order to observe the magnitude of capitalization in the industries. The Study Team has further conducted the analysis on the weighted average of these performances, after putting these 50 major industries into 13 different trade groups. The results of these exercise are shown in the figure No. : The Activity Performance Indicators on Top 50 Major Industry by Trade Categories (2005 - 06)

Rank	Industrial Code	Industry Nama & Ownership	No. of Estab (1).	Total Fixed Assets (2)	Addition Alteration (3)	Depreciation (4)	Total Workers Engaged (5)	Gross Output (6)	Industrial Cost (7)	Non-Ind. Cost & Indirect Tax (8)	Gross Value Added (9)	Value Added at Factor (10)	Tax (11)
1	181*	Wearing Apparel expt. Fur App	4,532	65,334,875	6,475,115	11,220,332	1,507,402	622,698,490	345,552,993	21,640,168	7,000,000	155,505,329	105,038
2	1811	Wearing Apparel, Gar. expt.Fur	4.165	61.963.791	6.171.387	10.131.270	1.469.492	509.705.623	337.813.397	18.272.650	1.892.226	153.619.576	89.101
3	1730	Manufacture of Knitwear	636	30,832,719	4,403,710	6,686,644	512,744	228,100,149	162,131,516	10,341,312	65,968,633	55,627,321	299,180
4	171*	Manufacture of Textiles	11,778	141,227,969	1,872,032	23,226,885	645,295	204,223,788	152,325,512	7,118,921	51,898,275	44,779,354	127,921
5	271*	Iron & Steel Basic Industry	281	21,118,719	2,418,951	4,308,081	29,489	159,687,537	125.937.775	9,386,353	33,749,762	24,363,409	733.484
6	2713	Iron & Steel Re-rolling Mills	188	17,980,911	1,436,328	4,080,800	23,147	125,329,194	101,499,541	8,497,144	23,829,653	15,332,508	727,415
7	269*	Non-metalic Mineral Prod. Nec	3,063	44.800.834	1,872,979	7,213,756	274,388	117,158,679	47,147,396	6.259.117	70.011,284	63,752,167	796,538
8	242*	Other Chemical Products	700	21,919,447	3,623,334	3,317,948	85,162	83,874,677	37,107,624	4,757,440	46,767,053	42,009,613	645,695
9	1711	Cotton Textiles expt H. Loom	1,508	51,044,107	4,694,507	11,743,253	152,333	79,634,792	65,178,756	2,684,392	14,456,037	11,771,645	57,888
10	153*	Animal Feeds & By-products	4.174	12,498,008	420,486	574,931	90,337	75,068,249	62,107,194	426.698	12,961,054	12,534,356	30,551
11	3410	Mfg. of Motor Vehicles	10	316,249	-	33.661	630	71,303,952	5.951.139	94.224	65.352.813	65.258.590	-
12	151*	Food Manufacturing	440	10,843,702	285,018	860,380	24,819	67,554,960	48,681,730	2,440,200	18,873,230	16,433,030	55,526
13	1601	Cigarettes Manufacturing	27	9.675.261	2,822,342	2,167,293	17,501	65.182.592	19.881.941	38,172,087	45,300,651	7,128,564	1.246.831
14	2423	Allopathic Drugs & Medicines	380	16,850,223	3,422,560	2,519,395	68,276	63,064,731	29,350,446	4,040,414	33,714,284	29,673,870	380,851
15	1535	Rice Milling	3,870	9,619,473	321,359	370,094	82,559	58,713,481	48,269,622	282,962	10,443,859	10,160,897	28,131
16	2692	Bricks, Tiles & Non-clay Products	2.607	5,051,279	154,437	158,030	211,860	56.035.578	5.234.316	438,460	50,801,262	50.362.802	26,663
17	2094	Mrg. of Cement Products	90	26,632,570	1,329,687	5,068,668	12,982	47,532,118	34,079,623	4,325,689	13,452,494	9,126,806	410,493
18	1512	Products of Fish & Sea Foods	108	9,062,974	239,269	503,621	15,653	46,470,531	34,202,869	1,472,650	12,207,002	10,795,012	4,224
19	154	Mig. of Other Food Products	1,815	9,853,282	830.242	5,809,354	84,895	38.809.660	21.559.230	1.694.124	17,250,430	15,556,307	586,459
20	4740	International Steel Mills	107	2,942,431	973,304	7 440 204	5,200	31,943,339	22,424,040	1 060 280	9,510,713	0,040,004	45 800
21	1713	Ducing Blacching & Finishing	570	0 070 767	0,070,900	1,412,201	132,790	31,403,103	22,503,072	1,009,200	0,902,111	7,912,030	15,690
22	1716	Uppelling, Dieachling & Finishing	0 622	2 110 271	215,009	1,405,095	222 722	29,794,011	19 577 1 49	92 766	0,203,102	10 720 205	6 2 2 0
2.0	1714	Silke & Supportion Textiles	0,032	2,119,371	4624 222	2 150 219	62.052	29,351,305	20.042.792	1 106 100	7 209 409	611 220	22 220
25	102*	Footwear Manufacturing	470	5 225 500	371 / 70	1 317 204	29 5 9 8	26,064,000	1/ 512 300	457 849	11 551 700	11 003 851	1 700
26	2/1*	Mfg. of Basic Chemicals		48 000 606	1 471 409	55 / 27 8/5	10 305	25 281 701	1/ 330 208	772 713	10 942 403	10 169 690	238 928
27	172*	Manufacture of Other Textile	323	436 972 516	2 504 266	3 945 259	46 427	24 392 879	17 501 707	1 661 148	6 891 171	5 230 023	18 753
28	2412	Fertilizer & Nitrogen Compound	15	47,150,361	1.441.323	55.002.051	8.157	23,788,587	13,436,396	521.872	10.352.191	9.830.319	238,908
29	221*	Publishing	467	4.096.109	344.945	339.685	66,490	21,959,108	11,398,776	2,664,053	10,560,332	7.896.279	193,622
30	191*	Leather & Its Products	283	4,477,169	46.779	446.310	21,281	20.679.668	14,790,091	283.544	5,889,577	5,606,033	21,105
31	1911	Tanning & Leather Finishing	202	4.448.368	46.347	444.628	20.012	20.447.076	14.640.242	282.734	5.806.835	5.524.101	21,105
32	1921	Leather Footwear	455	4,535,410	320,600	1,246,975	28,199	20,115,724	12,070,875	457,059	8,044,849	7,587,790	1,677
33	361*.	Furniture & Fixtures Mfg	963	1,845,785	527,241	958,057	37,304	19,810,587	7,020,482	73,121	12,790,105	12,716,985	673
34	251*	Mfg. of Rubber Products	131	2,398,386	353,614	331,097	11,152	19,452,697	10,631,550	1,321,841	8,821,146	7,499,305	62,513
35	2212	Printing & Publg. Of Newspaper	264	3,643,814	237,360	296,414	62,371	19,328,496	9,863,249	2,619,492	9,465,246	6,845,754	185,631
36	2519	Mfg. pf Rubber Products. NEC	109	2,303,435	352,546	326,493	10,284	18.893.431	10,177,809	1.314.794	8,715,622	7.400.828	57.348
37	1515	Edible, Veg. Oil expt Hydro Oil	274	1,496,661	42,114	324,997	7,386	18,488,113	12,299,061	858,939	6,189,052	5,330,114	2,239
38	351*	Mfg. of Other Transport Equipmt	125	374,537	32,837	46,369	6,425	15,995,803	10,702,306	1,563,651	5,293,497	3,729,846	2,339
39	3513	Ship Breaking & Dismantling	31	157,491	18,012	32,884	3,742	15,432,037	10,357,991	1,557,315	5,074,046	3,516,731	-
40	1603	Bidies Manufacturing	160	524,110	33,981	38,509	43,223	15,312,133	5,764,425	2,071,944	9,547,708	7,475,764	1,816,715
41	1541	Mfg. of Bakery Products	1,142	1,504,185	43,321	1,469,169	29,783	13,160,575	7,969,925	676,595	5,190,651	4,514,055	376,875
42	2691	Mfg. of Earthenwares	260	12.816.294	384.511	1.963.317	47.345	12.196.834	6.738.928	1.417.520	5,457,907	4.040.387	35.873
43	1531	Grain Milling expt Rice Mill	241	2,155,807	91,612	132,034	5,811	11,962,792	10,806,974	139,267	1,155,818	1,016,551	2,261
44	1812	Mrg. of Hats & Caps	66	1,860,928	294,085	888,851	26,912	11,488,599	7,141,910	3.281.537	4,346,689	1.065.152	15.048
45	1546	Tea, Corfee Processing	139	4,3/3,358	466,725	1,381,954	25,576	10,976,128	4,192,721	201,547	6,783,406	6,581,859	37,886
46	3011	Mrg. or Wooden Furniture	/44	1,675,706	524,743	865,921	33,915	10,745,952	6,493,058	11,818	4,252,894	4,241,076	494
4/	252-	MIG. OF Plastic Products	653	5,229,584	437,023	524,187	18,779	9.628.845	5.089.628	332,274	3,939,216	3.606.942	10,459
48	25.0*	Mrg. of Spooling & Thread Bal	98	428.604.795	2.275.913	/32.987	19.909	9.355.568	0.911.891	889.922	2.443.677	1.553.755	12.369
49	2614	Chile	1/	421,498	110,239	94,349	5,303	0,441,973	4,024,903	1,106,216	3,017,070	2,/10,854	6,747
50	3014	UIIING	. 4	47,091	-	11,022	153	0,200,912	100,364	30,183	0,100,048	0,142,305	-

Figure 6.10 List of Top 50 Major Industries by Gross Output(2005 - 06) Init: Thousand Taka

Source: Fixed Assets. Persons Engaged, Gross Output and Value Added by Industry Group in year 2005-06, BBS

Source: Prepared by the Study Team based on Ownership of Establishment by Employment Size in year 2005-06 by BBS

		8		5	1		<b>F</b>	,	~ 5	
No.	Industrial Code	Industry Nama & Ownership	Gross Value Added (in '000 Taka)	Value Added at Factor Cost (in '000 Taka)	Workers per Estb. (in Person)	Fixed Asset per Estb. (in '000 Taka)	Fixed Asset per Worker (in '000 Taka)	Value Added per Output (in %)	Value Added per Worker (in '000 Taka)	Gross Output per Fixed Asset (in No.)
1	260*	Non-motolia Minaral Drad Nag	70.011.094	60 750 467		14 606 46	162.00	E0.76%	055.45	0.52
	209	Non-metalic Milleral Prod. Nec	70,011,264	63,752,167	332.01	14,020.40	103.20	59.76%	255.15	9.53
2	1730	Manufacture of Knitwear	65,968,633	55,627,321	352.82	48,479.12	60.13	28.92%	128.66	8.23
3	3410	Mfg. of Motor Vehicles	65,352,813	65,258,590	806.20	31,624.90	501.98	91.65%	103,734.62	7.40
4	171*	Manufacture of Textiles	51,898,275	44,779,354	54.79	11,990.83	218.86	25.41%	80.43	1.45
5	2692	Bricks, Tiles & Non-clay Products	50,801,262	50,362,802	104.94	1,937.58	23.84	90.66%	239.79	7.56
6	242*	Other Chemical Products	46,767,053	42,009,613	123.12	31,313.50	257.39	55.76%	549.15	6.97
- /	1601	Ligarettes Manufacturing	45,300,651	7,128,564	89.58	358,343.00	552.84	09.50%	2,588.40	2.62
9	2423	Allonathic Drugs & Medicines	33 714 284	29 673 870	101.00	44 342 69	246.80	53.46%	493 79	1.56
10	2713	Iron & Steel Re-rolling Mills	23.829.653	15.332.508	21.64	95.643.14	776.81	19.01%	1.029.49	6.01
11	151*	Food Manufacturing	18.873.230	16,433,030	63.00	24.644.78	436.91	27.94%	760.43	225.47
12	154*	Mfg. of Other Food Products	17,250,430	15,556,307	56.41	5,428.81	116.06	44.45%	203.20	6.23
13	1711	Cotton Textiles expt H. Loom	14,456,037	11,771,645	648.19	33,848.88	335.08	18.15%	94.90	6.74
14	2694	Mfg. of Cement Products	13,452,494	9,126,806	179.67	295,917.44	2,051.50	28.30%	1,036.24	3.74
15	153*	Animal Feeds & By-products	12,961,054	12,534,356	21.33	2,994.25	138.35	17.27%	143.47	6.10
16	361*.	Furniture & Fixtures Mfg	12,790,105	12,716,985	81.27	1,916.70	49.48	64.56%	342.86	11.09
17	1512	Products of Fish & Sea Foods	12.267.662	10.795.012	144.24	83.916.43	578.99	26.40%	783.73	1.78
18	192*	Footwear Manufacturing	11.551.700	11.093.851	144.94	11.118.30	176.55	44.32%	390.29	5.13
19	241*	Mfg. of Basic Chemicals	10,942,403	10,169,690	46.77	565.878.78	4.667.61	43.28%	1.061.85	3.94
20	1716	Handloom Textiles	10,814,161	10,730,395	88.14	245.52	9.07	36.79%	46.27	10.86
21	221*	Publishing	10.560.332	7.896.279	1.045.64	8.771.11	61.60	48.09%	158.83	0.63
22	1535	Rice Milling	10,443,859	10,160,897	78.60	2,485,65	116.52	17.79%	126.50	3.36
23	2412	Fertilizer & Nitrogen Compound	10.352.191	9.830.319	27.08	3.143.357.40	5.780.36	43.52%	1.269.12	13.87
24	1603	Bidies Manufacturing	9.547.708	7.475.764	75.42	3.275.69	12.13	62.35%	220.89	1.10
25	2711	Iron and Steel Mills	9.518.713	8.646.564	62.97	49.871.71	565.85	29.80%	1.830.52	4,99
26	2212	Printing & Puble, Of Newspaper	9,465,246	6.845.754	121.24	13.802.33	58.42	48.97%	151.76	0.53
27	1713	Jute Textiles expt H Loom	8 982 111	7 912 830	143.74	395 679 87	378.41	28.53%	67.64	0.06
28	251*	Mfg. of Rubber Products	8 821 146	7 499 305	543.80	18 308 29	215.06	45.35%	790.99	0.50
29	2519	Mfg. of Rubber Products NEC	8 715 622	7 400 828	142 38	21 132 43	223.98	46.13%	847.49	5 36
30	1712	Dveing Bleaching & Finishing	8 263 182	7 748 199	75.20	15 568 01	198.07	27 73%	184.44	4.62
31	3614	Chiks	8 180 548	8 142 365	99.07	6 798 71	311.05	98 72%	53 467 63	4.60
32	1921	Leather Footwear	8 044 849	7 587 790	61.98	9 967 93	160.84	39.99%	285 29	4 4 4
33	1714	Silks & Synthetic Textiles	7 308 498	611 229	38.74	30 851 42	409.06	25.87%	115.91	10.73
34	181*	Wearing Apparel expt. Fur App	7.000.000	155.505.329	85.13	14.416.34	43.34	1.12%	4.64	8.11
35	172*	Manufacture of Other Textile	6.891.171	5,230,023	236.25	1.352.856.09	9.412.03	28.25%	148.43	5.30
36	1546	Tea. Coffee Processing	6,783,406	6.581.859	94.35	31,463,01	170.99	61.80%	265.23	8.20
37	1515	Edible, Veg, Oil expt Hydro Oil	6,189,052	5.330.114	26.96	5,462,27	202.63	33.48%	837.94	12.35
38	191*	Leather & Its Products	5.889.577	5,606,033	51.40	15.820.39	210.38	28.48%	276.75	42.71
39	1911	Tanning & Leather Finishing	5,806,835	5.524.101	120.71	22.021.62	222.29	28.40%	290.17	97.99
40	2691	Mfg. of Earthenwares	5,457,907	4.040.387	270.14	49,293,44	270.70	44.75%	115.28	29.22
41	351*	Mfg. of Other Transport Equipmt	5 293 497	3 729 846	26.08	2 996 30	58.29	33.09%	823.89	8.75
42	1541	Mfg. of Bakery Products	5 190 651	4 514 055	182.10	1 317 15	50.50	39.44%	174.28	0.75
43	3513	Ship Breaking & Dismantling	5 074 046	3 516 731	24.11	5 080 35	42 09	32 88%	1 355 97	5.55
43	1812	Mfg of Hate & Cane	1 3/6 600	1 065 152	407.76	28 105 99	42.03	37 92%	1,000.97	5.55 £ 17
44	3611	Ming. of Wooden Eurniture	4,040,009	1,000,102	184.00	20,133.00	40.41	30.03%	125.40	0.17
45	252*	Ming. of Moodern Furniture	4,202,094	4,241,070	104.00	2,202.29	49.41	39.30%	123.40	2.51
46	202	IVII 9. OF Plastic Products	3,939,216	3,000,942	45.58	8,008.55	2/8.48	40.91%	209.77	6.41
4/	359"	Ning, or Transport Equipment NEC	3,817,070	2,710,854	28.76	24,794.00	/9.48	45.22%	/19./9	1.84
48	1724	iving, or spooling & Inread Bal	2,443,677	1,553,755	203.15	4,3/3,518.32	21,528.19	26.12%	122.74	0.02
49	1811	wearing Apparel, Gar. expt.Fur	1,892,226	153,619,576	311.94	14,877.26	42.17	0.37%	1.29	20.03
50	1531	Grain Milling expt Rice Mill	1,155,818	1,016,551	21.86	8,945.26	370.99	9.66%	198.90	174.13

Figure 6 11 Productivity	v Performances on the	Ton 50 Maio	or Industry
riguit 0.11 riouucuvit	I CITOI mances on the	/ IOP 30 Maje	n muusu y

Source: Fixed Assets, Persons Engaged, Gross Output and Value Added by Industry Group in year 2005-06, BBS

Source: Prepared by the Study Team based on Ownership of Establishment by Employment Size in year 2005-06 by BBS

			0	(	,							
			Weight	ed Average Perfo	ormance Indicato	ors on the Top S	50 Industries by (	Industries by Categories				
No.	Category of Industry	No. of Industries	Workers per Estb. (in Person)	Fixed Assets per Estb. (in '000 Taka)	Fixed Assets per Worker (in '000 Taka)	Value Added per Output (in %)	Value Added per Worker (in '000 Taka)	Grpss Output per Fixed Asset (in No.)				
1	Light Engineering Industry	3	287.01	19,805.07	213.25	56.65%	35,092.77	6.00				
2	Agro & Agro-processing Industry	11	79.77	48,345.39	276.90	40.58%	5,413.62	40.53				
3	Ship-breaking & Dismantling Industry	1	24.11	5,080.35	42.09	32.88%	1,355.97	5.55				
4	Iron & Steel Industries	3	68.76	73,556.81	686.27	23.32%	1,334.83	4.94				
5	Chemical & Fertilizer Industries	3	65.66	1,246,849.89	3,568.45	47.52%	960.04	8.26				
6	Plastic & Rubber Industries	3	243.92	15,816.42	239.18	44.13%	616.08	4.09				
7	Pharmaceutical Industry	1	101.02	44,342.69	246.80	53.46%	493.79	1.56				
8	Cement & Ceramics Industries	3	184.92	115,716.16	782.01	54.57%	463.77	13.51				
9	Leather & Footwear Industries	4	94.76	14,732.06	192.51	35.30%	310.62	37.57				
10	Furniture & Fixture Industries	2	132.63	2,084.50	49.44	52.07%	234.13	6.80				
11	Textile & Fabric Industries	7	200.01	887,759.06	4,639.96	25.72%	116.36	4.13				
12	Home Textile Industry	2	247.95	14,220.70	39.11	37.31%	103.89	8.52				
13	Ready-made Garment Industry	3	249.96	25,924.24	48.55	10.14%	44.86	12.12				
14	Other Different Industries	4	393.73	10,118.90	73.86	54.79%	196.66	2.95				
	Total	50										

Figure 6.12 The Activity Performance Indicators on Top 50 Major Industry by Trade Categories (2005 - 06)

Source: Fixed Assets, Persons Engaged, Gross Output and Value Added by Industry Group in year 2005-06, BBS

Source: Prepared by the Study Team based on Ownership of Establishment by Employment Size in year 2005-06 by BBS

According to the Activity Performance Indicators based on the Weighted Average by Trade Categories, Light Engineering Industry, Cement & Ceramic Industries, Pharmaceutical Industry, Leather and Footwear Industries, Furniture & Fixture Industries are ranked at the higher level on the Value Added Ratio against Gross Output, while Light Engineering Industry, Agro & Agro-processing Industries, Ship-breaking & Dismantling Industries, Iron & Steel Industries, Chemical & Fertilizer Industries are ranked at the higher level on the Value Added per Employee. Meantime, Agro & Agro-processing Industries, Leather & Footwear Industries, Cement & Ceramic Industries, Ready-made Garment Industry, Home Textile Industry, Chemical & Fertilizer Industries are ranked at the higher level on the Total Fixed Assets. For the Industry that provided bigger Employment Opportunity, Light Engineering Industry, Ready-made Garment Industry, Home Textile Industry, Ready-made Garment Industry, Home Textile Industry, Ready-made Garment Industry, Home Textile & Fabric Industries are ranked at the higher level on the Return on the Total Fixed Assets. For the Industry that provided bigger Employment Opportunity, Light Engineering Industry, Ready-made Garment Industry, Home Textile & Fabric Industries are ranked at the higher level.

(2) Analysis of Inter-industry Configuration in Bangladesh (Impact to the Domestic Industries, etc.) The Government of Bangladesh, through the Planning Commission of the Ministry of Planning, has developed Industrial Input-output Table (IOT) along with the processes of creating 6th 5-year Plan of Bangladesh. The IOT was developed on the matrix of 86 major industries in Bangladesh, based on the economic data in the years of 2006/2007 which were composited by the Bangladesh Bureau of Statistics (BBS). Analysis of the IOT was conducted based on the data on the Domestic Supply, Domestic Demand and four (4) key elements of Production Activities; Skilled and Unskilled Labor Costs, Cost of Industrial Estate and Amount of Capital Outlays. In addition to the IOT, Analysis of Endogeneity Degree, Backward Linkage and Forward Linkage were conducted by applying the Leontief I-O Technology Coefficients. Results of this analysis are shown in the following Figure.

Code	Activity	Endogeneity Degree	Backward Linkages	Forward Linkages
49	Petroleum Refinery	0.8229	3.2898	9.8572
62	Power Plant Building	0.8165	2.9724	1
23	Fish Process	0.7772	2.9236	1.0023
55	Basic Metal	0.8572	2.8736	4.6139
65	Canal Dyke Building	0.7624	2.8091	1
54	Cement	0.8798	2.8065	2.1539
28	Food Process	0.8918	2.7467	1.1052
63	Rural Road Building	0.8204	2.7425	1
30	Leather Industry	0.7833	2.6857	1.0119
24	Oil Industry	0.7176	2.6726	2.2597

Figure 6.13 Endogeneity Degree and Backward Linkages of Bangladesh Industries

Source: Technical Framework Papers Volume 1: Input Output Structure of the Bangladesh Economy 2006-07, Planning Commission

In analyzing the Endogeneity Degree, it is assumed that the coefficient figure of 0.57 or more has higher potential for Endogenous Activity, while the coefficient figure of 2.1 or more has higher potential for Backward Linkage to the industries surrounding. According to this analysis, the Industries suitable for the Endogenous Activity and Backward Linkage Activity are; Fish Process (Agro-processing), Basic Metal (Light Engineering), Food Process (Agro-processing), Leather Industry, Oil Industry (Agro-processing) among the eight (8) priority industries pre-determined. As to the Forward Linkages, the higher coefficient figures in the table indicate the possibility of bottle-necks in the course of its business implementation. In the meantime, this IOT Table can be used for the analysis of Internalization of the Imported Commodities, since the figures in the IOT include the figures derived from the External Trade of Bangladesh.

#### (3) Evaluation of the Major Industries for the selection of Priority Industry

In addition to the evaluations on the 13 Major Industries as specified in the Chapters 6.2.2 (1) and (2) above, such Qualitative Evaluations as the Conformity with the superior Strategic Papers like  $6^{th}$ 5-year Plan, National Industry Policy 2009-2012 and Export Policy 2009-2012, Possibility of Employment Opportunity, Impact arising from the Industrial Input and Output Relations, and Possibility of Foreign Exchange Earnings. Furthermore, additional Qualitative Evaluations were conducted on such Emerging Industries which are not included in the Top 50 Major Industry due to smaller economic scale on its gross outputs. Overall Evaluation for selecting the Priority Industry along with this Study shall be conducted along with the integration of results of these Qualitative Evaluation and Quantitative Evaluations.

#### 1) Quantitative Evaluation

In the processes of Quantitative Evaluation, Conformity with the Supreme Strategic Papers (being assigned as the Priority Industry by the Papers or not), Potentiality as the Industry with Backward and Forward linkages, Level of Labor Intensity, and Degree on the Earning of Foreign Exchange were, among other results of analysis stated herein (2) above, evaluated by assigning the degrees in addition to the analysis on Number of Employee per Entity, the Ratio of Value Added against the Gross Output, the Value Added per Employee, and the Return on the Total Fixed Asset have been evaluated. Two degrees were assigned to the evaluation of Conformity with the Supreme Strategic Papers and to the Backward and Forward Linkages, while three degrees were assigned to the rests. Meantime, analytical results on the Industrial Input and Output Relations which have been conducted by the Government of Bangladesh were directly referred. The results of this analysis were shown in the Figure 6.14.



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Light Engineering Industry was evaluated as the top contender followed by In this evaluation, Agro & Agro-processing Industry, Leather & Footwear Industry, Cement & Ceramic Industry, Ready-made Garment Industry, Home Textile Industry, Furniture & Fixture Pharmaceutical Industry. However, Cement & Industries, Plastic & Rubber Industries and Ceramic Industries, Furniture & Fixture Industries, and Plastic & Rubber Industries were not assigned as the Priority Industry by the Export Policy 2009-2012. As to the Growth Trends on the major international commodities, top 3 industries were identified as Sea-bound ship building, Pharmaceutical, and Agro-processing followed by Toiletry, Software & ICT related Industries.

No.	Category of Industry	Workers/ Est.	Value Added/ Output	Value Added/ Worker	Gross Output/ Fixed Asset	Priority in Govt Policy	Backward Linkage Potential	Forward Linkage Potential	Labor Intensive	Forex Earning	Total Score	Ranking
1	Light Engineering Industry	13	13	13	6	10	10	5	10	10	90	1
2	Agro & Agro-processing Industries	4	6	12	13	10	10	10	10	10	85	2
3	Ship-breaking & Dismantling Industries	1	4	11	5	0	0	0	10	0	31	11
4	Iron & Steel Industries	3	2	10	4	0	0	0	5	0	24	12
5	Chemical & Fertilizer Industries	2	8	9	8	10	0	0	0	0	37	10
6	Plastic & Rubber Industries	10	7	8	2	10	0	0	5	10	52	6
7	Pharmaceutical Industry	6	11	7	1	10	0	0	0	10	45	9
8	Cement & Ceramic Industries	8	12	6	11	10	10	10	0	5	72	4
9	Leather & Footwear Industries	5	10	5	12	10	10	10	10	10	82	3
10	Furniture & Fixture Industries	7	9	4	7	10	0	0	10	5	52	6
11	Textile & Fabric Industries	9	3	3	3	0	0	0	5	0	23	13
12	Home Textile Industry	11	5	2	9	10	0	0	5	10	52	6
13	Ready-made Garment Industry	12	1	1	10	10	0	0	10	10	54	5

Figure 6.14 Quantitative Evaluations on 13 Major Industries

Source : Prepared by the Study Team based on various Data

2) Emerging Industries with higher Growth Rates in Exports in the recent years

The following Figure shows Growth Rates in Exports during the periods from 2006 to 2010. According to this Figure, Sea-bound Ship-building shows remarkable growth with 61.3% followed by the Pharmaceutical Industries with 23.5% and Agro-products & Agro-processing Industries with 19.2% during the period. Although Toiletry Products Industries and Software & ICT-related Industries also show steady growth, the Light Engineering Industry does not indicate any growth in its exports.

Figure 6.15 Gro	owth Rate in Export	ts by Industry(200	6 ~ 2010)
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Rank	Name of Major Industries	Growth Rate (2006-2-10)
1	The Sea-bound Ship-building Industries	61.3%
2	Pharmaceutical Industries	23.5%
3	Agro-products & Agro-processing Industries	19.2%
4	Toiletries Products Industries	15.2%
5	Software & ICT Industries	10.5%
6	Footwear & Leather Industries	4.6%
7	Light Engineering (including Auto-parts & Bicycles) Industries	1.7%
8	Home Textile Industries	-1.0%

Source: Prepared by the JICA Study Team based on EPB Data





Those three (3) Emerging Industries which showed higher growth rate in Exports Businesses but were not listed in the top 13 Industries in Gross Outputs, are the Ship-building Industry, Software & ICT Services Industry and Toiletry Products Industries. A brief description of those Industries is as follows;

#### · Ship-building Industry

The Inland Water Transport has been functioned as one of the major transport means in Bangladesh where three (3) major rivers are passing by, and ship-building for the traditional river-bounding ships has a longer history. There is an industrial cluster of ship-building for smaller ship at the Narayangonji City located at the south of capital city of Dhaka. In Bangladesh, Ship-breaking and dismantling industry is quite common in Chittagong area and they have commenced the production of steel-made ferry boats for the domestic uses. Export of ocean-going ships in the years of 2010/2011 has increased 33.3% higher than that of the previous year which reached to the sums of US Dollar 4-.44 Millions. The destinations of these exports are such European Countries as Denmark. Considering huge supply potential of the qualified Bangladesh welders and ship-fitters who are currently working at various shipyards in Singapore and Dubai to the domestic ship-building industry, it is anticipated that Bangladesh has great potential to be the venue of major ship-building industry in the regions. The Ministry of Industries has, with their ambitious hope, set a schedule to develop the Ship-building Road Map by June 2012 in order to accelerate the industrialization of ship-building industry in Bangladesh.

#### · ICT Products & ICT-Service Industries

In the recent years, promotion program for the Information Technology-related Industry is widely and enthusiastically implemented in various countries responding to the globalization of economy world-wide. There are two (2) major industrial associations in Bangladesh that are Bangladesh Computer Samity (MCS) and Bangladesh Association of Software and Information Services (BASIS). The former is consists of the entities engaged in the computer-related industries in general, while the latter consists of the industries engaged in the soft-wear development and data-processing. Annual turn-over is now expected to reach to the level of US Dollars 410 Millions and enjoying annual growth rate of over 20%. According to the forecast made by the World Bank, turn-over of Soft-wear development and IT-related Services will reach to the level of US Dollars 500 Million by 2014. Bangladesh is considered to be the third highest after China and India in the ranking of the potential venues for the Soft-wears Development, with the reason that Bangladesh has huge amount of human resources educated in English. The Government of Bangladesh has introduced the concept of "the Digital Bangladesh" in the Vision 2021, and has focused the development of IT-related Industry as one of core objectives in the supreme strategies.

#### Toiletry & Cosmetic Industries

With the rapid economic development in Bangladesh in the recent years, there is great potential for the development of income level that leads to the improvement of hygienic sense and to the creation of huge domestic markets of Toiletries. Such multi-national industries as Unilever have already been conducting their production and marketing activities in Bangladesh in the past, however, similar activities by national capital have also been commended in the recent years. Since Trade Balance in the fields of Toiletries has been recording huge loss to Bangladesh, the development of Toiletry Industry which functions as substitution of those import, will greatly contribute to the improvement of Trade Balance. The Toiletry Industry has wider linkages with packaging and other elements, thus it is anticipated that the development of Toiletry Industry will drastically contribute to the development of Plastic and Paper Industries in particular as well.

3) The Priority Industries in the Strategic Development Policies (Conformity with the Superior Planning Policies)

In light of the quantitative analysis conducted hereinabove, a cross-checking with the list of Priority Industries identified by various Strategic Development Papers has been conducted, in order to cross-check conformity with the Industrial Development Policies adopted by the Government of Bangladesh. Those industries that were identified as the Priority Industry by three (3) Strategic



Papers out of Four (4) Strategic Papers which consist of 6th 5-year Plan, National Industrial Policy 2010-2015, Export Policy 2009-2012 and SME Strategic Paper, were chosen for the Qualitative Evaluations. Implications of the Priority Industries that were assigned by the Strategic Papers were indicated in the Figure No. 6.16. Ship-building Industry, TCT Products and ICT-services Industries, Toiletry & Cosmetic Industries and Jute Industry qualify these conditions. Jute Industry is however recognized as one of the traditional industries and is not recognized as the Emerging Industry. Jute Industry is also not assigned as the Priority Industry by the Export Policy 2009-2012, thus the Study Team has dropped Jute Industry from the candidate list for the Priority Industry under this study.

6th 5-year Plan	Industrial Policy - 2010	SME Policy Strategy 2005	Export Polic y (2009-2012)
1.Agro-based and Agro-processing Industry	1.A gro-based andagro-processing Industry	1.Ag ro-processing/Agri-business/ Plantation Agriculture/Specialist farming/Tissue-culture;	<ol> <li>Agro-products and agro-processed products,</li> </ol>
2.Ship Building,	2.Ship Building		2. The sea-bound ship-building industries,
3.Ready-made Garments Industry	3.Ready-made Garments Industry	2.Knitwear and ready-made garments;	
4.Renewable Energy (Solar Power, Windmill)	4.Renewable Energy(Solar Power, Windmill)		
5.Basic Chemicals/dye and chemicals	5.Basic Chemicals/dyeand Chemicals		
6.Herbal Medicinal Plant	6.Herbal Medicin al Plant		3. Producing herbalplants, medicine and medicinal products,
7. Jute and Jute Products,	7.Jute and Jute Products		4. Jute and jute products,
8.Light Engineering Industry	8.Light Engineering Industry	3.Light Engineering and metal-working	5. Light engineering products (including auto-parts and bicycles),
9. Leather and Leather Products	9.Leatherand Leather Products	4.Leather-making and leathergoods;	<ol> <li>Footwearand leather products,</li> <li>Crushed and finished leather products,</li> </ol>
10.Plastic Industry,	10. Plastic Industry	5. Plastics and other synthetics;	8. Plastic products
11. Furniture,	11. Furniture		9. Furniture industries.
12.Handicrafts,	12. Handicrafts		10. Handicrafts,
13.Frozen Fish Industry,	13. Frozen Fish Industry		11. Frozen fish production and processing,
14. lea Industry	14. lea Industry		
15.Home Lextle,	15. Home Lextiles		12. Home textile,
10. Ceramics,			13. Ceramic products and meramine,
17.Jewenery 19. Tissue Crefting and Distants alogu	17. Jewellely		14. Uncul diamond,
10. Tox	10. Tax		
20 Cosmetics and Toiletries	19. TOy 20. Cosmetics and Toiletries	C Dharma agu tiga la /Ca ama fi ag/Ta il atria ag	15 Toiletries products
		6. Pharma ceuticais/cosmetics/toiretnes,	13. Tolletties products.
21. In no varive and import Substitute industry	21. Innovative and import substitute industry		
22.Active Pharmaceuticals Ingredient Industry and Radio Phamaceutical Industry,	22 Active Pharmaceuticals Ingredient Industry and Radio Pharmaceuticals Industry		16. Pharmaceutical products,
23.Radio-active (diffusion) Application Industry (e.g. developing quality of decaying polymer/preservation of food/disinfecting medicinal equipment)	23 Radio-active(diffusion) Application		
24.Energy Efficient	24. Energy EfficientAppliances/		
Appliances/Manufacturing of Electronic	Manufacturing of Electronic goods/		
goods/Development of Electronic materials	Development of Electronic Materials		
25. Development of Polymer Industry	25.Development of PolymerIndustry		
	26.ICT and ICT-based Services	7. Software development;	<ol><li>Software and ICT products,</li></ol>
	27.Hospital and Clinic	8. Healthcare & diagnostics;	
	28 Human Resource Export	9. Designer, Aesthically-challenging, Personal wear and effects.	
		10. Electronics and electricals;	18. Electric and electronic products,
	29. Warehouse	11.Educational services;	19. Hand-woven textiles from hilly a reas,
	30 Container Service		20. Fresh flower and foliage,
	31.Tourism		

	111	<b>D</b> • • •			1 /1	
Figure	6.16	Priority	Industries	identified	by the	Policy Papers
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Source : Prepared by the Study Team based on the Policy Papers

4) Reflection of the Questionnaire Survey Results gained from potential investors

Along with this Study, a Comprehensive Questionnaire Survey has been conducted against 610 firms in Bangladesh and 160 firms outside Bangladesh in order to observe which Industries are considered to have more potential. According to the Survey Results, Light Engineering Industry, Ship-building Industry, and Agro-processing Industry are identified as having the most potential for the Trade and Investment for the purpose of the Domestic Market, while the Toiletry Products Industry, Software & ICT Services Industry, Footwear & Leather Industries, and Pharmaceutical Industry are among those that received higher points in the Survey.

5) Results of the Overall Evaluation for the Selection of Priority Industries

Considering all those results of evaluation derived from the quantitative analysis and the conformity with the superior Industrial Development Policies adopted by the Government of Bangladesh, the Study Team has finally selected ten (10) Industries that include the Ready-made Garment & Home Textile Industry, Agro & Agro-processing Industries, Light Engineering Industry, Leather & Footwear Industries, Pharmaceutical Industry, Ship-building Industry, Plastic Industry, Furniture

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#### Industry, Ceramic Industry, Software & ICT-Service Industry.

The Study Team has made intensive discussions with those Priority Industries under the kind coordination extended by the Federation of Bangladesh Chamber of Commerce and Industry (FBCCI). These Industries are considered to be leading industries and are engaged in the lobby activities to the Government. Most of those representatives of these Industries are quite active and are enthusiastic to manage their entities with a firm belief. Results of these discussions are shown in the following chapter.

#### 6.3 The Results of Fact-finding Survey on the selected Priority Industries

As it was stated in the previous chapter, the Study Team has conducted Interview Surveys with regard to those selected ten (10) Priority Industries for identifying the Constraints and Issues faced by the Industries, Targets in their Mid- and Long-term Development Plans, and the Strategies to overcome these challenges. At the same time, such basic data as the Magnitudes of Industries and the Number of Employees, and Export and Import Data in the past are gathered. Fact-finding Data and the Development Strategies adopted by each Industry are shown in the following Chapter.

#### 6.3.1. The Ready-made Garment(RMG) and its Associated Industries

(1) Outlines of the RMG Industry

Bangladesh RMG Industry has been consistently growing for the last 20 years and the share of RMG Industry accounts 79% in the entire amount of Export and 12% in the GDP of the Nation in 2009. Currently approximately 5,150 RMG Plants are operating in Bangladesh providing 3.6 Millions of Employment Opportunity which is about 50% of the entire number of Employment in the Country. In the recent years, the export of Knit-wears increased sharply and its share surpassed that of the Weaving-wears since 1990s. The major destinations of these exports are European Countries and U.S.A. which account 90% or more in the total export. The growth rate of RMG Industry has been more than 20% in the last two decades, and most of famous major brands in the apparel industry are now produced in Bangladesh.

#### (2) Profiles of the RMG Industry

Development of the RMG Industry may be confirmed by the growth trend in the amount of Export and the number of the Employment. The number of Employment provided by the RMG Industry has been drastically increased as shown in the following table; 1.8 Millions in the years of 2001/2002 but it was doubled to 3.6 Millions in the years of 2010/2011.

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Number of										
Registered										
Business Units	3618	3760	3957	4107	4220	4490	4743	4925	5063	5150
No. of										
Employment(In										
Million)	1.8	2	2	2	2.2	2.4	2.8	3.5	3.6	3.6
Source: Official Website of The Bangladesh Garment Manufacturers and Exporters Association (BGMEA), available at:										
http://www.bgmea	.com.bd/home/n	pages/abou	tus							

#### Figure 6.17 Numbers of the Entity and the Employee in the RMG Sector (2001~2011)









Source: BGMEA



Meantime, Amount of Export by the RMG Industry has been consistently increasing as shown in the following table; US\$7,900.80 Millions in 2005/2006 to US\$12,496.72 in 2009/2010. As to the contribution ratio of RMG Industry to the entire export, it was 3.89% in 1983/1984, but it has sharply increased to 61.4% in 1993/1994 (both of which are not indicated in the table), then 75.06% in 2005/2006 and eventually reached to 77.12% in 2009/2010. The RMG Industry in Bangladesh has been designed to penetrate foreign markets since its inception, and this strategy is still intact in its operations even in a very depressing economic environment in the recent years. Such steady performance deemed that Bangladesh RMG Industry has certain resistance powers against the market trends seeking for lower-priced products.

Year	Export of RMG (in million US\$)	Total export of Bangladesh (in million US\$)	% of RMG's to total export
2005-06	7900.80	10526.16	75.06
2006-07	9211.23	12177.86	75.64
2007-08	10699.80	14110.80	75.83
2008-09	12347.77	15565.19	79.33
2009-10	12496.72	16204.65	77.12
2010-11 (July-Sep)	3971.52	5029.05	78.97

Figure 6.20 Export	of RMG Products and	Share in the entire	e Export (2005~2011)

Source: EPB

The Source of such competitiveness seemingly lays on the low-cost Workforces who are talented with higher-learning capability, and highly skilled Managerial Practices that can keep the lead time promised at any situation. In addition to that, a well-established back-to-back Letter of Credit systems and Bonded Areas including the Export Processing Zones (EPZ) are two key elements contributed to the enlargement of Export as well as the development of RMG Industry. Should these success stories be maintained or further accelerated, the Government of Bangladesh is requested to deploy a remarkable Incentive Package for Foreign Direct Investment (FDI), to assure the ample supply of yarns and other raw materials, and to maintain the competitive operation costs at the RMG plants. If these conditions are satisfied, the RMG Industry in Bangladesh may enjoy a sound growth further. Demands for the supply of Yarns and Fabrics are sharply increasing in commensurate with the growth of the RMG Industry in Bangladesh, while those supplies are at this moment largely depending on the Import from abroad. Since the Government of Bangladesh has been extending the Cash Incentive with a ceiling amount of 15% out of invoiced sum, to the RMG Industries who have procured such Yarns, Fabrics and other raw materials from the Domestic Market, there might be a potential investment to Upper-streams of the RMG Industry in the future.

Those RMG Industries are widely spread mainly at Dhaka Capital Region and Chittagong City where an International gateway port is located. Those RMG Industries have a large variety of the



entities from those employ more than a few thousands of staff to those who run by a few member of volunteers. To name a few of the leading firms in the RMG Industry, it may be represented by Apex Spinning & Knitting Mills Limited, Babylon Garments Limited, and Desh Garments Limited.

#### (3) Outline of the leading RMG Manufacturers

Apex Spinning and Knitting Mills Limited (ASKML) is a relatively new Corporation which is established in 1990 with an attempt to produce extensive knitwear products. The Corporation was, upon its establishment, listed at the Stock Exchanges both in Dhaka and Chittagong, and gradually expanded its operations to the production and export of the Weaving-wears. ASKML is well known as the manufacturer who having a production capacity of 15 Millions of RMG Products per year and who exports 100 % of its products. Major products of ASKML are, among others, Sport Shirts, Polo Shirts, Sweaters, Jackets, Under wears, Child-wears.

Babylon Garments Limited has been established in 1986 as one of the Babylon Group of Companies, and currently having 14 branches of Business with more than 10,000 employees. Turnover of the Corporation well exceeds US\$90 Millions in 2009. Unique point of the Babylon Garment is vertically integrated from the productions of Knit-wears and Weaving-wears to Printing and Dyeing, and Retail Services of the RMG Products. They have a large fleet of outlets that sales RMG Products made by their own plants in order to check the demands and taste of the end-users by themselves. Many of International Brands in apparel industry have been entering into an agreement for Original Equipment Manufacturer (OEM) with Babylon Group, and the reputation of the Group is quite high among the owners of OEM.

Desh Garments Ltd. was established in 1977 and has been functioned as the pioneer in the RMG Industry who is seeking for overseas markets. At its inception, the firm was established as a Joint Venture with Daewoo Group of South Korea, and was well known as one of the largest and most-modern RMG Plants in the Indian Sub-continent The key Bangladesh Staffs working for Desh Garments plant were used to go to an intensive training course for 6 months at the Daewoo Plant in South Korea. The main products of Desh Garments are such high-quality apparels as Suites and Dress for Men and Women, Children's Wears, Trousers and others. Their Products are regarded as the highly-quality garments in the markets and are awarded many times not only in Bangladesh but in the European Markets. Annual production capacity is over 5 Million sets of Garments, and the Corporation is well known for its unique Management style that delegates the powers to the lower hierarchy with flat organization.

#### (4) Managerial Environment Analysis on the RMG Industry

The RMG Industry of Bangladesh has had steady grown in the Global Markets for the last few decades and now is identified as the third largest supplier of RMG Products in the World after China and India. It is anticipated that this situation will be maintained for the time being at least in the future. Managerial Environment surrounding the RMG Industry is analyzed as follows;

1) Internal Managerial Environment Assessment

• [Strength]

Bangladesh enjoys ample supply of competitive cheap labor in comparison with her direct competitors: China and India. Taking an advantage of rapid growth of the RMG Industry, RMG Accessories and Related Industries are now accumulating in Bangladesh, thus the competitive edge of Bangladesh in the RMG Industry may be maintained for certain periods of time.

• [Weakness]

Association identified as basic constraints in any branch of Bangladesh Industry is the lack of Industrial Land, shortage of Energy Supply such as Power and Gas Supplies, lack of such Transport Infrastructure such as International Ports, Highways and Railway Networks, Inefficient Regulatory Processes by the Government Offices, lack of Governance at the Government Offices and others. The magnitude of these constraints and challenges are quite wide and in-depth.

- 2) External Managerial Environment Analysis
- [Opportunity]

In China and India which are identified as the two (2) major competitors to Bangladesh in the Market, those countries are losing their competitiveness due to Economic Development in those

countries, and these changes create the following consequences; China is now sharply losing its competitiveness due to the rapid increase of Labor Costs in the labor markets, Huge number of Labor Demands for various Industries in India, supply of qualified labor to RMG is getting difficult year by year in India. These phenomena bring Bangladesh more opportunity to expand its business

• [Threat]

The Textile and Yarn Industries of Bangladesh are looking for relocation of their plants to countries such as Uzbekistan where Cottons are produced and exported, and this relocation will make the Value Chain of RMG in Bangladesh less-attractive. A shorter Value Chain in Bangladesh may lead to less-added Value as well. It is also anticipated that Myanmar, a neighbor country of Bangladesh will catch more eyes of Investors when compared to that of Bangladesh, due to an opening of her Economy to the World. This change will create stiff competition in attracting Foreign Direct Investment to Bangladesh. Also, another implicit risk factor for the Bangladesh RMG Industry is that major destinations of Bangladesh External Trade are North America and the Europe which are experiencing serious economic down turn now

#### (5) Competitiveness Assessment in the Global Market

The Position of Bangladesh the RMG Industry is shown in the Figure 6.21. China and India are the countries positioned higher than that of Bangladesh. The Domestic Markets in China and India are, however, expected to be expanded further, and the Position of these two countries will be changed as a result from their Competitors in the third country Market Place. Bangladesh RMG Industries will potentially have the opportunity to make a move in the export market. Since many RMG Manufacturers are considering to relocate their RMG Plants from China to other countries, it is quite worthwhile to invite these RMG Manufacturers to Bangladesh.





Source : Prepared by the JICA Study Team based on various data

(6) Development Strategies of the RMG Industry

1) Diversification of Export Markets

Major Export Destinations of the Bangladesh RMG Industry are concentrated to the markets of the European Union and U.S.A. At Present, the Economic Performances of these countries are poor, because they are urged to restructure their financial systems, thus Bangladesh is urged to diversify its Export Markets from these countries to other parts of the World. According to the Knit-wear Trade Association, they have been trying to penetrate into Japanese Markets since 1996, but they haven't been able to achieve satisfying results. However, such a situation has been changing since UNIQLO decided to invest in Bangladesh in 2008, and Bangladesh currently receives many buyers from Japan. Now many Japanese major retail outlets, Garment Whole-sellers, and Trading Houses show keen interest in the Bangladesh RMG Industry. Some Japanese Garment Industries are trying

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to relocate their manufacturing plants from China to Bangladesh, and these phenomena will activate and develop a closer relationship between Japanese Retail Chains and Bangladesh RMG Industries and RMG-related Industries. At the same time, the said Association is trying hard to penetrate the RMG Markets in the Middle East and Central and South America where intensive marketing practices need to be executed by the Ministry of Commerce and Export Promotion Bureau (EPB).

#### 2) Promotion of Product Development

It is essential to improve the Quality and Design of the Products for the development of new commodities, rather than to remain at a position manufacturing products that focus on competitive prices, and an effective support activity from the Public Sector of Bangladesh is badly needed.

## (7) Outlines of the RMG-related Industries in Bangladesh

#### 1) Fabric Industries

The Fabric Industries of Bangladesh which takes an up-stream part of the RMG Industry has the long history known as one of the major industries in the Bengal regions. Upon the independence from United Kingdom as the East Pakistan in 1947, there is eleven (11) spinning plants equipped with 1.1 Millions spindle machines and 2,700 units of weaving machines that producing yarns and fabrics from the cottons, and these activities have been gradually added the processes of dyeing, printing, knitting and hosiery. In 1999, number of spindle machines has reached to 300 Millions at various textile plants run by the public and private sectors in Bangladesh. This spinning sub-sector is producing different counts of cotton yarns, polyester yarn, synthetic yarn, woolen yarn and blended yarn mixed with cotton and polyester. Those yarns are being used by the weaving sub-sectors like specialized textiles, handlooms, knitting and hosiery, and are eventually tailored as the final products such as shirts and blouse and forwarded to the different markets.

According to the data given by the Bangladesh Textile Manufacturing Association (BTMA), currently 1306 textile mills are operational as the member of BTMA in Bangladesh and these member mills can be classified in different categories as; Yarn Manufacturing Mills: 373, Fabric Manufacturer Mills: 703, Dyeing-Printing-Finishing Mills: 230. In those textile mills, approx. 4.00 million people are employed and they fulfills 100 % of the domestic fabric and yarn requirement, 50% of the cotton oven fabric requirement of export oriented garments, and Over 95% of the yarn and fabric requirement of export oriented knitwear. The following table shows the number of mills, the Production Capacity and the number of employees in the Fabric Sector.

Sub-sector	No. of unites	Installed machine capacity	Production capacity (m)	Manpower
Textile spinning	341	7.20 ml. spld 0.18 ml. rotor	1,600 kg	400,000
Textile weaving	400	25,000 SL/SLL	1,600 mtr	80,000
Specialized textile and power loom	1,065	23,000 SL/SLL	400 mtr	43,000
Handloom (GF/F)	148,342	498,000 handloom	837 mtr	1,020,000
Knitting, knit dyeing (GF)				
(a) Export-oriented	800	12,000 knit/Dy/M	3,600 mtr	300,000
(b) Local market	2,000	5,000 knit/M	500 mtr	24,000
Dyeing and finishing (FF):				
(a) Semi-mechanized	180	-	120 mtr	10,000
(b) Mechanized	130	-	1,600 mtr	23,000

Figure 6.22 Number of Mills, Production Capacity and Number of Employees in the Fabri
Sector in Bangladesh

Source: Director's Report, 2009, BTMA



Meantime, the Fabric Industry is recognized as an apparatus-dominated industry which is required a large amount of capital outlays for installation of the manufacturing and its auxiliary plants, thus it is not easy for an entrepreneur of Bangladesh to enter into this business. When such investment is planned, it is required to conduct a detailed survey for a selection of the industrial land that requires comparatively larger areas, and availability of the industrial waters for dyeing and printing works. Since the supplies of Electric Power and Gas are inadequate in Bangladesh at the moment, it is difficult to justify such investment, unless certain benefits of synergy effects arising from the upand down-stream of the Fabric Industry are found. As the Government of Bangladesh has adopted various economic incentives to invite Foreign Direct Investment to the Fabric Sector, the benefits arising from the extension of backward linkage to RMG Industry are quite significant. Along with these policies adopted, some Bangladesh business groups such as A.K. Khan Group in Chittagong are commended to invest in the Spinning and Fabric Industries in Bangladesh which may further be followed by the Dyeing Industry as well in the future. Meantime, partner for this venture is an Malaysian corporation of one of the major Japanese textile company which has proven experiences in operating the mills in the developing country, and it is anticipated that such model of investment will further be enhanced in Bangladesh in the future.

#### 2) Home Textile Industry

Outlines of the Industry

Bed sheets, Bed Covers, Pillar Covers, Curtain, Cushion Covers, Aprons, Kitchen Globes, Napkins, Table Cloths are major products of Bangladesh in the fields of Home Textiles. Major destinations of its export are; European Countries, UK, U.S.A., Canada, Mexico, Australia, Japan, Dubai. Although leading players in the global home textile markets have been; China, India, Pakistan and Turkey, Bangladesh home textile industry is also growing steady with more than 20% annual growth rate in the recent years and is now approaching to the level of these leading countries. Noman Group is one of the prominent home textile industries in Bangladesh, and growth of home textile industry of Bangladesh is, according to them, largely depending upon the increase of sales prices which is triggered by rising of such materials as Cotton and Weavings.

#### Profiles of the Industry

There is no trade association in Home Textile industry in Bangladesh, and the Study Team has gathered some information on them from a Knitwear Manufactures Association. According to the information, scale of single operator is rather larger than that of knitwear operator although the number of employment per operator is small, and they are positively involved in the export business, thus they have more competitive advantage in the global markets. The following table illustrates movement in the number of home textile operators for the period from 2001 to 2011 which shows consistent up trends.

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Number of										
Registered Business										
Units	5	7	9	10	12	12	14	14	16	17
No. of Employment										
(In Thousands)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Source: Report of the Board of Directors of Bangladesh Textile Mills Association (BTMA) for 2002-2011, Page-2, available at:										
	htt	n•//www.ht	madhaka c	om/Image/	Directors'%	20Report-	11-final nd	f		

#### Figure 6.23 Movement on the number of Home Textile Industry(2001 ~ 2011)

Source: EPB

According to the EPB data, amount of Home Textile products exported are; US\$242.78 Millions in 2005/06, US\$363.23 Millions in 2006/07, US\$404.27 Millions in 2007/08, US\$536.07 Millions in 2008/09, US\$559.56 Million in 2010/11. The Industry has quite large Foreign Exchange Earnings,



since the sums of imported home textile are very nominal. Major reason why the Bangladesh Home Textile Industry has made rapid progress is said to be that the productions of China and Pakistan. major competitors to Bangladesh, are declining in the recent years. However, it is anticipated that the Home Textile Industry of Bangladesh has a great potential considering the fact that Bangladesh Ready-made Garment Industry became 3rd largest exporter in the Globe in 2011 only after China and India.

i igure 0.24 Export and import of itome result i routets(2005 2010)									
Industry		2005-2006	2006-2007	2007-2008	2008-2009	2009-2010			
Home Textile (Including Terry Towel)	Import	7.16	4.36	19.40	11.48	19.71			
	Export	242.78	362.23	404.27	536.07	559.56			

Figure 6.24 Export and Import of Home Textile Products(2005 ~ 2010)

Source : EPB

#### 6.3.2. The Agro-processing Industry

(1) Outlines of the Agro-processing Industry

Total outputs in the sectors of Agro and Agro-processing Industry accounts approximately 20.29% in the National GDP and Number of Employees shares approximately 43.6% respectively. Approximately 6,000 entities are engaged in the Agro-processing Industry, out of which 200 entities are the large scale firms and the rest of them is considered to be Small and Medium Enterprises. Agro-processing sector has wide range of activities from Plantation and Processing of Tea, Horticulture, Plantation, Processing and Export of Fruits, Plantation and Processing of Mango, Poultry, Seeds and Nursery. There is a large number of Trade Associations organized for those industries. There are different factors attracting investors to the Agro-processing Industry which may summarize as follows:

a. Huge supply of raw materials at competitive prices to Agro-processing Industry

- b. Agricultural Products may be processed with higher Value Added.
- c. Cold Storages are well established to serve as the Supply Chain in Frozen Fish Export Business.
- d. Special loan facilities are available for setting up an Agribusiness.
- e. Agribusiness Industry enjoys preference Tax Holidays.
- f. Attractive Cash Incentives to the Exporters of Agro and Agro-processing Products ranging from 15% to 20%.

#### (2) Profiles of the Agro-processing Industry

According to the Classification of Bangladesh Industry Standards, "Agro-products and Agro-processed Food" include various Agricultural Commodities widely ranging from Crops (Grains, Vegetables, and Fruits), Livestock, Fishery and their processed foods to Forestry Products. The major commodities in Agro-processing Industry are Frozen Fish and Agro-processed Foods (of Crops), which draw keen attention in views of Manufacturing and Export. Primary Agro-processed Products include Spices, Mustered Oil, Jam, Jelly, Juice, Bakery Products, Aromatic Rice, Honey, Meat, Molasses, Sauce and etc. and these processed products are currently exported to U.S.A., U.K., China, Japan, Russia, Indonesia, Laos, Philippines, U.A.E., and Latin American Countries. Total amount of Frozen Fish exported in 2008-2009 was US\$ 454.66 Million which accounts for 2.92% in Total Export. Approximately 80% of such export was Shrimp and 20% was Fish. Annual catch in the Bangladesh territorial waters is approximately 160,000 tons which is ranked at 30  $\sim 40^{\text{th}}$ positions in the World. Most of the Shrimp exported are Sea-water Shrimps which account approximately 75% in total Shrimp Export, while 25% of Shrimp are cultured at the brackish waters. The former is exported to Japan and the latter is exported mainly to U.S.A, U.K., and Italy. Total Employees engaged in the Fishery and Fish-processing Industries are approximately 800,000, of which approximately 300,000 Employees are Permanent Workers and the rest are Seasonal Workers. Bangladesh Frozen Food Exportation Association is one of the major Industry Association in the Fishery Sector and having 98 member firms.

With regard to the Export and Import of the Agro-processing Products, Trade Balance during the period from 2005 to 2010 in the sector shows constant in-balance to Bangladesh, since the amounts of Import are increasing constantly while the amounts of Export remain at the same level. The amounts of Export in the years of 2008-2009 were U.S.\$870.11 Million which shares



approximately 5.59% in the total Export. However, the amount of Export in the years of 2010 -2011 has increased sharply to approximately U.S.\$107.56 Million which is approximately 33% higher than that of the previous year. The Government of Bangladesh has introduced Cash Incentive systems for 15~20% of the Exported Values in order to encourage the Export of the Agro-processing Products.

		2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
	Import	2,627.38	3,410.85	5,716.48	6,450.56	8,949.60
	Export	772.70	832.27	987.56	870.11	687.53
	(Frozen Fish)				(534.07)	(454.53)
6		•				

Figure 6.25 Export and Import of Agro and Agro-processing Products( Million US\$)

Source: EPB

(3) Outlines of the leading Agro-processing Product Manufacturers

There are three (3) major Agro-processing Product Manufacturers in Bangladesh which may be represented by Pran Foods, ACI Food Ltd. and Square Consumer Product Ltd.

Pran started its operation in 1981 as a processor of fruit and vegetable in Bangladesh. Pran is currently one of the most admired food and beverage brands among the millions of people in Bangladesh as well as in 77 other countries in the World where their products are regularly being exported. The company currently has 30,000 employees and has set out on establishing a factory in India. Pran's quality reaches International levels and their product lines cover more than 200 products in 10 food and beverage categories such as Juices, Beverages, Mineral Waters, Bakery Products, Carbonated Drinks, Snack and Sweets, Pre-cooked Foods, Biscuits, Dairy Products, and many others. The Company has already introduced ISO9001 Quality Management Systems besides HACCP and HALAL Systems for the export of processed foods to Islamic Countries.

ACI Foods Ltd. was established in 2006 and is a Food Manufacturing arm of Advanced Chemical Industries which is known as one of the leading conglomerates in Bangladesh. They are focusing on the manufacturing of Higher Ouality Products and their products are exported to the Middle East (Saudi Arabia, Kuwait, Bahrain, Dubai) KSA, Cyprus and South East Asian Countries (Singapore), Australia, U.K., and U.S.A.

(4) Managerial Environment Analysis on the Agro-processing Industry

The Study Team has visited Bangladesh Agro Processors Association (BAPA) and conducted Interview Surveys in order to observe the Managerial Environment, Constraints and Future Development Strategies of the Industry. The results of these Surveys are as follows:

1) Internal Managerial Environment Assessment

• [Strength]

Supply of competitive yet obedient work forces, Supply of good quality Agricultural Products in large scale such as materials, and Fertile agricultural lands are still available. These are points are identified as the Strengths in the Industry.

• [Weakness]

Lack of Skilled Labors, Small-scale and Financially-weaker Operators in the Industry, Lack of Advanced Technology for Agro-processing, Lack of Logistic Facilities including Cold Chain Facilities, Lack of Testing Laboratory and Certification Systems, Lack of Marketing Capability, and Obsolete Technology in Horticulture Sector are identified.

2) External Managerial Environment Assessment

• [Opportunity]

Sharp increase in the Export Market in the recent years (more than 20% increase annually), Expanding Emerging Markets in Indian Sub-continent and Middle East, Many Investors showing interests in investing in the Industry, Application of GSP Systems in certain countries and Cash Incentives for the Export of Agro-processing Products, Provision of Lower Rate Loans for Agri-business and Attractive Tax Incentives, and Availability of Foreign Aid Program to the Agro-processing Sector are identified as opportunities in the industry.

• [Threat]

Stricter application and enforcement of Quality Assurance Systems and Health and Hygienic

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Regulations by the Government may be potential threat to the Industry in the future.

#### (5) Competitiveness Assessment in the Global Market

Through discussions with BAPA, the Positioning Map showing the positions of the Bangladesh Agro-processing Industry in the Global Market was drawn as shown in Figure 6.26. The Leader in the Market is Thailand followed by Pakistan and India which are recognized as the direct competitors of Bangladesh. BAPA considers that the Agro-processing Industry which has extensive competitive edges in Quality and Price will be the bench-marking Industry for Bangladesh, and the Bangladesh Position in the future was indicated as shown the Map.





Source: Prepared by the JICA Study Team based on the Data from BAPA

(6) Development Strategies of the Agro-processing Industry

Along with preparation of the Positioning Map, the following Development Strategies were delineated through the discussions with BAPA.

1) Market Development capitalizing on Strengths and Opportunities

Penetrate into the Emerging Markets in the Middle East and Africa capitalizing on the competitive edge in Production Costs. There are large numbers of Bangladesh immigrants who may be functioned as the stepping stones penetrating into these Markets.

- 2) Overcome the Issues capitalizing on the Opportunity
- Develop Cold-chains and Logistic Facilities capitalizing on the Investment from Foreign Firms.
- Learn the Technology and Practices regarding Quality Management and Agro-processing through Joint Venture activities with Foreign Firms.
- Get support from the Business Promotion Council (BPC) which is a subsidiary organization of Export Promotion Bureau (EPB) for the development of New Products and New Markets .
- Promote Human Resources Development through Assistances from Foreign Governments and Donor Organizations.
- Introduce Quality Assurance and Quality Certification Systems such as ISO, HACCP and others through Assistances from Foreign Governments and Donor Organizations.

# 6.3.3. The Light Engineering Industry (including Supporting Industry)

(1) Outlines of the Light Engineering Industry

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The light engineering industry is known as a labor-intensive industry and has been involved in various industrial productions such as industrial plant and machineries, spare parts for production plants and equipments at the various factories, small tools, toys and consumer items for the domestic market. Those products are widely used in the RMG Plants, Jute Mills, Spinning and Fabric Industries, Paper Mills, Sugar Mills, Fertilizer Plants, and Pharmaceutical Plants as a part of their production plants, spare parts, cast-in pipes, aluminum products, diesel-powered engines, bicycle parts, dry-batteries and others as well as those major facilities of Power Plant, Ships, Railway Systems, Construction Industry and Agricultural activities. It also covers the items that functioning as import substitute. Light engineering industry can be considered as an individual industrial sector alone, but at the same time it can be considered as supporting industry to other industries such as major assembling industries for Automobile and Electric Home Appliances. This sector has huge potentiality on technological and economic development.

Currently around 40,000 industries are engaged in the production and manufacturing of highly value added engineering goods and services with the value of annual turnover more than tk.10000 crore which contributes nearly 2.15% to the entire GDP of Bangladesh. In view of such magnificent performances, the Ministry of Industries has declared this sector as one of the thrust sectors in its Industrial policy-2010.

#### (2) Profiles of the Light Engineering Industry

Light engineering industry is not performing its production activity as Industrial Cluster but widely scattered in different community centers including old town of Dhaka city, industrial zones of Khulna, Tongi-gazipur areas as well as in agrarian regions of the northern parts Bogra, Pabna and Nouga, and along the major land and water transport stations like Chittagong, Jessore and Narayongonj. In Old Dhaka areas, there is around two thousand of small-scale Light Engineering industries which is mostly engaged in the production of automobile part repairing. In this industry, around 6 lakh people are directly involved and about 10,000 types of different items are manufactured for the local industry. As to the performance of this industry, figures on the average turnover, average number of employees and average assets invested are shown in the following table. According to these figures, average turnover is 5 Million Taka and average number of employees is 70 persons in the top 10% larger firms which are considered to be relatively smaller scale.

			,
	Sales in Tk.	Employment(Person)	Investment in Tk.
Top 10% of firms	5,000,000	70	10,000,000
Medium 20% of firms	2,000,000	30	5,000,000
Rest of all firms	500,000	10	1,000,000
C EDD			

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Figure 6.27 Average	e Sales and	Number of	Employees o	of Light En	gineering Industry
					<b></b>

Source: EPB

The Number of the entity belongs to the Light Engineering Industry and its employees employed by the industry in the last 10 years are consistently increasing as shown in the following table. It is considered that the Light Engineering Industry, being a supporting industry, has been growing by providing necessary spare parts and a part of the production plants to the emerging RMG and Jute Industries as well as to the Mechanization of Agriculture.

5		(united)	, include	lieb and		projim				
	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Number of										
Registered										
Business Units	1750	1775	1790	1805	1810	1820	1850	1900	1910	2020
No. of										
Employment	8750	8875	8950	9025	9050	9100	9250	9500	9550	10100

Figure 6.28 Numbers of Light Engineering Industries and its Employment

Source: On our request the Office Secretariat of Bangladesh Engineering Industry Owners' Association has sent the information. Their website is available at: http://www.beioa.org.bd/

### Figure: 6.29 Number of Entity $(2001 \sim 2011)$



# **Figure: 6.30 Number of Employees** $(2001 \sim 2011)$



Source : Same as above

In Bangladesh, most of the industries are still largely depend on imported production plant, machinery and equipments, thus the potentiality of the Light Engineering Industry is clearly recognized, if supply for those plants and spare parts are replaced by the domestic Light Engineering Industry. As the amounts of Export and Import of the Light Engineering Products are shown in the following table, large amount of deficit has been recorded for the last 5 years.

Industry		2005-2006	2006-2007	2007-2008	2008-2000	2009-2010
Light Engineering Products (Including Auto-parts and Bicycles)	Import	971.71	1,414.82	2,342.16	1,024.47	2,667.65
	Export	126.00	236.91	219.68	189.48	311.09

#### Figure 6.31 Export and Import of the Light Engineering Products

Source : EPB

Recently Ministry of Commerce has set up the Light Engineering Product Business Promotion Council (LEPBPC) with a view to promote and facilitate export of Light Engineering products & services in Bangladesh. In the Export Policy set by the Ministry, the following incentives are introduced:

- Provision of low-interested loan against the investment, •
- Moratorium on income tax,
- Various cash assistances (ceiling is 10% of the exported amount),
- Provision of export credit with reduced rate of interest,
- Subsidized rate for air transportation, duty drawback and bond facilities etc.

# (3) Outlines of the leading firms in the Light Engineering Industry

Bangladesh Machine Tools Factory Ltd.(BMTF) is one of the largest players in the Light Engineering sector and having its production plant at Gazipur area where approx. 40km north of Dhaka. They have initially commended its operations in 1979, but they once went to receivership in 1994 due to a slump of business. In 2000, the firm has been taken over by the Ministry of Defense and Bangladesh Army and resumed its operations as one of the state-owned corporations.


Production plant of BMTF is well equipped with modern production plants and equipments for various engineering products. It has basic production facilities like casting, forging, machining, heat and surface treatments etc. Currently, BMTF is reshaping its operations under the management of Bangladesh Army in order to respond the new challenges and requirements and is planning to explore its overseas markets as well.

**RFL Group** has started its operations as Cast Iron (CI) producer contributing to the provision of pure drinking water and affordable irrigation instruments for improved rural life in 1980. Today the company has its wide ranges of CI products like pumps, tube wells, bearings, gas stoves etc and having achieved its prestige as the largest cast iron foundry in Bangladesh. RFL has recently diversified its operations and went into the production of Polyvinyl Chloride(PVC) pipes and plastic products in 2003, many of which are exported to overseas markets. They have developed Research and Development facilities within the firm and are involved in the design and development of new products themselves. They also established inspection systems for the quality control within the firm and are now verified as an ISO9001 certified organization. They have approx. 5,000 members of the qualified staff. RFL Plastics, a subsidiary of RFL groups, is the largest manufacturer of indoor and outdoor plastic products for domestic and export markets. Their modern plastic injection molding machines with a conversion capacity of over 3,300 tons of resin per month. The company's product includes kitchen wears and plastic-made furniture, and some of them are exported to various countries around the globe.

**Meghna Group** is well known as one of the prominent producers of bicycle being exported to different European countries, has recently commended the production of tires for motor cycle and light vehicles. The company has steel tube mill that produce quality steel pipes for bike frames and steel furniture. The bicycle unit of Meghna group has been involving the production of various bicycles from mountain bikes to sport bikes and family bikes, and these products are typically exported to UK, Germany, Holland, and Italy among others. The components and parts of bicycle account tremendous numbers and the Group has been assigning the production of these components and parts to six (6) different subsidiaries considering its specialty.

(4) Managerial Environment Analysis on the Light Engineering Industry

Special characteristic features of this Industry are the involvement of large numbers of smaller holders who are engaged in the production of varied products, thus scale of Operations is rather limited. Except few large scale operators, they are facing various managerial constraints in daily operations such as Finance and Production Facilities and they are expecting certain support and assistance from external institutions. The Study Team made interview surveys with the Bangladesh Engineering Industry Owners Association (BEIOA) and Foundry Owners' Association of Bangladesh (FOAB) who were introduced by FBCCI, and the results thereof are as follows:

1) Internal Managerial Environment Assessment

• [Strength]

Although these can be considered as rare cases, there are certain accumulations of Industries in Bogra and other locations whose brands are established within certain levels. There are considerable numbers of skilled labors and the supply chain for raw materials such as Iron Scraps is well established.

• [Weakness]

There are many constraints and challenges in the Industry; difficult to produce higher quality products due to obsolete production method (Cupola Furnace), Lack of Quality Management due to shortage of modern Testing Equipments, Lack of Quality Assurance Systems, Poor Working Conditions at the Foundry Shops and Lack of Working Safety Measures, Lack of Managerial Knowledge at the Foundry Shop Owners, Lack of consistent Industrial Development Policies, Inconsistent Energy Supply, Difficult to access modern production technologies in particular regarding the Molding Technologies, Difficult to get Loans from Banks, and many others.

2) External Managerial Environment Assessment

#### • [Opportunity]

There are several numbers of Opportunities for the Industry; Enlarging Foundry Product Markets,

Large Opportunity to replace many parts for Automobile and Ship-building imports, Many business opportunities due to rapid progress of the RMG Industry and Ship-building Industry, Avail of Assistances from Foreign Governments and Donor Organizations.

• [Threat]

The following Threats are identified by the Associations; Stiffer competition due to inflow of cheaply-priced Chinese Products into Bangladesh, Increasing difficulties making extension of the Industrial Estates in Bogra due to rapid Urbanization, Difficulties complying with stricter enforcement of regulations and directives by the Government on safety at the working places, and others.

(5) Competitiveness Assessment in the Global Market

The Positioning Map shown in Figure 6.32 was drawn through the discussions with FWAB. Leaders in the Foundry Market are Ukraine and East European Countries known as CIS Countries and Mexico, followed by Korea, China, Thailand and India. The position of Bangladesh is lower than these countries and it is understood that Bangladesh Industries will improve their quality and technology to compete with them. Thailand will be the benchmarking country for the time being and shall improve the quality of products in particular.





Source: Prepared by the Study Team based on the Data from FWAB

(6) Development Strategies of the Light Engineering Industry

In parallel to the discussions with FWAB for the Positioning in the Global Markets, the Study Team gathered the following Development Strategy from FWAB as their future business plan.

1) Market Development capitalizing on Opportunities

- Penetrate into the Markets of Assembly Manufacturers for Automobile and Motorbike and Ship-building Industry in Bangladesh
- Commencement of Marketing Activities for penetrating into the Sub-contract Business with Automobile Parts Manufacturers in Thailand
- Positive Marketing Drive to the Emerging Markets in the Middle East and Africa for Agricultural Machines and Equipments and Deep-well Tubes

2) Overcome the Issues capitalizing on the Opportunity

- Improve Quality Standards through the operations of Sub-contracting works and learning from the Anchor companies being invited to Bangladesh
- Introduction of Quality Management and Quality Assurance Systems with help support from Foreign Donors
- Introduction of Induction Furnace to Foundry Industry for improvement of Quality Standards
- 3) Cope with potential Threats capitalizing the Strengths



- · Compete with cheaply-priced Chinese Products with help support from the Bangladesh Government
- Develop new Industrial Estate and relocation thereto in close collaboration of the Government of Bangladesh
- · Improve Safety Measures at Working Places along with guidance from the Government of Bangladesh

It is an imperative step that the modernization of Light Engineering Industry is essential in order to promote the industrialization program in Bangladesh. It is also expected that some of the Light Engineering Industries shall play key roles as a supporting industry to those Japanese assembly manufacturers in Automotive and/or Home Electric Appliances industries when they have decided to came into Bangladesh. In fact, one of the foundry industries in Bogra is producing break-drums for Automobile and some of them are exported to India. It is observed in the interviews with the Ministry of Industries that one of the Japanese Automobile manufacturers is seriously considering to commencing the production of bike in Bangladesh in the very near future, thus it is worthwhile to consider for extension of a systematic support to the Light Engineering Industry of Bangladesh.

# 6.3.4. The Footwear and Leather Industries

(1) Outlines of Footwear and Leather Industries

The root of Leather Industry of Bangladesh may be traced back to the tannery works commenced by RP Saha at Narayangonji area in 1940s. Thereafter the tannery works have been shifted to Hazaribagh area in Dhaka City and been developed in a bigger way in 1970s. Now a day, the Industry is recognized as one of the prominent export industries in Bangladesh, and those products are widely exported to various overseas markets; Germany, France, Italy, Holland, Spain, Russia, Brazil, Japan, Korea, Taiwan and Singapore. The Industry may be sub-divided into three (3) sub-sectors; Leather, Leather goods and Leather footwear, and the sector has been growing enormously during last few years due to huge demands in the world market. This sector now contributes about more than 0.50 percent to the entire GDP and stands 5th rank in terms of export earnings in Bangladesh. Bangladesh has a long established tanning industry which produces around 2-3% of the world's leather production. It is also anticipated that the supply of raw materials come from the stocks of cattle and goat produced by Bangladesh livestock industry that accounts around 1.5% and 3.5% of the world raw material supply respectively.

At present, there are about 170 tannery units in Bangladesh and 150 tannery units among them are located at Hazaribagh area, and a cluster for leather products is located at Alubazar area of old Dhaka. Bangladesh produces approximately 100-150 million sq. ft. of raw hides and skins; about 85% of which is exported in crushed and finished form. Rest of 15% is used to be produced as finished leather products for domestic market. Some reputed firms in the tannery sector are Apex Tannery, Lexco, Karim Leather, Samata Tannery and Bay Tannery.

Footwear industry is also one of the prominent industries in Bangladesh and the modernization of footwear industry took place in the late 1980s. Prior to such modernization of footwear industry, Bata, the first multinational shoe manufacturing giant, has established their plant at Tongi near Dhaka in 1962. In 1967, Eastern Progressive Shoe Industry (EPSI) has established its production plant and has started exporting footwear to USSR, Czechoslovakia and England. Both of Bata and EPSI had also major shares in the local footwear market. While many footwear industries have recently shown their interest in investing in Bangladesh, some major local players which are represented by Apex footwear, Bay Emporium, Excelsior Shoes and Paragon are also well established now.

Meantime, selling price of the leather products is dominantly influenced by the prices of raw hides and skins, and this situation is considered as one of the unstable factors of the leather industry. The following table shows the trends of exported leather products for the periods from 1998 to 2010.





# Figure 6.33 Trends of Exported Leather and Leather Products (Unit : Million US\$)

Source: Official website of Board of Investment (adopted from Bangladesh Economic Review); available at: http://boi.gov.bd/key-sectors/leather-and-leather-goods (accessed on 18th January 2012).

#### (2) Profiles of the Footwear and Leather Industries

Since 2009, the Footwear and Leather Industries of Bangladesh enjoy a very sound growth both in total production and exported values, and member firm of the Leather goods & Footwear Manufacturer Association of Bangladesh (LFMAB) is exceeded 200 firms. The total production of Footwear, Leather and Leather Products reached 1 Billion US\$, while total exported value accounts 430 Million US\$ in the year of 2009/2010. The numbers of the entity engaged and of the employees are also increasing. The production capacity of Bangladesh in footwear, leather and leather industries is ranked at the position after China, Viet Nam, India, Indonesia and Thailand. Major destinations of the export are the member countries of European Union which accounts approx. 50%, followed by Japan which accounts 35%. Strengths of footwear ad leather industries are Competitive labor costs (monthly labor cost of skilled worker is US\$100 in China, while that of Bangladesh is US\$50 only), Relatively large domestic markets, and Higher supply of raw materials (80% of natural leathers is supplied by the local market).

(2005 ~ 2010)								
Industry		2005-2006	2006-2007	2007-2008	2008-2009	2009-2010		
Fotwear, Leather and leather pr	oducts Import	308.89	237.10	325.70	323.95	390.83		
	Export	352.00	402.00	454.00	364.00	430.00		

Figure 6.34 Export and Import of Footwear, Leather and Leather Products

Source : EPB





Figure 6.36 Move of Employees (2001 ~ 2011)



Source : Same as above

(3) Outlines of the leading firms in the Footwear and Leather Industries

Bata Shoe Company (Bangladesh) Ltd., Apex Adelchi Footwear Limited and RMM Leather Industries Limited are the major manufacturers in the Footwear and Leather Industries in Bangladesh.

Bata Shoe Company (Bangladesh) Ltd. is the Bangladesh operations of the Bata Shoe Organization Group and commenced its operation in 1962. They have production plants in Tongi and Dhamarai, suburban districts of Dhaka with total production capacity of 110,000 pairs of shoes daily. Bata Shoe is known as one of the largest shoe manufacturers and distributors in the World with a long history backed to its initial operations in 1894 in Czech. Currently, they are operating in 70 Countries in 5 Continents with 4 regional management headquarters. They have 27 production plants in 20 countries and have approximately 5,000 outlets with 50,000 employees. Their product lines cover all type of shoes for men, women and children and those products are sold in the global markets with different famous brands such as Bata Comfit, Marie Claire, Hush Puppies, Scholl, Nike, Bubblegummers, Sandak, and Weinbrenner. Annual sales in Bangladesh in fiscal year 2009 were approximately 30 million pairs of shoes, which is equivalent to 5 billion Taka. They have 13 depots which are directly managed by themselves in order to support the operation of 242 outlets in Bangladesh.

Apex Adelchi Footwear Limited is one of the prominent Shoes Manufacturers in Bangladesh and exporting its products to various markets in Western Europe, North America and Japan. They are well known not only as one of the pioneer exporters of higher-quality Leather Products in Bangladesh but also as the second largest retailer of footwear in the domestic market. They are affiliated with La Nouva Adelchi, the largest Shoes Manufacturer in Italy and are supported by them in the fields of Capital Outlay, Production Technology and Marketing. Apex has been listed on the Bangladesh Stock Exchange since 1993 and is effectively managed with approximately 8,000 employees. It can be said that the special characteristics of Apex are that they are producing competitively priced leather products made by locally tanned leathers of international standards. They focus to realize a synergy effect arising from the multiplication of best practices of Product Development and Production Technology provided by Adelchi of Italy and the Low-cost Production in Bangladesh. They have currently the premises of 189 wholesale outlets and 141 retail outlets which are ranked as the second largest in Bangladesh after Bata Shoes.

**RMM Leather Industries Limited** manufactures crust, split and finished leather. RMM also produces mesh and leather goods made of goat, cow, sheep and kangaroo hides that are used by Garments, Shoes and other leather goods industry. They have been working very closely with Italian buyers for the last eight years and their focus is on meeting customers' expectations. To achieve this, their professional team is dedicated to identifying and searching for the right kind of skin both in the domestic and international arena, and after this, those raw materials are put through the processes to meet the ultimate customer's requirements. Their tanneries are fully equipped with contemporary machineries and devices for ensuring quality of product. They ensure to meet rigid expectations of customers by end-to-end quality control that will be provided on line by a large talent pool of qualified and skilled technicians and their finished products are entirely exported to Italy, Spain, Hong Kong, Japan, Taiwan, China, Vietnam, Thailand and Poland. Presently, they have also started to produce and export leather products (mesh) -shoe uppers, mats, belts and bags. In the meantime, RMM provides Consultancy Services and Professional and Technical Support Services to other tanneries in the Country.

(4) Managerial Environment Analysis on the Footwear and Leather Industries

Footwear and Leather Industries have enjoyed steady growth in recent years; however, they have certain challenges as well. According to the Leather and Footwear Manufacturers Association of Bangladesh (LFMAB), the Industries are surrounded by the following managerial environment.

1) Internal Managerial Environment Assessment

• [Strength]

Avail of Competitive Raw Hides and Skins in the local market, Supply of competitive Labor Forces in larger scale, Higher Quality yet Competitive Production Systems, Flexible Production Systems to entertain smaller scale of order, are identified as the Strengths of the Industry.



• [Weakness]

Inadequate Infrastructure and Utility Services (Power Supply, Transport, Tele-communication infrastructures in particular), Lack of Lands and Industrial Estates for Industrial Plants, Majority of the Industries are small holders (Incorporated entity accounts for only 26% and the rest is run as family businesses in smaller scale), Incident of Environmental Pollution at Tannery Industry, Inadequate Quality Management Systems and Quality Testing/Certification Systems, are recognized as the Weakness of the Industries.

- 2) External Managerial Environment Assessment
- [Opportunity]

China and India who are the direct competitors in the Footwear and Leather Products are losing their competitive edge in the export business, due to increasing production costs and the extension of their domestic demands, Cross-selling of Footwear and Leather Products along with RMG Products is expected, Avail of GSP Facilities in certain countries, are recognized as the Opportunity of the Industry.

• [Threat]

Political instability of Bangladesh, Shrinking Markets in European Countries due to Economic downturn, Stricter Enforcement by the Government on the Environmental Issues and Management Compliances are identified as potential Threat of the Industries.

(5) Competitiveness Assessment in the Global Market

The Positioning Map shown in Figure 6.37 was developed through the discussions with LFMAB. The Leader in the Footwear and Leather Industries Markets is China followed by Indonesia, India and Vietnam, and Bangladesh is positioned below them. Cambodia is the only country positioned below Bangladesh. The competitive edge of Bangladesh is their avail of good Raw Materials in the domestic market and Supply of Competitive Labor Force. It is essential to improve the Production Technology and Design Capability through Joint Venture with Foreign Manufactures which is partly undertaken by larger players in the Industries.



Figure 6.37 Positioning of the Footwear and Leather Industries.

Source: Prepared by the JICA Study Team based on the Data from LFMAB

(6) Development Strategies of the Footwear and Leather Industries

Although there are certain issues and constraints to be addressed, the future of footwear and leather industries is considered to be bright. Major reasons that lead to such assumption are; Bangladesh has enough supply of raw materials and process innovation and waste-water treatment at the tannery industry have already been in progress. Also, it is considered to be attractive that the selling price of leather products is set at relatively higher level and it provides an opportunity to get higher value added. The Development Strategies of the Footwear and Leather Industries gathered from the



interviews with LFMAB are as follows:

1) Strategies capitalizing on Strengths and Opportunities

- · Diversify the Export Markets by penetrating to the Emerging Markets
- · Establish Bangladesh Brands in Leather Products capitalizing on better quality materials and innovative designs
- 2) Overcome the Issues capitalizing on the Opportunity
- · Develop a Backward (Accessory) Industry in order to extend the Value Chain of the Industries
- · Establish Vocational Education Institutions in the fields of Footwear and Leather Industries utilizing the assistance from Foreign Donors
- · Develop Marketing Data Systems in order to use for Market Diversification
- · Positively introduce new Power Procurement Systems and realize consistent production systems to the Industries
- 3) Cope with potential Threats capitalizing the Strengths
- · Overcome the Environmental Issues that the Tannery Industry faces getting support from the Government.

According to the interview with one of the Japanese leather industries working in Bangladesh, they have no claim and serious constraints, except the supply of electric power, although they are operating outside export processing zones and they have no financial partner from Bangladesh (100% owned by the Japanese entity). They are planning to concentrate their production activity onto the manufacturing plant in Bangladesh by closing down their manufacturing base in China, when they can put their production plant in Bangladesh as full and consistent operations. Their production plant in China is not longer competitive due to higher labor costs, and they wish to establish their own commercial brand through the global logistic and marketing systems to European and Japanese markets based on the production plant at Bangladesh. It is assumed that such international operations model as conceptualized by the said Japanese firm which identifies Bangladesh as the production center and the developing countries as the target markets could be happened in the future.

# 6.3.5. The Pharmaceutical Industry

#### (1) Outlines of the Pharmaceutical Industry

The drugs which are currently produced in Bangladesh are called Generic Drugs, Bangladesh pharmaceutical industry has started in the early 1960s and has been developed as one of the most high-tech industrial sectors of the Country. At present the Sector is considered as one of the most prospective business sectors. In the early 1960s, the Sector was dominated by a few foreign companies, however domestic companies account for more than 70% of the total production of pharmaceutical products and provides about 98% of domestic demands now. There are 245 registered pharmaceutical companies who are mainly manufactured and marketed to the domestic markets and a few large scale companies are engaged export business. Currently Bangladesh drugs are exported to 83 countries and it is anticipated to increase to 120 countries within a few years time. Major drugs exported from Bangladesh are; API, Dosages, Therapeutics and all types of Drugs in the forms of Powder, Capsule and Pills. After the Doha Declaration in the WTO/TRIPS Agreement, LDCs' have the option not to opt for pharmaceutical product patents until 2016 which assures their legality to reverse engineer patented products, thus Bangladesh has the highest potential to take this opportunity to boost its pharmaceutical production for both domestic and global markets.

# (2) Profiles of the Pharmaceutical Industry

Total Sales of the Bangladesh Pharmaceutical Industry was 35.19 Billion Taka in 2006 and it has reached to 68 Billion Taka in 2010 which shows 23.8% higher than that of 2009 and 93% higher than that of 2006. Total Sales are now expected to reach to 90 Billion in 2011. Almost all the Domestic Pharmaceutical Demands are met by the Bangladesh Pharmaceutical Industry with the distributions of 97% to the Domestic Industries, 7% to the Foreign Companies and 3% for the Drugs imported. Types of the Drugs are widely varied from Suspension, Cream, Ointment, Gel, Lotion, Pre-filled syringe to Parenteral, details of which are shown in the Figure 6.38.





Produc	Product wise turnover and quantity (in Million)										
Oral solid Oral liquid Parenteral Topical				Opht	nalmic	Nasal Pr	esentation				
BDT	Unit	BDT	Unit	BDT	Unit	BDT	Unit	BDT	Unit	BDT	Unit
48,940	262	7,790	213	6,600	48.2	1,690	51.3	950	21.1	1,370	13.6

Figure 6.38	Sales of Drugs b	y types (in Taka	and Quantity)
<b>0</b> • • • • • •	<b>.</b>		

Source : Prepared by the JICA Study Team based on the Data from Bangladesh Pharmaceutical Industry Association

Amount of Exported Drugs was 2.4 Billion Taka in 2006 while it reached to 3.5 Billion Taka in 2010 which shows 45.8% increase during the periods of 5 years. The Global Drugs Market in the year of 2010 was 808 Billion US. Dollars and the amount of exported Bangladesh drugs was 47 Million US. Dollars which is quite nominal in the market share. The Trade Records of the Bangladesh Pharmaceutical Industry between 2006 and 2010 show in-balance to Bangladesh, due to the large amount of imported raw materials and smaller amount of drugs exported.

Figure 6.39	Ann	ual Sales, H	Export, N	umbers of	Firm/Em	ployees (2	2006-2010)	
ar		2006	2007	2008	2009	2010	Unit	1

Fiscal Year	2006	2007	2008	2009	2010	Unit
Annual Sales	35,190	40,750	47,010	54,920	68,000	BDT Million
Production Quantity	428.90	462.50	501.70	536.20	619.30	Million Units
(Exporting)						
Annual Sales	2,519	2,347	3,131	3,352	3,274	BDT Million
Annual quantity of sales	24	25	33	34	35	Million Units
Number of companies		245	237	241	245	Units
Number of employees	0.10	0.11	0.12	0.13	0.15	Million

Source: Prepared by the JICA Study Team based on the Data from Bangladesh Pharmaceutical Industry Association

(3) Outlines of the leading firms in the Pharmaceutical Industry

Square Pharmaceuticals Ltd., Beximco Pharma, Glaxo Smith Kline, Aventis Pharma, Novartis Bangladesh Ltd., ACI Ltd, Eskayef Bangladesh Ltd., ACI Ltd., Eskayef Bangladesh Ltd., Opsonin Chemicals, Renata Ltd. Essential Drugs Co Ltd, Recit and Coleman, The Acme Laboratories Ltd are identified as the leading firms in the Pharmaceutical Industry in Bangladesh. The following Figure shows the Net Profit after Tax of three (3) major firms (Square, Beximco, Glaxosmithkline) for the period from 2000 to 2011.

Figure 6.40 Net Profit after Tax of Three Major	: Firms(Square, Beximco, Glaxosmithkline)
-------------------------------------------------	-------------------------------------------

Financial Performance of Net Profit after Tax							
(Unit : BDT million) Continuing operations							
	Square	Beximco Pharmaceuticals	Glaxosmithkline				
Year	Pharmaceuticals	Ltd	Bangladesh				
2000	418.25	398.30	63.95				
2001	573.68	401.78	64.35				
2002	759.45	341.68	72.25				
2003	764.88	224.64	86.82				
2004	970.04	294.30	183.52				
2005	1,255.85	489.26	48.85				
2006	1,165.86	470.66	-17.12				
2007	1,303.24	353.07	45.05				
2008	1,381.86	545.34	142.95				
2009	2,058.38	624.74	323.79				
2010	2,497.12	1,051.65	410.18				
2011	3,257.48	n/a	n/a				

Source: Prepared by the JICA Study Team based on the Website Data of the Dhaka Stock Exchange.



Square Pharmaceutical Ltd is the largest pharmaceutical company in Bangladesh and it has been continuously in the 1st position among all others since 1985. It was established in 1958 and converted into a public limited company in 1991. They have 10 Manufacturing Plants in two (2) different sites (Dhaka and Pabna) and employs 33,000 staff in Bangladesh. They have pioneered exports of drugs from Bangladesh in 1987 and their destinations are expanded to the EU, Asia, Africa and South America. The Drugs which are produced by Square include wide ranges of dosages such as Alimentary Preparations, Anesthetics, Anti-allergy Preparations, Anti-diabetic Preparations, Anti-haemorrhagic, Anti-parasite Preparations, Aromatase Inhibitor, Cardiovascular Preparations, Drugs for Urinary Incontinence, Eye and Ear Preparations, Oral Contraceptive, Systemic Anti-fungal, Anti-viral and Anti-protozoal Agents, Vitamins and Minerals etc. As to the financial feature of Square, Authorized Capital is 5 Billion Taka and Paid-up Capital is 2.648 Billion Taka and Annual Sales in the financial year of 2009-2010 was 11.46 Billion Taka (US\$163.71 Million) which shares 16.43% in the Domestic Market. The Sales in the said year increased 16.72% compared with that of the previous year while Net Profit after Tax is shown in the Figure 6.40.

Beximco Pharmaceutical Ltd. is one of the leading Manufacturers of Pharmaceutical Formations and Active Pharmaceutical Ingredients (API) in Bangladesh. The Company was incorporated in 1976 as the flagship firm of the Beximco Group. It commenced operation in 1980 under a licensing agreement to manufacture and market products of Bayer AG. They launched their own formulations in 1983, and commenced exports of API to Hong Kong in 1992 and Formation Products to Russia in 1993. They were also awarded National Export Trophy (Gold) three (3) times. Since then, they have been a dominant player in the domestic market, and have taken greater strides over the years to expand their export business to 47 countries across 5 Continents and have become one of the leading exporters in Bangladesh. They have Pharmaceutical Plant in Dhaka and employ 2,500 staff. Their products cover all key therapeutic categories of Anti-infective, Gastro-intestinal, Cardio Vascular, Anti-diabetic, NSAIDs, Respiratory CNS, Anti-allergy etc. As to the financial feature of Beximco, Authorized Capital is 9.1 Billion Taka, while Paid-up Capital is 2.518 Billion Taka. Total Sales in 2010 was 6.49 Billion Taka which has increased by 33% compared with that of the previous year.

The principle activities of Glaxo Smith Kline Bangladesh Limited (GSK) include secondary manufacture of pharmaceutical products and marketing of Vaccines, Pharmaceutical Healthcare Products and Health Food Drinks. In 1948, Glaxo Laboratories (Pakistan) Limited was incorporated in Chittagong where it was under the administration of East Pakistan at the time, as a first branch of GLAXO Group Limited which had its registered head office in Karachi. This company was absolutely dependent on imports from the U.K. GlaxoSmithKline Bangladesh has commenced its operations in 1974 as an importer of medical products from the Glaxo Group of Companies. In 1995, the company renamed as GlaxoWellcome Bangladesh Limited. In 2002, they have changed again their name to GlaxoSmithKline Bangladesh Limited following the global mega merger with SmithKlineBeecham and Glaxo Group. Their product lines range across therapeutic areas such as Anti-bacterial, Respiratory, Dermatology, Oncology, Gastro-intestinal, Cardiovascular and other diseases. GSK being a global company, is one of the World's leading research-based pharmaceuticals and healthcare companies which employs over 99,000 staff in over 100 countries. 12,800 staff out of 99,000 are involved in the development research works for New Medicine and Vaccines of GSK which are widely used in 182 countries in the World. Their Authorized Capital is 200 Million Taka and Paid-up Capital is 120 Million Taka.

Incept Pharmaceutical Ltd is a leading pharmaceutical company in Bangladesh established in the year 1999. They have a very large pharmaceutical plant in Savar, 35 kilometers away from the center of Dhaka. They have commenced the production of API in the post era of 2005 which includes plans to get into reverse engineering and analogue research. In 2011, they implemented SAP, an ERP Software Systems for company-wide resources management in order to achieve higher productivity in the company. They have their own distribution network including 18 depots all over the country. The company is open to collaborate with interested and relevant parties in





various countries and they export their drugs to 36 different countries around the World. Their products include Tablets, Capsules, Oral Liquids, Ampoules, Dry powder vials, Nasal Sprays, Eye drops, Creams, Ointments, Lotions, and Gelatin Capsules. They specialize in value added high technology dosage forms like Sustained Release Tablets, Quick Mouth Dissolving Tablets, Effervescent Tablets, Prefilled Syringe Products, Insulin and Insulin Analogue and Biological Products, among others. Up to April in 2011, their number of Generic Drugs accounted for more than 300 types.

(4) Managerial Environment Analysis on the Pharmaceutical Industry

According to the discussions with Bangladesh Association of Pharmaceutical Industry (BAPI), the Managerial Environment surrounding the Pharmaceutical Industry is recognized as follows: 1) Internal Managerial Environment Assessment

• [Strength]

The Pharmaceutical Industry has one of the largest pools of white-color workforces and is rich with qualified professional such as Pharmacists, Chemists and Bio-chemists, Producing approximately 2,000 University-graduates in the Medical-related Faculties at 20 Universities every year, Competitive edge on the production cost over China and India, Some leading firms have already got Quality Certification Systems from England, E.U. and Australia taking an advantage of modern and advanced testing equipment. These are identified as the Strengths.

• [Weakness]

Heavily depending on the imported Active Pharmaceutical Ingredient (API), Requires large amount of money and longer time to get approved as authorized medicine in the export markets, Government of Bangladesh prohibits the Industry to borrow loans and to invest abroad due to shortage of Foreign Exchange, Lack of Administrative Capability and Control Systems at the National Regulatory Authority (NRA) of Medicine, the Standards of NRA are not approved by WHO, Inadequate Quality Control on the Medicines produced by SME Pharmaceutical Manufacturers, and Lack of Credibility over the entire Pharmaceutical Industries are identified as the Weakness.

2) External Managerial Environment Assessment

• [Opportunity]

Bangladesh has a bigger potential as a Large Domestic Market with a large population, Less Competition with Foreign Pharmaceutical Industry in the Domestic Market due to few foreign players, and Avail of GSP facilities at certain overseas markets including the EU (this facility will be extended even after 2015), are recognized as the Opportunity.

• [Threat]

Entering Brand-name Drug Manufacturers into the Generic Pharmaceutical Industry, shrinking risks of the Generic Pharmaceutical Market are thought as the potential threats in the future.

#### (5) Competitiveness Assessment in the Global Market

Front Runners in the Generic Drugs markets are U.S.A, Israel, Switzerland, India and China, and Bangladesh is the late comer to the Market. If Bangladesh wishes to catch up with these front runners in Quality and Quantity, it is imperative to overcome many issues in close collaboration with the Government. The Government is requested to take an initiative for introducing National Regulatory Authority (NRA) systems and change the regulations for the Industry to get necessary funds for M&A abroad. Since Market of the Generic Drugs will be consistently expanded globally, a dynamic support by the Government to the Pharmaceutical Industry is essential.



Figure 6.41 Positioning of the Pharmaceutical Industry

Source: Prepared by the Study Team based on the Data from BAPI

(6) Development Strategies of the Pharmaceutical Industries

The Bangladesh Pharmaceutical Industry has proven capability in the fields of Technology development, Quality Management, Financial Management and Marketing and Distribution to achieve a sustainable development of the Industry themselves. However, there are several constraints to promote the export of drugs such as rigid regulatory control by the Government for Foreign Investment by Foreign Currency and lack of Administrative Systems and Organizational Capability to satisfy the requirements of WHO and others. Removal of these Constraints is identified as a matter of priority.

- 1) Grant permissions for foreign Investment by the export-oriented pharmaceutical Industries
- Develop the environment for the Pharmaceutical Industry by setting a certain quota for Foreign Investment
- Develop a method to raise funds at the off-shore financial markets by collaborating with foreign firms
- 2) Improvement of Administrative Systems on the Quality Control of Drugs
- · The Government of Bangladesh shall establish a qualified Administration Systems and Organizational Structure by introducing NRA Standards that can be recognized by WHO.
- · Improve those Administrative Systems and Organizational Structure introduced by the Government as recommended herein above by assigning qualified staff for required numbers and conducting Capacity Building exercises for them to operate the systems.
- Establish the Systems to reconcile to WHO/PICS Requirements and get approval from the certification organization WHO.
- · Assign qualified staff to the Government Offices and conduct a Capacity Building program for them.
- · Develop Administrative Systems at both of the Government Offices and the Pharmaceutical Industries for the management of Vaccines, Medical Testing and Drug Administration.
- 3) Promote the development of an Industrial Estate for the production of API.
- BSCIC under the supervision of the Ministry of Industries has commenced the development of API Park that has approximately 200 acres of land in Bausia in the Munsigonj District. This Industrial Park shall be completed by the end of 2012 fiscal year and can accommodate 57 Pharmaceutical Industries that are involved in research and production of drugs and medical products.

In order to promote the Export of Drugs and Medical Products, various processes and operations shall be conducted; Contract Manufacturing for Overseas Pharmaceutical Firms, Joint Operations with Foreign Firms, Develop own Brands, Research and Development for new Technology, and



many others. Through these processes, one can improve its competitive edge and catch-up with the front runners in the markets and gain market shares. Along with these processes, considerable amount of Foreign Investment is required for the registration, distribution, market access, purchase of research documents, and funds of hard currencies for mergers and acquisition (M&A). In order to avoid such longer processes, some Chinese and Indian Pharmaceutical firms are taking M&A operations to directly acquire the competitors in the target markets who are having licenses for their drugs and processing. In India, no advanced approval at the financial institutions that provides required funds is necessary and the private sector is allowed to invest freely until the ceiling of 400% of their net assets. According to BAPI, if the Bangladesh Pharmaceutical Industry is extended same facilities as that of India, they may promote international operations more easily and enjoy higher progress.

# 6.3.6. The Ship-building Industry

# (1) Outline of the Ship-building Industry

Bangladesh has a long history of Ship-building. In 1920, the Country made ships with Steel and other materials. In1958, they built and developed many steel-made ships. The Welding Technology was introduced to the Ship-building Industry in Bangladesh in1982. Annual growth rate of the Ship-building in the recent year shows 15~20% which is considered as quite good growth. There are large numbers of Rivers in Bangladesh and many smaller river boats have been developed in the past to meet the demands for Inland Water Transport along with these rivers. On the other hand, numbers of the ships being built by Bangladesh Ship yards and exported abroad is sharply increasing since 2008. As of April 2012, the accumulated number of the exported ships accounts for 12 Ships. The latest exported ship was built at Ananda Shipyard and delivered to the Ship-owner in the European Union. This ship was designed to be used for the transport of logs in the Baltic Sea and equipped with Anti-ice Navigation facilities. Her specifications may be summarized as LOA 110M, 4,000 Gross Ton, 6,100 DW, Ships class SVB. It is apparent that the technology level of Bangladesh Ship-building Industry is highly regarded since this ship satisfied the requirements of the Ice Class on International Standards.

Although Bangladesh has been rich in providing Human Resources for Ship-building, many have migrated into Singapore and Dubai where many shipyards are operating due to lack of such employment opportunity within Bangladesh. At present, approximately 50,000 Bangladesh Overseas Workers are engaged in the jobs related to the Ship-building Industry, 35% of which are distributed to Singapore, 10% to Middle East and 35% to India. Approximately 60% of Engineers and 50% of Naval Architects working at the Shipyards in Singapore are those from Bangladesh, and it is anticipated that some of them will return to Bangladesh when the Bangladesh Ship-building Industry becomes fully developed.

# (2) Profiles of the Ship-building Industry

Bangladesh has approximately 200 Ship-building companies and approximately 300 Shipyards and Docks are engaged in the Ship-building and Ship-repairing works for any type of vessels from smaller wooden boats to tankers, barges, ferries, dredgers and even to ocean-going vessels. Most of those Shipyards are Medium and Small Enterprises due mainly to the lack of capital outlays. Most of the vessels built in Bangladesh are smaller-sized boats for the domestic ship owners. There are two (2) ship-builders who are exporting vessels; Ananda Shipyard & Slipways Ltd. and Western Marine Ltd. Besides these two major firms, Khan Brothers Shipyard is involved mainly in the building of smaller boats for the domestic market and Kharnaphuli Shipyard is building high-speed boats. It is assumed that the Industry employs 50,000 workers directly and 600,000 workers are employed indirectly. According to the information from the Bangladesh Ship Building Industry Association(BSBIA), the Bangladesh Ship-building Industry requires One (1) million tons of Steel annually for their Ship-building but most of this amount is imported from abroad since the production of Steel by domestic mills accounts for only 50,000 tons. Similarly, majority of the Components (Propeller, Anchor Chain, Rudder, Pipes, etc) and Equipment (Engine, Generator, Pump, etc) for the Ships rely on Import from abroad. Along with the Import of those Components and Equipments from abroad, a Letter of Credit (L/C) shall be established for which collateral equivalent to 30% of the L/C is required. Since Bangladesh commercial banks have difficulty





issuing Bank Guarantee against International Bank, the Importers request International Banks for establishing the L/C and the Bank requests 6% of Guarantee Fees which become an extra cost to the Ship-builders. Bangladesh Importers shall undertake extra burdens arising from the depreciation of the Taka currency at present. In Bangladesh, the Government has set Standards (Rules and Regulation) for Ship-building, but there is no Ship Classification Society and the Authorized Surveyor to inspect the Ships. Thus, these situations may lead to certain incidents in which under-standard ships are being built and eventually it brings a shipwreck and/or maritime accidents.



Both Photo are taken by JICA Study Team

In May 2012, the Study Team visited local shipyards located on the bank of Brinaganaga River, Pangaon district, southern part of Dhaka city where approximately 10 river vessels are under building. There are several number of Shipyards but the boundary of each yard is not clearly divided. They are using recycled Steel Sheets, Steel Rods and Navigation Devices being supplied by the Ship-breaking Operators in Chittagong. There is no permanent office in the yards except temporary huts for the workers to take a rest. They weld the Steel Sheets and build Ships on the sandy beach, while they lift the components by manual pulleys and no mechanized crane is used. It seems that they adopted the same ship-building method of wooden ships to their ship-building operations. They have grinded rusted Steel Sheets which are fixed with Hull to make surfaces smoother and the welded lines were not consistent. One of the Ships under building is a Bulk Carrier with approximately 2,500 Gross Tons powered by two engines of 750 horsepower and equipped with two propellers.

With regard to the External Trade on the Ship-building Industry, they are importing a lots of Steels and Components but amounts of export is still rather limited, thus huge amount of deficit has been recorded for last few decades. However, they recorded 40.4 Million US Dollars of Export in the years 2010-2011 which is 333% higher than that of the previous year. At present, the Industry has the back order of 130 smaller-size Oil Tankers from foreign ship-owners. And, ten (10) larger shipyards have the back order of 42 vessels from abroad which are worth approximately 600 Million US Dollars, according to Financial Express dated May 12, 2012, a local paper in Bangladesh.

Figure 0.42 Trends of Export & Import of Sinps (Unit. Willion 0.5\$)								
	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010			
Export	692.00	719.96	948.92	1,233.08	1,191.93			
Import			0.27	12.72	9.34			

Figure 6	.42 Trends	of Export & I	mport of Shi	os (Unit:	Million US\$)

Source: Bangladesh Ship Building Industry Association

(3) Outlines of the leading firms in the Ship-building Industry

Ananda Shipyard & Slipways Ltd of Dhaka and Western Shipyard Ltd. of Chittagong are two (2) major Ship-builders in Bangladesh who have exported their products to European Union in 2010.



Ananda Shipyard & Slipways Ltd (ASSL) has commenced its operations in 1983 as an Engineering Firm in Dhaka. Then, after becoming a public entity in 1999, they were incorporated and listed at the stock exchanges in 2009. In 2005, ASSL received the first ever direct ship export order from Denmark and they delivered "Stella Maris" in March 2008. This ship model was developed as the export model for foreign markets exclusively and all the marine and navigation devices were also developed and installed by themselves. ASSL has the largest ship-building capacity as a Private Ship-builder in Bangladesh with the Shipyards that can build 5 ships of 10,000 DWT at one time. They are certified with ISO9001:2008 which functions as their Quality Management Systems.

Western Shipyard Ltd. is one of the leading Shipyards in Bangladesh. They initially started their ship-building works in 1994 under umbrella of Western Marine Group. Then they have opened their own shipyard in Chittagong in 2000. Since then they are actively involved in New Ship-building for Cargo Vessels, Tug Boats and Tankers, and also Modifications, Regular Docking and Repair of Vessels with their specialized technologies as well. The Shipyard employs 300 professional staff and 3,200 skilled and semi-skilled labors. Currently they have three (3) shipyards within 35 acres of land. The company has built 55 various ships and has a proven track record in the ship-repairing. As of 2009, their Authorized Capital was 100 million Taka, Paid-up Capital was 64.55 million Taka, while Annual Sales was 1.63 billion Taka respectively. They were certified with ISO 9001:2008 in 2010.

(4) Managerial Environment Analysis on the Ship-building Industry

Through the intensive discussions with Bangladesh Ship-building Industry Association (BSBIA), the following assessment on the Managerial Environment surrounding the Industry were gathered:

1) Internal Managerial Environment Assessment

• [Strength]

Skilled yet Competitive Workforce in the Industry, Flexible and Obedient English-speaking Workforce, Ample suitable location along many rivers and coastlines for the development of Shipyards, Many potential Bangladesh workforce working at many Shipyards abroad, Positive entrance by prominent business groups of Bangladesh into the Industry, are recognized as the Strength.

• [Weakness]

Higher capital costs and difficult to access loans, Scale of Shipyards is rather small, Lack of Vocational Education in the Ship-building sector, Lack of Ship Classification Society, are recognized as the Weakness.

- 2) External Managerial Environment Assessment
- [Opportunity]

Both the Domestic Market and Overseas Market (EU, Denmark, Africa) are expanding, Expected large replacement demands derived by the change of IMO Regulation on the Hull Systems; single hull to double hull, Introduction of Export Incentives for 5%, Introduction of the Preferential Tax Relief for promoting Ship Export (5% of Corporate Income Tax for non-registered firms and 10% of Corporate Income Tax for registered firms shall be applied for the next 12 years), Commercial Banks changed their funding policies/attitudes to the Industry and are now more positive, Supporting Organizations such as FBCCI are quite positive to help support the Industry, are recognized as the Opportunity.

• [Threat]

According to BSBIA, there is no Threat to the Industry at present.

#### (5) Competitiveness Assessment in the Global Market

The Positioning Map shown in Figure 6.43 was developed through the discussions with BSBIA. In the market of Smaller-size Commercial Vessel (Cargo Ships) which is a competitive area for Bangladesh Shipyards, the market leader is China followed by Indonesia, Vietnam and India. The position of Bangladesh is far below them and Bangladesh is considered to be a "Newcomer" to the Market. The products of Bangladesh demonstrate a competitive edge in Price, but there is certain room to be improved in Quality and Lead time (Production Capacity). Indonesia has been nominated as the "Benchmarking" Country for Bangladesh for the time being.





Source: Prepared by the Study Team based on the Data from BSBIA

#### (6) Development Strategies of the Ship-building Industries

The Smaller-size Ships Market in the world which is dominant to Smaller-size Cargo Ships enjoys steady growth backed by strong demands, and this environment provides the Bangladesh Ship-building Industry a very good business opportunity, since the Industry has a competitive edge in their low-cost production.

1) Strategies capitalizing the Strength and the Opportunity

- Penetrate into the Emerging Markets in Europe and Africa capitalizing on its competitive edge of low-cost production,
- · Improve Ship-building Technologies through a Joint Operation with foreign firms and increase the competitive edge further.
- 2) Overcome the Issues capitalizing on the Opportunity
  - · Develop modern Shipyards through a Joint Operation with foreign firms and/or introducing long-term loans from local commercial banks,
  - Initiate Human Resources Development in the Ship-building sector by establishing Vocational Education Institutions by the private sector,
  - · Organize a systematic support framework for the Ship-building Industry capitalizing on the support facilities provided by FBCCI and CPD,
  - · Satisfy the financial demands for smooth operations and longer payment period related to the export business through new borrowings from New Commercial Banks,
  - · Establish the Ship Classification Society in Bangladesh with help support from the International Maritime Organizations.

The Bangladesh Ship-building Industry has approached the Ministry of Industries to draw up a Bangladesh Ship-building Roadmap and is now requesting to develop the Ship-building Industrial Cluster in three (3) different locations. It is also important to develop Backward Linkage with Light Engineering Industry and Steel and Rolling Industries in order to replace the import of Steel Sheets, Components, Equipments and Parts used for the Ship-building and eventually to reduce the huge amount of trade in-balance. It is also important to establish Ship Classification Society in order to enhance the safety of Ship Operations and introduce enforceable Design Policy and Specifications, Safety Measures, and Ship Registration and Management Systems, Regular Inspection and Certifications Systems and others. A Capacity Development program for establishing Ship Classification Society and Human Resource Development for its Surveyors are expected to be





extended by JICA.

#### Outlines of the Shipbuilding-related Industry in Bangladesh (7)

Although Bangladesh Ship-building Industry has a long history as stated in (2) herein above, the building of Steel Vessels itself has commenced recently. On the other hand, Bangladesh together with India and Pakistan undertake approximately 70% of the entire Ship-breaking and dismantling works in the World, and these operators are located near Chittagong, the largest sea-port city in Bangladesh. According to Bangladesh Survey of Manufacturing Industries (SMI) 2005 - 2006 done by the BBS, Value-added per Capita of these Industries is ranked as one of the highest among others. More than one hundred and fifty Ship-breaking and dismantling operators are working along the shallow beach in the north of Chittagong City, and those steel sheets, marine engines, various navigation devices and auxiliary machines are dismantled from the wrecks and they are distributed to local ship-building industries as second-hand goods and some of them are reused for the building of local boats. It is said that approximately 50,000 workers are engaged in these industries and a large amount of steel scraps are supplied by the industries to the national economy and value chains that perform without a steel mill. However, these ship-breaking and dismantling works have been undertaken in very poor working conditions and a considerable amount of work accidents happen every year. Also, there are serious environmental issues arising from the contamination that comes from the leaking of waste oils and the outcome of a large amount of toxic debris. According to Ship Recycling Agreement being adopted in 2009, regarding ship-breaking and dismantling of ocean-going vessels, more than 500 gross tons shall be conducted compulsorily within the facilities that satisfy those technical requirements designated. Modernization of ship-breaking and dismantling industries in Bangladesh is urgently required for the environment and the introduction of a "Green Economy" is strongly anticipated around the Globe.

# 6.3.7. The Plastic Industry

#### (1) Outlines of the Plastic Industry

The Plastic Industry of Bangladesh started its history as a small industry way back in 1960. Since then, the Plastic Industry has continuously expanded its domain and achieved rapid development in the early 1990's due to the adaption of the free market economy. The Plastic Industry was able to establish itself as one of the key industrial sectors of Bangladesh during the last two decades and the Industry was nominated as one of the thrust sectors in 2010's Industrial policy by the Ministry of Industries; however, this Industry still remains under the shadow of Readymade Garment industry. The main products manufactured by the Plastic Industry are various accessories related to the Ready-made Garment, and other commodities which show steady growth in the recent years. The Industry has been increasing day by day during the last eight years and keeping the average growth rate at 20 % or more every year. The Plastic Industry uses imported polymer granules and recycled plastic as raw material and the former is completely relied upon as an import. As to the recycled plastic, there are well established collection systems of the used plastic and approximately 126 tons of recycled plastic are constantly provided every day. The Bangladesh Plastic Goods Manufacturers & Exporters Association (PGMEA) is an Association which represents all kinds of plastic products manufacturers and its exporters in Bangladesh and the Association consists of around 1,300 member firms. PGMEA is providing such support and research activities as the development of Skilled manpower, Development of Mold design and mold making, Provision of the Testing facilities for quality control and Proper management of waste plastics, etc to the Industry.

# (2) Profiles of the Plastic Industry

Around 1,300 companies are operating across the country. More than 3,000 factories are involved with manufacturing in different scales and 300 small units are involved with recycling. Among these companies, 200 companies are directly dealing with export of finished plastic goods. At present, about 98% of the manufacturing units belongs to Small and Medium Enterprises (SME). In terms of market expansion and consumption the plastic industry has increased tremendously in last two decades as the domestic market size has reached \$1 Billion and consumption of plastic reached 750,000 tons compare to 15,000 tons in 1990.

The major products manufactured by the Plastic Industry are readymade garment accessories, household utensils, furniture, packaging materials, building and construction equipment as well as electrical and agricultural products. The Industry is providing employment to half a million people. Trends in Export and Import for the periods from 2005 to 2010 are shown in the Figure 6.44 . According to these records, the trade balance in the Plastic Industry shows a deficit although the amount of export is sharply increasing. In 2009-2010 fiscal years, the Plastic Industry earned \$242 million by exporting, but the Industry earned \$350 million in 2010/2011 which is 34% higher compared to the previous year.

Financial Year	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
Import	353.59	471.39	609.193	446.192	431.457
Export	162.8	186.3	214.5	237.4	242.6

Figure 6.44	Trends of Ext	port and Im	nort on the ]	Plastic Indust	$rv(2005 \sim 2010)$
1 igui c 0.44	II Chub OI LA	on t and min	port on the	i iastic indust	

Source: EPB

(3) Outlines of the leading firms in the Plastic Industry

Among many others, the following three (3) firms are leading Plastic Industries in Bangladesh that specialize in the manufacturing of Indoor and Outdoor Plastic Products, Ready-made Garment related Products, and Furniture-related Products.

**RFL Plastics Limited**, a subsidiary of RFL Industries is one of the largest manufacturers of indoor and outdoor plastic products (PVC-Polyvinyl Chloride and cast iron products) in Bangladesh. RFL Plastics Limited started its operations in 2003 and at present they have a 55,700 square meter plastic manufacturing plant equipped with injection molding, vacuum forming and blow molding machines with a conversion capacity of over 3,300 tons (3,000 MT) of resin per month. The facility is located 30 miles (50 km) East of Dhaka (capital of Bangladesh). Around 3,000 workers and 100 technical experts are currently working at the plant of RFL plastics. The company follows the British Standard 3505 to craft their product and their product ranges include household items like kitchenware, plastic furniture and storage containers, and many of them are exported abroad. The company has its own R&D laboratory facilities to develop the quality and design of their product.

**Bengal Polymer Wares Limited** is a sister concern of Bengal Group of Industries and they are solely involved in the production of garment hangers. They are well known as one of the largest garment hanger manufacturers in the region and are capable of producing more than 2 million pieces of plastic garment hangers every day. Bengal Polymer is the licensee manufacturer of Mainetti which is the largest hanger manufacturing company in the world with more than 50 distribution centers over 28 countries. Major products of Bengal Polymer include Garment hangers (Mainettim Randy, A&E, Bengal), Polybag, Packaging tape etc. They are currently expanding their molded furniture production capacity by installing 1600 ton and 850 ton presses

**TANIN Group** is one of the oldest manufacturers and exporters of plastic injection molding products in Bangladesh. The company started its operation in 1978. TANIN Group manufactures furniture using wood-substitute plastic. Products of TANIN Group include various types of Tables, Desks, Benches, Garden Tables, Folding Chairs and others.

(4) Managerial Environment Analysis on the Plastic Industry

The Study Team made interview surveys and intensive discussions with Bangladesh Plastic Goods Manufacturers and Exporters Association (BPGMEA) and confirmed the following points:

1) Internal Managerial Environment Assessment

• [Strength]

Flexible yet competitive labor supply, Many entrepreneurs entering into the Industry, Unique

technology in the recycling systems of Plastic in Bangladesh, Consistent support from the Government bodies are identified as their Strength.

• [Weakness]

Limited vocational education institution in the fields of chemistry and polymer chemistry, Education and training programs in the plastic and chemistry do not meet the requirements from the private sector, Material supplies are largely dependent on materials from abroad, Lack of technicians and skilled labors in the industry, Inconsistent supply of energy are recognized as the Weakness of industry.

- 2) External Managerial Environment Assessment
- [Opportunity]

Existence of potential large scale markets in the fields of Auto-parts and Electric Home appliances, Competitors are going to lose their competitive edge, Synergy effects are expected from the rapidly growing Ready-made Garment Industry, Support and assistance from foreign donors are expected, Facilities of GSP is still available at E.U. and U.S.A markets, are recognized as the Opportunity for the Industry.

• [Threat]

Stricter enforcement on the environmental conservation regulations by the Government Offices is recognized as the potential threat of Industry.

#### (5) Competitiveness Assessment in the Global Market

The Positioning Map as shown in Figure 6.45 was developed based on the Data from BPGMEA. Malaysia is the market leader followed by China, Thailand, and Viet Nam. India and Bangladesh which were positioned below them are considered as being at almost the same level. The Industry has set Thailand and Malaysia as Benchmarks and wishes to adopt a growth strategy. Since Bangladesh has larger domestic market rather than that of Thailand and Malaysia, it is important to entertain the demands in the domestic market as well.





Source: Prepared by the Study Team based on the Data from BPGMEA

(6) Development Strategies of the Plastic Industries

1) Strategies capitalizing on the Strength and the Opportunity

- A Business Promotion Council for the plastic industry shall be established for the promotion of exports and the development of the plastic industry by collaboration of Public and Private sectors,
- · Penetrate into Packaging Products Market fully utilizing the industrial designs and advanced

technologies in the fields,

- · Refine the industry's unique technologies on the recycling of plastic in close collaboration with the Government of Bangladesh and foreign donors.
- 2) Overcome the Issues capitalizing on the Opportunity
- Establishing a central institution for Plastic and Polymer Chemical Technologies with an attempt to provide various services for Research and Development, Certification, and Human Resources Development
- 3) Cope with potential Threats capitalizing on the Strengths
- · Develop new technology for the Environmental Conservation in close collaboration with the Government of Bangladesh.

# 6.3.8. The Furniture Industry

#### (1) Outlines of the Furniture Industry

Traditionally the furniture industry of Bangladesh has been developed as a cottage based industry. In the 1990s when the Bangladesh furniture industry transformed from a cottage based industry to a mechanized mass production oriented industry, they began to grow by installing modern machineries, innovating designs and using diverse materials. The industry is shifting its focuses from dependency on teak logs as raw materials to other materials such as Processed-wood and Medium Density Fiber board (MDF), laminated board, particleboard, and others. However, designs are usually focused on the more contemporary style and the preferred use of materials includes plastic, MDF, laminated boards and wrought irons for office furniture.

One of the key strengths of the local furniture industry is diversity in product portfolio. According to CSIL (Centre for Industrial Studies), Bangladesh has a strong potential in linking home décor craft items with the furniture industry. The export of furniture products from Bangladesh started in 1995 and it is estimated that the exports of Bangladesh will reach to a worth of USD 10 million for crafts furniture accessories and to a worth of USD 40 million for furniture by 2015. In wood furniture manufacturing, keeping low labor cost is a vital factor in becoming competitive in the world market and those costs shall not exceed forty (40)% of the total costs. In Bangladesh, labor costs account only for 20% in the total production costs and the hourly wage rate in the furniture industry is estimated between \$0.06 and \$0.40, much less than \$0.50- \$0.75 of China which is the largest furniture exporting country in the World. The labor costs of Bangladesh account for 12% to 53% of that of China.

#### (2) Profiles of the Furniture Industry

According to the Bangladesh Furniture Industries Owners Association (BFIOA), the total number of the entities belonging to the furniture industry are between 24,000 and 28,000 and 20% of them are working in large industries and 80% are working in SMEs. At present there are two relevant Associations in the industry i.e., Bangladesh Furniture Export Association (BFEA) and Bangladesh Furniture Industries Owners Association (BFIOA). Currently BFIOA has approximately 2,000 member firms while BFEA has 15 member firms which might become 19 members in 2012 since 4 new members are expected to become members.

Although annual sales of the furniture industry is assumed to be 10,000 Croe Taka (100 billion Taka), the actual amount might be higher than that amount because there is many member firms who do not report the figures correctly. Around 70% of the production of the furniture sector of Bangladesh is for home furniture and 30% is for office furniture. The product lines of the Bangladesh furniture industry have a wide range from Desks, Tables, Chairs, Sofas, Beds, Cabinets, Chest, and Show-case and others. The total number of the employees in the industry is approximately 2.2 million and 20% of them are working at large scale firms while 80% are working at SMEs. There are a number of furniture clusters in Dhaka which are located at Badda, Sutrapur, Mirpur area of Dhaka. There are 15 large Furniture companies doing their business in Dhaka capital region, while many furniture industries in Chittagong are involved in the export business. Due to the booming real estate sector in Bangladesh, the furniture industry is growing at a rate of 9.55% while the demand for furniture is increasing by 20%, thus, the furniture is under supplied in the domestic market. Local production for furniture accounts for USD 958 million while imported furniture accounts for only USD 16.84 million.





In the meanwhile, as far as trends in the amount of exports and imports, the amount exported in 2009/2010 was two hundred croe Taka (2 billion Taka) which contributes approximately 2% in the GDP of Bangladesh. Major destinations of the exports are to India, Australia, England, Canada (Home furniture), Australia, UK, Middle East, Japan and others.

	Figure 0.40 Fiends of Export of Soft Furniture								
F. Year	2006-2007	2007-2008	2008-2009	2009-2010					
Import									
Export	8.16	5.49	4.44	3.79					

Figure 6.46 Trends of Export of Soft Furniture

Source: Web site of the Furniture Association

About 40% of raw materials of furniture are procured domestically while the rest is imported from different countries which share quite higher percentages. Raw materials may be split into two categories; Wood materials and Non-wood materials. Wood materials may further be divided into Logs, High Density Fiber Board, Medium Density Fiber Board, Particle Board, Melamine Board, Laminated Board, Vineyard board and others which come from North America, Malaysia, and Ivory Coast. About 30% of Teak and mahogany are procured from the domestic market. With regard to Non-wood materials, most of the plastic, keys, rocks, hinges and other metal parts, lacquer, leather (synthetic leather) forms, fabrics, glass are imported.

As to the structure of Bangladesh furniture industry, sales by firm scale, gross profit, and net profit are as shown in Figure 6.47. A few number of the large scale firms have introduced modern production plants and technologies and are involved in the export business and enjoy higher sales, market shares and ratio of profit. However, majority of the industry are SMEs and/or Small and Cottage Industries, thus they are producing the furniture in traditional way with less productivity, poor quality and design and end up with less profitability.

Firm size	Numbers of Enterprise	(Share)	Average Annual Sales (BDT)	(Share)	Gross Profit (%)	Net Profit (%)
Micro	7,961	79.7%	1,877,400	1.4%	21.6	9.87
Small	1,676	16.8%	5,118,333	3.7%	25.74	12.41
MSM 2	276	2.8%	8,571,429	6.2%	29.67	14.67
MSM 1	40	0.4%	19,350,000	13.9%	32.1	15.1
Large	35	0.4%	104,100,000	74.9%	35.8	15.8
Total	9,988	100.0%	139,017,162	100.0%		

Figure 6.47 Profiles of Furniture Industry by scale

Source: Prepared by the Study Team based on the Data from Booklet of Bangladesh Furniture St Interior Décor Exposition 2012

(3) Outlines of the leading firms in the Furniture Industry

Outlines of the four major furniture manufacturers are as follows;

**Otobi Limited** is one of the pioneering furniture manufactures in Bangladesh which commenced its operations in 1975. They have well-established distribution networks which consist of 400 directly-managed outlets across the country with their main manufacturing plant with total floor area of 300,000 square feet in Mirpur, near Dhaka and 42,000 square feet of main outlet located in Gulshan. They have also extended their operations into India with a franchise system located in Kolkota and its distribution centers located in 6 other cities in India. They are the leading firm in the fields of highest categories of furniture with approximately an 80% market share. Their product lines cover wide ranges of furniture for the Offices, Homes, Hospitals, and such specialized furniture as Kitchen Cabinets. Annual sales of Otobi well exceed 6.6 billion Taka and the number of employees is more than 5,000. Besides India, they are planning to extend their export markets to



Canada, U.K., U.S.A., Middle Eastern Countries and African Countries.

Partex Furniture Industries Ltd. belongs to Partex Star Group. They were established in 1991 and their sales now reach the level of 1.5 billion Taka. PARTEX Furniture manufactures solid timber and timber-substitute products. They offer a combination of timber, special particleboard, and decorative plywood. At present, the production area of the Partex is about 162,000 square feet and the company is building a new factory of area 350,000 square feet. Around 1200 skilled workers are currently employed by this firm. The company has strong backward integration for their furniture production as their sister concerns produce Particle Board, MFC board, Filled / Flush Door, Plywood, Veneered Board, PVC Sheet & Door etc. Currently they are exporting their products to India, but they are now planning to extend their export markets to Middle Eastern Countries, U. K., and U.S. A.

Navana Furniture limited, a sister concern of Navana Group, was founded in 2002. Annual sales reach to the levels of 1.2 billion Taka. They have their factory in Savar, operating in more than 12,000 square foot area. They focus on Office solutions, Home solutions, Medical and Lab solutions, Industrial solutions and Interior Design Furniture. The company has around 80 outlets across Bangladesh and is also expanding their business internationally. At present, thousands of people are employed by Navana at their corporate office and manufacturing plants in Bangladesh. Also, they are presently exporting their products to India, and they are now planning to expand their export business to the markets in Europe and the Middle East in the near future.

Akhtar Furnishers Ltd commenced its business in 1976 and they are well recognized as one of the pioneers in the industry in Bangladesh. Annual sales reach to the levels of 1.2 billion Taka. At present, around 800 people are directly working by the firm and they have their own seasoning capacity of 2000 square feet of solid wood a month. Their major product lines cover the furniture made of Wooden, Melamine Laminated Chip Board and MDF. They started their export business at an earlier stage and currently they are exporting the products to Australia, U.K., U.S.A., and they wish to expand their markets to Middle Eastern Countries. They are well known as a unique entity, because they are involved in the human resources development themselves. Mr. K.M.Akhataruzzaman, who is functioning as the President of Akhtar Furnishers Ltd. and as the Chairman of BFEA at the same time, has established together with his partner Akhatar Furniture Academy this year by casting his own private funds. The objectives of this endeavor are to provide the educational and employment opportunities to younger generations who wish to have a job in the furniture industry. At that academy, there are several courses such as English Languages, Personal Computer Advocacy, Design and other skills besides Furniture Manufacturing, and the Academy accommodates wide ranges of admission from 13 to 40 years of ages. The Academy uses textbooks made by professionals outside the Academy and provides Short Course and Diploma Course which requires 4 years of admission and this course is expected to open for admission from the next academic year. According to Mr. Akhataruzzaman, he has a dream plan to expand this scheme to 64 locations in the country by 2013; within 3 years of time from its inception.

(4) Managerial Environment Analysis on the Furniture Industry

The Study Team has visited BFEA and made observation of the external and internal managerial environment including the managerial issue faced by the furniture industry.

- 1) Internal Managerial Environment Assessment
- [Strength]

Competitive labor market in the Country, Avail of domestic precious woods in certain scale, Competitive river transport costs for those domestic precious woods, Accumulation of furniture manufacturers and workers engaged in the furniture manufacturing being a traditional industry within the Country, and others are recognized as the Strength.

• [Weakness]

Many unskilled labors and technology level is lower, Lack of skilled labors (English proficiency and Computer literacy, Design Capability are required in addition to traditional furniture manufacturing), Lack of vocational education in furniture manufacturing and lack of furniture manufacturing courses at the existing vocational institutions, Higher dependency on the imported materials which cost more to the manufacturers, Low productivity due to obsolete technology and lack of mechanization,



Higher power supply cost due to shortage of power supply via national grid and adaptation of personal power generation systems, Weak marketing capability for exploring export markets, SMEs being the majority in the industry face various constraints such as human resources, technology, production systems and finance, Poor quality management and quality inspection systems, Lack of healthy work environment at the shop floors, Difficult to expand its production capacity due to lack of industrial estates, No incentives for the promotion of export business by the Government, and others are identified as the Weakness.

2) External Managerial Environment Assessment

• [Opportunity]

Growing markets (increased 30% in domestic market and 20% in the overseas market compared with the previous year), Improved productivity in certain area due to assistance by foreign donors (Katalyst), Strategy of Chinese furniture manufacturers focuses the low-quality and low-price products and no serious competition in the markets with Bangladesh furniture, Many emerging markets in Asia and Africa besides Europe and U.S.A., Positive supports by Export Promotion Bureau (EPB) are available, and other are recognized as the Opportunity.

• [Threat]

Malaysia, Viet Nam and Indonesia are front runners in the higher-quality furniture segment in the international markets and Bangladesh furniture manufacturers meet with stiffer competitions, Supply of domestic precious woods such as Teak and Mahogany is getting smaller, Lack of industrial standards for furniture manufacturing in Bangladesh while rigid industrial standards are applied in certain countries and thus it will be potential threat in future, Stricter enforcement of regulations and directives by the Government on the Safety and Healthy Measurements at the work place are expected in the future, and others are recognized as the Threat.

(5) Competitiveness Assessment in the Global Market

Figure 6.48 shows the positioning map of the Furniture Industry of Bangladesh. The leader in the market is Malaysia followed by Viet Nam and Indonesia. The furniture made in China are standard-type and low-priced thus the position of Chinese furniture is located lower than that of Bangladesh. BFEA sets Malaysia as their bench-marking country for the time being and they will try to develop the industry along with this strategy..



Figure 6.48 Positioning of Furniture Industry

Source: Prepared by the Study Team based on the Data from BFEA

(6) Development Strategies of the Furniture Industries

- 1) Strategies capitalizing on the Strength and the Opportunity
  - · Penetrate into the Market focusing the furniture made of domestic precious woods and applied



with advanced designs. Particular emphasize shall be given to improve quality level of the furniture by introducing advanced furniture manufacturing technologies and adopting effective marketing practices in close collaboration with EPB.

- · Develop the emerging markets in the Middle East and Africa with strategically low-priced furniture. In order to get in the emerging markets, improvement of marketing capability is imperative. Introduction of advanced furniture designs through the assistance from EPB and research works on the market trends are critical to improve the quality of products and development of new products. Besides these practices, business matching and public advertisement through overseas media and public relations are important to develop the markets.
- 2) Overcome the Issues capitalizing on the Opportunity
  - •Establish vocational education institutes by the private sector for development of skilled workers in the furniture industry. More coordination and collaboration shall be materialized between BITAC and other supporting institutions run by the public sector and the Vocational Schools and the Akhatar furniture Academy which are run by the private sector.
  - The training of skilled workers will be promoted in a way that focuses on on-the-job-training (OJT) in places where domestic furniture is manufactured in order to help facilitate growth in the domestic market. A furniture upholsterer meister system in manufacturing facilities will also be introduced and efforts will be made to improve productivity by aiming at increases in production control technology.
- · Introduce Quality Standards and Certification Systems taking an advantage of ODA programs given by the foreign donors.

Establish Bangladesh Industrial Standards along with the international Industrial Standards and the requirement on the quality inspection and quality certifications. For those who can produce the furniture products with internationally known furniture, authority shall recognize them with an award of honor of export furniture manufacturers and issue a certificate with an attempt to improve the technology level in Bangladesh.

Request the authority concerned for introducing the export promotion incentives to furniture industry.

Develop various incentives in close collaboration with EPB and FBCCI for introduction of export incentives, Refund of import duty on the exported furniture, Corporate income tax depending on the actual amount of exported furniture, extension of subsidiary for modernization of the manufacturing plants, Tax relief for modernization of the manufacturing plants, Reduction of the Tax for modernization of manufacturing plants, Subsidiary to the overseas marketing expenditures spent by the furniture exporters.

· Improve the managerial capability at small and medium sized furniture manufacturers and develop the fundamentals of the furniture industry.

Assist the technology improvement and introduction of financial assistance for furniture manufacturers of small and medium size.

- 3) Cope with potential Threats capitalizing on Strengths
  - · Promote plantation of the precious woods to be used for furniture manufacturing in close collaboration between public and private sectors.
    - Promote the activity on forestry conservation and Sustainable Forest Management systems in order to enrich the resources of the precious wood.

# 6.3.9. Ceramic Industry

#### (1) Outlines of the Ceramic Industry

The Bangladesh Ceramic Industry set off in the 1980s, and at present the sector being one of the emerging industries, has significant potentiality in expanding its share in the global ceramics industry which is worth \$10 Billion USD. Major products of this sector include, among other, Ceramic table wares, Tiles for building and Sanitary wares. Though the ceramic industries of Bangladesh heavily relies on importing of raw materials, the industry enjoys higher value addition (65 percent) due to the comparative advantages of the industry such as technical expertise, skilled manpower in ceramic sectors, clean gas reserves, good reputation in the international markets, and huge domestic demand. Since the sector requires a more labor intensive production process, the economy of Bangladesh which is based largely on its labor cost competitiveness, makes the industry thrive even more.



### (2) Profiles of the Ceramic Industry

In the last five years, the ceramic industry has been expanded by 200 percent in gross output and increased its export growth by 100 percent. During the last decade, the export of ceramic products registered an average growth of 20 percent, while the industry earned around 3.33 billion Taka through exporting ceramic products during the period from January to December 2011. According to the chairman of Bangladesh Ceramic Ware Manufacturers Association (BCWMA), export of ceramic products can be increased to US\$ 100 million in the next six (6) years. The market of European Union and Canada are the major export destinations of the ceramic products of Bangladesh. Although China and Thailand are the main competitors of Bangladesh, due to expansion of its domestic market, according to the chairman of BCWMA. In the meanwhile, total employees engaged by the ceramic industry accounts for approximately 33,170, about 40 % of which are women workers. The export and import data of the ceramic sector during the period from 2005 to 2010 are as shown in the following figure.

Figure 0.47 Export and import of Ceranne Froducts(2005 2010)								
FY	2005-06	2006-2007	2007-2008	2008-2009	2009-2010			
Import	28.25	33.64	38.457	42.045	42.444			
Export	27.5	29.95	38.33	31.70	30.78			

Figure 6 49	Export and Im	nort of Ceramic	Products(2005	~ 2010)
Figure 0.42	Export and Im	port or Ceranne	1 10uucis(2003	<i>2</i> 010 <i>)</i>

Source: EPB

According to these data, consistent in-balance to Bangladesh has been recorded for the last 5 years. Higher import duties on the imported raw materials is one of the major constraints that the industry is currently facing in Bangladesh, and under-invoicing of imported finished ceramic products is also creating a tremendous problem for the local ceramic manufacturers due to the uneven competition in the market, according to the BCWMA.

Growth of exported ceramic products from Bangladesh during the period from 1998 to 2010 is shown in Figure 6.50 below. Exported values from 1998 to 2007/2008 show consistent growth, according to these data.



Figure 6.50 Trends of the exported Bangladesh Ceramics (1998 ~ 2010)

Source: BOI

(3) Outlines of the leading firms in the Ceramic Industry

At present, there are 28 member firms at BCWMA who are incorporated as exporters of Bangladesh ceramic products. Among many others, the following three (3) major firms are play leading roles in the industry.

RAK Ceramics (Bangladesh) Limited is rather new firm which was incorporated in Bangladesh

in 1998 and has started its commercial operations in the year 2000. The firm's authorized capital is 3,000 million Taka, Paid-up capital is 2,784 million Taka, Total Annual Sales in 2011 was 3,440 million Taka and Net Profit after tax was 551 million Taka. The firm is a joint venture company of the UAE (90%) and Bangladesh (10%) which was incorporated in Bangladesh and the firm became one of the leading firms in the ceramic industry within a very short period of time. They are engaged in manufacturing and marketing of bathroom sets, ceramics tiles and all types of sanitary ware, and now have over 1,000 models. The plant of RAK Ceramics (Bangladesh) produces over 900,000 pieces of sanitary war per annum. Standard capacity of plant is 22,000 square meter tiles and 3,400 pieces of sanitary ware per day.

Shinepukur Ceramics Limited (SCL) is a member firm of BEXIMCO Group and is located in the BEXIMCO Industrial Park, near Dhaka Export Processing Zone. SCL was established in Bangladesh in 1997 and their Plants were commissioned in 1998. The firm's authorized capital is 5,000 million Taka, Paid-up capital is 1,111 million Taka, Total Annual Sales in 2011 was 1,458 million Taka and Net Profit after tax was 156 million Taka. SCL is equipped with the latest Machinery from Japan and getting technology transfer from NIKKO of Japan. SCL produces Bone China Porcelain, Ivory China and High Alumina tableware for all different market segments. Their products are widely used at home, industrial places such as restaurants, hotel, and even as Airline in-Flight items. SCL is the largest Bone China manufacturing Company in the SAARC Region. About 10,000 Pieces of Bone China and 60,000 Pieces of Porcelain Table-ware are produced at SCL plant every day. SCL is one of the largest Ceramics Table-ware Exporters in Bangladesh and approximately 60% of the total National Ceramic Tableware Export is undertaken by SCL. Main export destinations of SCL products are Australia, Argentina, Canada, Denmark, France, Germany, India, Italy, Japan, Mexico, Norway, New Zealand, Poland, Russian Federation, Spain, Saudi Arabia, Singapore, Taiwan, Turkey, USA, UK, UAE etc. SCL have been awarded National Export Trophy (Gold) many times.

Fu-Wang Ceramic Industry Limited is a multi-national company which was established in Taiwan, Malaysia and Bangladesh. The firm was established in Bangladesh in 1995 and in 1998. Fu-Wang Ceramic was listed in the Dhaka and Chittagong capital markets. The firm's authorized capital is 1,000 million Taka, Paid-up capital is 699 million Taka, Total Annual Sales in 2011 was 566 million Taka and Net Profit after tax was 93 million Taka. Their major products are a comprehensive range of Wall Tiles, Floor Tiles, Decoration Tiles, and Border Tiles.

(4) Managerial Environment Analysis on the Ceramic Industry

Through intensive interview surveys with the Bangladesh Ceramic Ware Manufacturers' Association (MCWMA), the following results were gathered.

1) Internal Managerial Environment Assessment

• [Strength]

Competitive labor market, Capability of producing higher -class quality of ceramic due to avail of better natural gas, Many skilled labors backed by the longer history of Bangladesh ceramic industry, Closer collaboration with FBCCI and other assistance organizations, and others are identified as Strengths.

• [Weakness]

Unstable energy supply systems, Raw materials of ceramics are largely dependent upon import from other sources, Higher capital-cost and difficult to get loans from financial institutions, Transport infrastructure in Bangladesh is poor, Lack of Industrial Human Resources Development systems, and others are recognized as the Weakness.

2) External Managerial Environmental Assessment

• [Opportunity]

Bangladesh is surrounded by various emerging markets such as the Middle East, South Asia and China, Rapid expansion of high-tech ceramic product markets, Avail of well-established support to ceramic industry from the Government of Bangladesh, Many opportunities to get support from foreign donor countries and /or joint venture operations with private sectors, and others are identified as the Opportunity.

• [Threat]

Political instability of Bangladesh Government, Lack or shortage of lands and industrial estates for the construction of production plants, Stricter enforcement by the Government for the use of toxics including those items used in the processes of ceramic manufacturing, Lack of lands and utilities required for the production of ceramic products, and others are identified as the Threat.

#### (5) Competitiveness Assessment in the Global Market

The Positioning Map of the Ceramic Industry as shown in Figure 6.51 was developed through the discussion with BCWMA. Bangladesh is positioned in the middle between the upper group and lower group and is recognized as a country that can produce ceramic with a consistent level of quality. The Market leader is Poland followed by Czech and other East European Countries who are set as the bench-mark for Bangladesh. The position of Bangladesh is higher than that of Thailand, Viet Nam and Indonesia and Bangladesh products are well penetrated in the markets. They recognized the Middle East, South Asia and China as the emerging markets and they will adopt the Growth Strategy that focuses on the competitive edge of Bangladesh which are lower prices and improvement of quality.

#### Figure 6.51Positioning of the Ceramic Industry



Source: Prepared by the Study Team based on the Data from BCWMA

- (6) Development Strategies of the Ceramic Industries
- 1) Strategies capitalizing the Strength and the Opportunity
- Penetrate into those emerging markets in the Middle East, South Asia and China capitalizing on higher quality and competitive prices.
- 2) Overcome the Issues capitalizing on the Opportunity
- Develop the markets of High-tech Ceramics by improving technological capability through joint venture with foreign firms.
- Establish industrial human resource education/training institutes with assistance from foreign donors.
- Diversify the supply source of raw materials and ease the risks thereof for the ceramic products getting support from the Bangladesh embassies/consulates abroad and foreign embassies/consulates located in Bangladesh. Special attention shall be paid to the possibility of sourcing raw materials from neighboring Myanmar.
- 3) Cope with potential Threats capitalizing on the Strengths
- Envisage such potential risks arising from the stricter enforcement of regulations/directives in close collaboration with FBCCI/DCCI and protect the interests of the industry.

# 6.3.10. Software • IT Services Industries

(1) Outlines of the Software • IT Services Industries

South Asia has in recent years enjoyed strong economic growth and increased flows of foreign IT

investment. Bangladesh is now a significant country of choice for the location of e-Commerce and IT Services activities. A growing number of national and multinational corporations are investing in Bangladesh, benefiting from a high quality workforce, a first-class telecoms infrastructure and the professional coordinated approach of BOI, delivering a flexible and attractive package to investors. In addition, Bangladeshi IT companies have expressed a desire to become outsource software development suppliers and partners to software developers in higher cost locations around the world, particularly in the EU and United States. Software • IT Services Industries include Internet services providers, Software development, Data processing, Automation and Call centers. In Bangladesh, specialized IT educations are well established at graduation and post graduation levels and IT education programs are offered at over 90 universities and 700 colleges across the country and more than 10,000 IT students graduate from these universities and colleges every year. A large part of these IT graduates possess global IT vendor certifications (e.g., from Microsoft, Cisco, Oracle, Sun) on top of their academic degrees. In December 2010, Gartner, one of the most respected global consulting groups, published a list of top 30 outsourcing destinations of the world and Bangladesh was included in the list. Many global companies have started to consider seriously Bangladesh as their outsourcing or back-office location. In 2010, Samsung of Korea, the global leader in the consumer electronics industry, opened up its high-end Research and Development (R&D) center in Bangladesh with over two hundred engineers and AMD, LG and IBM are currently in the process of setting up their R&D centers in Bangladesh.

The Government of Bangladesh has started an equity-finance scheme with shorter and longer tenure repayment periods to the Software • IT Services Industries in 1996 in order to encourage the industry further. The funds were established jointly by the owners of IT Industries which contributed 49% of the funds and the Government which contributed the rest and the funds may be used without any interest for its borrowings. Also, all the entities including the foreign firms engaged in the IT services and Software development businesses are exempted from the Income Tax for the periods up to July 30, 2012. Furthermore, a cluster for IT-related Industries are being developed at the Sonargaon district opposite Dhaka City in order to encourage the industry. The Ministry of ICT has drawn up the ICT Policy and identified more than 100 emphasized individual items for further development. The following programs are being implemented as the initiatives for developing the Software • IT Services Industry in Bangladesh .

· Paid Internship Program by the Government of Bangladesh

The Internship Scheme for the development of 500 software programmers each year.

• Technology Transfer project by EU System Software and Multimedia development by Bremen University of Germany and Paris Chamber of Commerce and Industry (IT Update Project - Marketing & Management)

- · Development of BASIS Institute of Technology and Management by the World Bank
- · BITMAP Project by the Government of Denmark Organization Development and Sustainability, Promotion and Awareness, Developing ICT Sector for BASIS, and 2nd Phase- Business Matching Meeting is currently being implemented.
- · Skill development and export promotion by Japan International Cooperation Agency (JICA) As of March 2012, JICA has dispatched 5 personal computer instructors and computer engineers to Bangladesh in order to enhance IT education. Since there is no certification system in IT-related technologies, they are also supporting the introduction of IT Qualification Systems certified by the Government just like ITEE certification systems in Japan through JICA/Bangladesh Computer Council.

# (2) Profiles of the Software • IT Services Industries

Bangladesh Association of Software & Information Services (BASIS) was established in 1997 as one of the leading Industrial Associations in the Software • IT Services Industry. The Association began its activities initially with 17 member firms, and the member firm now reaches 470 firms, although 100 firms are deemed to be dormant firms. Thus, the number of firm that are actually engaged in Software • IT Services are approximately 370. Business lines of the member firms may be summarized as approximately 60% of the member firms and are involved in the Software Development while the rest are involved in the IT-related services such as Data LAN, and Graphics



design. Major destinations of their foreign services are European Countries such as Denmark and others. Besides BASIS, Bangladesh Computer Shomity is established by the firms involved in the production of IT hardware. The total number of employment provided by the industry is approximately 30,000 and the number of firms involved is approximately 500, the majority of which are Small- and Medium Enterprises (SMEs). The business environment, which has recently changed, is in the development of open bidding systems for which any freelance and individual operator may access via on-line internet systems. It will provide free and equal opportunity to those small holders in Bangladesh on a Global scale. In this particular field, India, U.S.A, and Philippines are prominent, then followed by Pakistan and Bangladesh. Software IT Services Industries may distinguish three (3) different categories:

- Domestic Market 50%
- Outside(Export) Market 40%
- Foreign Direct Investment 10%
- (Typical example: Samsung of Korea has established a R&D Center in Dhaka without any local partner and they run the center with 300 staff which is expected to increase to 1,000 next year)

The annual sales of domestic Software • IT Services Industry is approximately 250 million US dollars which is not significantly large. Distributions of the domestic market are as shown in figure 6.52 below.



Figure 6.52 Domestic Market of Software IT Services Industries

In 2010, the total sum of Software • IT Services exported was 45 million US dollars, while trends of the same figures during the periods from 2006 to 2011 are as shown in figure 6.53. Although the scale of the exported sum is rather smaller compared to that of the domestic market, the growth rate in recent years is increasing. Major destinations of those exported are; U.S.A., U.K., Canada, Australia, Denmark, Netherlands, Germany, India, Japan, and U.A.E.

Fiscal Year	Export (In million USD)	Growth (over privious year)
2006-07	26.08	-3.44%
2007-08	24.09	-4.83%
2008-09	32.91	32.59%
2009-10	35.36	7.44%
2010-11	45.31	28.14%

Figure 6.53	Trends of Software •	IT Services exported
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Source: EPB



Source: BOI

Remarks: According to BASIS, annual Software IT Services in the years 2010/11 accounted for 45 million US dollars in the official statistics, but actual figures shall be approximately 100 million US dollars. This gap came from the difference in the figures between the figures captured by the Bangladesh Bank based on the C Form submitted and those figures that were not passed by the Bangladesh Bank. There is considerable amount of direct remittances being made by the foreign clients to the bank account designated by the Bangladesh services providers directly, which is difficult to capture by the Bangladesh Bank.

(3) Outlines of the leading firms in the Software • IT Services Industries

Majority of Bangladesh Software IT Services Industries are SMEs and the following three (3) firms are typical pioneer firms among others in the industry. Profiles of these firms are as follows.

**Daffodil Computers Limited** was established in 1990 as a proprietorship concern of Mr. Md. Sabur Khan, the Director of Dhaka Chamber of Commerce and Industries and the former President of the Bangladesh Computer Society (BCS) . In 2003, the company became the 1st public listed company as a purely IT based company in Dhaka Stock Exchange (DSE). The firm's authorized capital is 500 million Taka, Paid-up capital is 499 million Taka, and Net Profit after tax was 34.1 million Taka. Though the core business of Daffodil Computers was computer Assembling & Selling, the Company diversified into computer training and software development. Daffodil Institute of Information technology and Daffodil Software Limited are two of Daffodil Computers group of companies. They became an official sales agent in Bangladesh for Hewlett-Packards in 1997.

**Datasoft Systems Bangladesh Limited** was established in 1998 and is one of the leading firms in the industries which is duly certified by CMMI Livel-3 & ISO 9001:2008. They are providing innovative yet cost-competitive technical services to both the public and private sectors.

**BdJobs.com Ltd** is the first firm in Bangladesh which opened its carrier management site on the internet and is providing matching services for job-seekers and employers on internet lines. The number of accesses to their site accounts for approximately 80,000 times daily, 40 million times per month, and data of registered resumes are as high as approximately 375,000 and the number of the client subscribers is more than 5,500.

(4) Managerial Environment Analysis on the Software/IT Services Industries

The Study Team had intensive discussions with BASIS representatives on several occasions and gathered the following data.

1) Internal Managerial Environment Assessment

• [Strength]

Ample younger generation work forces (University Graduates) who are talented in the English language and IT Knowledge, Advantageous Tax systems and Tax Incentives for starting-up new business, Well-established Micro Finance Systems which can be used for seed-money for Entrepreneurship are recognized as the Strength.

• [Weakness]

International Telecommunication lines, in particular the interface with external linkage, are weak and poor, Access to finance is rather limited due to weaker asset values of SMEs, Lack of practical training systems in IT Sector, and Slow progress in the development of a High-tech Park and other industrial cluster, are recognized.

2) External Managerial Environment Assessment

• [Opportunity]

More opportunity is foreseen for small-scale IT Operators due to application of Open Platform Systems, Direct competitors such as India and Philippines face increasing production costs which in turn makes Bangladesh more competitive, Avail of widely-spread assistance programs for various projects from foreign donors, Emerging markets in various countries in the Middle East and Africa, Many Bangladesh Overseas Workers who have proven knowledge and skills in the IT sector are recognized as the Opportunity.

• [Threat]

Shrinking software and IT Service markets in Europe and U.S.A. due to the slump of their economies. Stiffer competition is expected by entering the African countries and others are identified as the Threat.

# (5) Competitiveness Assessment in the Global Market

The Positioning Map of the Software · IT Services Industries was drawn through discussion with BASIS. The Leader in the Global Market is India followed by East European Countries, Philippines, Viet Nam and Egypt. Bangladesh is positioned at the lower place than these countries and it is required to try to improve her competitiveness to keep up with these countries. However, there is some favorable phenomenon for Bangladesh in that India and Philippines are losing their price competitiveness due to hike of labor costs and more opportunities are open for those small holders due to the rapid introduction of Open Platform systems in the Global market. There will be a niche market in such Islamic Countries in the Middle East and Africa where many Bangladesh Overseas Workers are found and they are considered to be good partner in penetrating these emerging markets.

Figure 6.54 Positioning Map of the Software • It Services Indus tries



Source: Prepared by the Study Team based on the Data from BASIS

(6) Development Strategies of the Software • IT Services Industries

In parallel with the preparation of the Positioning Map, the Study Team has made intensive discussions with BASIS and gathered information on their development strategies.

1) Strategies capitalizing on the Strength and the Opportunity

- · Positive penetration to the Open Platform Market fully utilizing Information Technologies and Micro Finance systems. Through this strategy, enlargement of the industry and improvement of the service quality may be achieved.
- · Establishing a matching system that inter-connects the IT Operators/Engineers in Bangladesh and those Bangladesh Overseas Workers, in order to exploring emerging markets in particular.
- · Positively promote low-priced Software Development Services and IT-related Services, for which Bangladesh Software/IT Services Industries have a competitive edge in close collaboration with EPB and other supporting agencies. At the present, Europe and U.S.A. markets are facing serious economic recession and the emerging markets in the Middle East and Africa, such low-priced services are well supported by the IT Industries and the end-users, and this environment provides considerable business opportunities with Bangladesh industries.

2) Overcome the Issues capitalizing on the Opportunity

• Improve the levels of IT Education, in particular in the fields of Vocational and practical skill development through support from Foreign Donors.

- Develop international communication trunk lines and domestic trunk communication lines outside Dhaka with an initiative of the Government. It is prerequisite that such basic communication infrastructure has enough volume of international communication lines and high-speed network systems, for the development of software and IT Services Industries. Soft loans from foreign donor may be used for the infrastructure development of submarine cable.
- Taking advantage of soft loans which may be provided by foreign donor agencies, improve accessibility to the finance by SME operators in the industry. Also, every effort shall be taken in order to make easy access to the available funds and timely provision of the loan for SME operators.
- Every effort shall be provided in order to complete the proposed high-tech park as scheduled, which was initiated by the World Bank. And consistently promote the development of high-tech parks and IT Villages in other areas in the country.
- 3) Cope with potential Threats capitalizing on the Strengths
- Try to make a balanced portfolio on the export market which is currently overemphasized toward European Countries and U.S.A. by penetrating into potential markets on the other part of the World and reduce the risks arising from the overemphasized market structure.

Currently Software • IT Service Industries in Bangladesh enjoy sound performance but the size of domestic market is rather small and inferior communication infrastructures are recognized as challenge for Bangladesh. The concept of "Digital Bangladesh" has been introduced by the Government in 2009 and many targets were set along with this concept such as Facilitation of public service by information technology, Promotion of IT Industry, Development of human resources, and Effective use of information technology in the medical and welfare fields. However, actual progress of these programs is not as expected and literacy of internet services is rather limited to the chosen private sector and habitants who live in the capital city of Dhaka and the second city of Chittagong. It is essentially important for the Government that they shall, as the initial step on the entire program, positively introduce those digital devices at their public services and implement these programs along with a solid schedule then try to spread these concepts to the other parts of the society.

Human resources development is the key element in developing Software  $\cdot$  IT Services Industries. At present, the industries accepts approximately 6,000 new university graduates every year, but there is a big gap between what the industry expects from those new human resources entering into the industry and what the new graduates have learned in the universities. In order to dissolve these issues, the industries and the educational institutions shall coordinate closely in order to change the education system to be more practical. In Bangladesh, it is said that approximately 40 firms are currently engaged in the call center business but only 10 firms are successful. The industries require to accumulate know how in operating such call center business.

# 6.4 Development Strategies for the Priority Industries in Bangladesh

So far the status quo of the major industries, its managerial environment, competitive environment in the Global markets and business strategies adopted by the priority industries of Bangladesh were discussed. After this analysis, challenges that those priority industries are facing in order to realize their industry-specific strategies were summarized. The associations of the industries have developed fifty two (52) industry-specific strategies. The study team has identified potential challenges that may be faced by the industries along with major elements of operations; Quality (Technology), Cost, Market Development, Human Resources Development, Financial systems, Procurement of raw materials and other for each industry-specific strategy. However, this matrix does not include the challenges related to the Infrastructure development. All the outcomes from this analysis are shown in the matrix attached to this report as the Appendix. These challenges were further summarized along with three (3) patterns of the industries and summary results thereof are shown in the figure 6.57. The three (3) patterns were classified based on how the raw materials are procured and nature of human resources engaged by the industries.

(1)Utilizing Domestic Resource Model: Agro-processing, Industry, Footwear and Leather Industries, Furniture Industry.

(2)Importing and Processing Raw Materials Model: Ceramic Industry, Plastic Industry, Home

Textile Industry, Ship-building Industry. Light Engineering Industry.

(3)Utilizing Advanced Human Resource Model: Pharmaceutical Industry, Software • IT Services Industries.

Furthermore, assistance needs for Bangladesh industries were identified from the inter-industrial points of view and the results thereof may be summarized as follows.

- (1) Quality (Technology)
  - · Improvement of Quality and Productivity by modernizing production equipments
  - · Development of own brand and design for products/Services
  - Improvement of Quality Standard and Certification Systems
  - · Improvement of Quality Inspection Technologies
  - Improvement of Environmental Conservation (Energy Efficiency, Waste Water Treatment, in particular)
- (2) Procurement of Raw Materials
  - · Diversification of supply source of raw materials by improvement of procurement data and information
  - · Development of Material Industries such as Iron and Steel, Petrochemicals and others
  - · Enlargement of preferential import tax systems for those raw materials imported and processed which are used for products to be exported (including those incentives on bonded warehouses, bonded factory, refund of import duties, and etc)
- (3) Cost Competitiveness
  - · Cost reduction by improvement of productivities
  - Introduction of cost control systems
  - Streamlining of domestic distribution and logistic systems
  - · Improvement of cost competitiveness by developing backward linkages
- (4) Market Development
  - · Reduction of import duties on the raw materials imported
  - · Improvement of market research capability
  - Improvement of strategy delineation capability for market development and penetration
  - Improvement of linkage between larger corporations and SMEs
  - · Establishing overseas distribution networks
- (5) Human Resources Development
  - · Development of skilled labors
  - Development of business persons for external trades
  - · Development of advanced human resources (IT and Environment)
  - · Development of Managerial Human Resources (including human resources for quality control, management systems)
  - Development of vocational education centers for the major industries at the national level
  - · Amplification of advanced human resources by encouraging home-coming of those qualified personnel working abroad.
- (6) Financial Systems
  - · Introduction of long-term and low-interest-rate loans for capital outlays
  - · Amplification of external trade finance systems (credit facilities for external trade, and loans for overseas operations)
  - Establishing credit guarantee systems for SMEs

Figure 6.57 Challenges for realizing development strategies according to the three patterns of priority industries and Inter-industrial needs for assistance

	Quality (Technology)	Procurement of Raw Materials	Cost Control	Market Development	Human Resources Development	Financial Systems
Domestic Resources- based industry	Improvement of quality and productivity by modernization for production plants is needed Improvement of technology through point operations with foreing firms is needed Development of new products in close Collaboration with industrial disgeness is needed improvement of package/design capability is preduction and the anironmental conservation technologies (Waste Water Treatment) is needed Development of new specifications for reaking low-cost production is needed	Development of horticulture & improvement of productivity in agriculture sector is needed "Forestation of precious trees for supply to furniture industry is needed Securing good quality of hide & skins is needed "Reduction of wastage of raw materials by improvement of domestic logistic networks	<ul> <li>Seek for lower production cost by improvement of productivity - Introduction and intensive implementation of cost control systems is needed</li> </ul>	Policy for market development and dversification is needed Penetration strategy for emerging markets is needed Improvement of market research capability is needed Development of domestic distribution networks is needed	<ul> <li>Development of business persons for external trade is needed</li> <li>Development of business persons who can work with foreign items is needed</li> <li>Human resources development in product planning, production, marketing (development)</li> <li>Busine is a second of the second constraint of the second of the second of the second constraint of the second of the second of the second constraint of the second of the second of the second constraint of the second of the second of the second constraint of the second of the second of the second constraint of the second of the second of the second constraint of the second of the second of the second constraint of the second of the second of the second constraint of the second of the second of the second constraint of the second of the second of the second constraint of the second of the second of the second constraint of the second of the second of the second constraint of the second of the second of the second constraint of the second of the second of the second of the constraint of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the s</li></ul>	Loan systems for development funds are needed 'Oredit systems for external trade are needed 'Find rasing scheme for investment by public and private sectors in needed 'Effective use of funds from foreign donors is needed
Imported Raw Materials Processing Industries	Improvement of Quality and Productivity by modernization of production plants - Improvement of technology through joint operations with foreign firms - New product development by introduction of advanced technologies - Markan Carling and the service of the service - Realize quality control systems - Improvement of quality level by introduction of induction furnace is needed - Development of technology level by assistance from foreign donors is expected - Introduction of systems - Introduction of systems - Introduction of the standards by establishing ship classification society is needed	-Diversification of supply source of ma materials by improving procurement data is needed -Development of material industries is needed	Seek for lower production cost by improvement of productivity Introduction and intensive implementation of cost control systems is needed Promote to reduce import duties Promote to reduce import duties es reduction of inport duty for the materials used for production of products exported	Policy for market development and devestification is needed Penetration strategy for energing markets is needed Improvement of market research capability is needed Development of domestic distribution networks is needed	Development of business persons for external tracks in needed Development of business persons who can work with foreign timms is needed Human resources development in Human resources development in the field of environment conservation is needed Development of managers (quality control & management systems) is needed Development of managers (quality is needed Human resources for introduction of ship classification society work is needed	Loan systems for development funds are needed Credit systems for external trade are needed Fund mäning scheme for investment by public and private investment by public and private Effective use of funds from foreign donors is needed
Advanced Human Resources-based Industry	Duality assumance by introduction of medical products quality control systems and improvement of medical product quality is needed -Manitariang quality standards of OPF market is needed -improve technology level by practical education in T sector -Product development meeting the requirements in the emerging markets is needed	Domestic production of Active Pharmaceutical Ingredient (API) is needed	<ul> <li>Seek for lower production cost by improvement of productivity -introduction and intensive implementation of cost control systems is needed</li> </ul>	Policy development for penetrating new markets is needed 'Strategy for extension of overseas business (including M&E) is needed Natching with Bangladesh IT engineers working abroad is needed	Development of business persons for external trade is needed -Human resources development for medical products quality control systems in eneded -Systematic development of IT engineers is needed	Loan systems for development funds are needed Oracit systems for external trade are needed Fund raising scheme for investment by public and private sectors is needed Effective use of funds from foreign donors is needed
L		An electron of the land of the land of the second	A			Automatic for Science and
Inter-Industrial Needs for Assistance	-Assistance for development of product development capability - Assistance for introduction of quality control - assistance for introduction of certification systems - Assistance for introduction of ship standards systems (including the establishing a ship classification society in Bangladesh)	<ul> <li>-resistance for improving thortfulture /pomology</li> <li>-Assistance for improving tannery and exchangings</li> <li>-Assistance for forestation of precious woods</li> <li>-Assistance for diversification of -Assistance for diversification of -Assistance for diversification of supply sources of rare materials by improving procurement information systems</li> <li>-Assistance for development of API park</li> </ul>	<ul> <li>Assistance for improving productivity</li> <li>Assistance for introduction of cost control systems</li> </ul>	<ul> <li>-xassuance for improvement of market reasance for policy/strategy -Assistance for policy/strategy deventification of the market deventification of the market -Assistance for expansion of value chains (inkage with the surrounding industries)</li> </ul>	<ul> <li>Assistance for introduction of systems</li> <li>Assistance and a systems</li> <li>Assistance for development of availances prevents for asternal trade - Assistance for development of advanced technology-based human resources such as [T and environmental engineers</li> <li>-Assistance for development of managers (quality control &amp; management systems)</li> </ul>	<ul> <li>Assistance for introduction of SME development financial schemes (Investment funds, modernization of production plants, etc)</li> <li>Assistance for introduction of external trade financial schemes (loans for import)</li> <li>Assistance for introduction of financial scheme for PPP business</li> </ul>

Source: Prepared by the JICA Study Team based on various data and the results of interview surveys



# 7. Analysis: Value Chain of Promising Products

# 7.1 Selection between two types of industries

In order to complement the competitiveness analysis and the development strategy of major industries, the Study Team conducted the further analysis, that is to say, the team studied and analyzed the value chains of the products and industries as well as visited the areas of industrial agglomerations.

As the Study Team selected products and industries, the team basically picked up two products from Bangladesh major industries and, at the same time, the team took into consideration the following factors:

Industry of Mango / Mango Products

- Belongs to the industry of Agro-processing industry, the type which takes advantage of domestic resources
- Is useful to understand the typical problems of Agro-processing industry in the country for the loss of the products, because of the defect of the distribution system, has been detected though Bangladesh produces a branch of fruits, including mangos.
- Is possible to produce employments. The technique of processing mangos is relatively facile and small to medium companies, which do not possess advance technique, are likely to enter the industry easily. In addition, the industry is expected to produce local employments around producing areas because processing factories are likely to be placed near the producing areas.
- Has a potential to grow for the industry has exported products to a certain extent at this moment.

Industry of Casting/ Casting Products

- Is included in light engineering industry, the industrial type that imports raw materials and exports the products made from the imported materials.
- Is likely to have a great influence on other industries in the country for the technology of casting will become the basis of other industries. This significance of the industry cannot be ignored.
- Is expected to grow and produce employments if the automobile industry and machine industry in the country grow in the future.
- Is possibly helpful to analyze the factors of industrial clusters for certain agglomerations exist in Bogra where the Study Team visited for the research.

# 7.2 Analysis of Value Chain of Agro-processing industry

# 7.2.1. Objectives of the Analysis

The objective of the analysis is to clarify the current situation of value chain which covers the mango products among other agro-processing products in Bangladesh. In other words, the subjects of this analysis are the value chains of mango juice, mango bar, mango pudding, and mango pickles.

Bangladesh imports plenty of raw materials from abroad, which are necessary for its industry. Bangladesh is not rich in resources but the agro-processing industry is the one of the industries which is possible to utilize domestic resources in the country.

Cultivating and agro-processed products produce 43.6% of overall employments and occupy 20.29% of GDP in the country. Cultivating and agro-processed products industries also indirectly support industries of wholesaler, retailer, hotel, restaurant, and transportation. The development of the industries is expected to have a greater impact than it is imagined from the share of GDP in the country.

The major reason why the Study Team targets mango and mango products for its analysis of value chain is because the industry has a potential of comparative advantage, which is evaluated by the superiority on amount of resources, scientific technology and knowledge, etc...

Firstly, as for the amount of resources, Figure No. 7.1 shows that Bangladesh is ranked in 12th in

the world for its amount of mango production. It is a big advantage that the country has plentiful resources which are used for agro-processing.

Country	Hectares (A)	Production in Tons	Productivity (B/A)
India	2,143,000	13,501,000	6.3
China	445,000	3,752,000	8.4
Thailand	285,000	1,800,000	6.3
Indonesia	266,000	1,620,000	6.1
Pakistan	215,000	2,250,000	10.5
Mexico	200,000	2,050,000	10.3
Philippines	181,000	975,000	5.4
Nigeria	126,500	734,000	5.8
Brazil	89,800	1,546,000	17.2
Guinea	82,000	-	-
Vietanam	52,000	360,000	6.9
Bangladesh	51,000	639,000	12.5

**Figure 7.1 Planted Areas** 

Source: Allaboutmangoes.com, Ministry of Agriculture(Bangladesh)

On the other hand, as the situation of domestic agro-processing industry examined on the quantity basis, Figure No. 7.2 illustrates that juice and drinks occupy over 60% of overall agro-processed products in the country. Most of the agricultural products which are used for agro-processed products are fruits. As Figure No. 7.3 indicates, mango is the product of the third biggest yield (22%) of the country, following banana (31%) and jackfruit (24%), but bananas and jackfruits are highly consumed without being processed. As for mangos, it is processed into many products, such as juice, pudding, jam, dried fruit (mango bar), and pickles.

SI. No.	Name of Sector	Ton	Million US\$	Ton	Million US\$
		(美奴)	(美額)	(慎凡に)	(侑凡に)
1	Juice	13,604	8.00	28%	18%
2	Drinks	17,024	6.88	35%	15%
3	Spices	2,877	9.12	6%	20%
4	Frozen Vegetable & Snacks	3,743	5.74	8%	13%
5	Chanachur	2,049	3.31	4%	7%
6	Pickle & Chutney	410	2.12	1%	5%
7	Vermicelli	2,158	1.02	4%	2%
8	Potato Products	223	0.67	0%	1%
9	Jam-Jelly	426	0.20	1%	0%
10	Kashundi & Sauce	7	0.01	0%	0%
11	Dry Foods	5,929	8.62	12%	19%
	Total	48,450	45.69	100%	100%

Figure 7.2 Production Volume and Sales of Agricultural Processed Goods (2011)

Source: BAPA, "Product wise turnover and quantity (in million)"

		(Figures in thousand metric tons)								
Year	Ma	ingo	Banana	Pine apple	Papaya	Jackfruit	Lichi	Guava	Melon	Total
	実額	構成比								
1996-97	187.0	13%	625.0	148.0	39.0	265.0	13.0	44.0	97.0	1418.0
1997-98	166.7	12%	624.8	148.5	40.9	266.7	12.8	46.1	96.4	1402.9
1998-99	187.1	14%	561.8	146.1	40.3	266.9	13.1	46.0	97.2	1358.5
1999-00	187.0	14%	572.0	148.0	41.1	267.0	14.0	48.0	79.0	1356.1
2000-01	188.0	13%	606.0	152.0	44.0	268.0	13.9	49.0	85.0	1405.9
2001-02	243.0	16%	650.0	154.0	48.0	275.5	14.0	77.4	85.0	1546.9
2002-03	242.7	16%	649.7	154.2	47.6	275.5	14.2	77.4	84.8	1546.1
2003-04	242.6	15%	706.6	212.8	50.6	279.5	15.0	81.0	39.1	1627.1
2004-05	662.1	17%	898.7	234.9	99.0	1744.6	23.0	59.2	127.2	3848.7
2005-06	639.8	22%	909.0	253.8	105.0	719.9	40.0	146.0	138.2	2951.7

Figure 7.3	Crop	Yields	of Fruit	S
		·		

Source : Bangladesh Bureau of Statistics (BBS)

Secondly, as for the superiority of the environment, the mangos yielded in Bangladesh, where it rains a lot and it marks high temperature, are popular in the world. Besides, the country is superior to its main rivals, Thai, Pakistan, and India, with regard to price of the products as well as its quality, for low wages in Bangladesh helps keep the product price down (Refer to Chapter 6).

The factors mentioned earlier lead to the conclusion that it is highly important to understand the current situation of value chain of agro-processing industry in the country and clarify the problems to be tackled starting with analyzing of mango products.

Before analyzing of mango products, this part ends with confirming the situation of domestic supply and demand, and that of export in Bangladesh. Figure 7.3 illustrates that agricultural yields has expanded but the domestic situation of supply and demand shows that there is not enough supply. Shortage of supply is caused by the growth in domestic demands because of the increase in variations of products as well as the increase in amount. For example, the diet has sifted from meat to vegetables and fruits, and people in the country prefer consuming processed-products, such as juice, jam and pudding, to consuming raw fruits. This change of eating habits can be understood as a proof that the quality of life in Bangladesh has improved. The agro-processing industry needs to deal with the new eating habits as such.

Products	Total Market Size (A: Demand side)	Total Supply (B: Supply side)	DS gap (A-B)	Export
Juice	70,000	58,481	+11,519	6,822
Drinks	10,000	7,644	+2,356	1104
Fruit bar	700	350	+350	11.67
Real potato chips	150	100	+50	5
Spice powder	6,000	5,505	+495	1225
Jam	140	131	+9	17
Jelly	1,000	913	+87	40
Chutney	2,000	964	+1,036	3
Piclkle	1,000	807	+193	82
Sauce/Ketchup	350	277	+73	85
Frozen fruits/Vegetables	5,100	258	+4,842	258
Frozen snacks	610	486	+124	-
Potato flakes	10,000	7,200	+2,800	-
Others	63,012	52,140	+10,872	-
Total	170.062	135 256	+34 806	-

# Figure 7.4 Supply-Demand State of Agricultural Processed Goods in Bangladesh

Source: IFC-SEDF Baseline Survey and Sector Studies in Agribusiness, Light Engineering, and Textiles & Apparels Sectors in Bangladesh (November 2009)
#### 7.2.2. Methodology

This part begins with defining value chain before starting analysis of value chain of each product. Value chain means the idea that ultimate value of products for customers is produced by the successive process in which company's various activities (supply, manufacture, distribution, sales, etc...) add value and cost to its products. Analysis of value chain makes it possible to understand the cost-structure of the product and to find out the advantageous elements or the keys to further growth of the product in competition.

This idea of value chain is proposed by Michael E. Porter in "Competitive Advantage: Creating and sustaining superior performance."



Figure 7.5 Conceptual Framework of Value Chain

Source: Michael E. Porter "Competitive Advantage: Creating and sustaining superior performance"

As Figure 7.5 shows, value chain is divided into two ideas: main activity and supportive activity. Main activity includes purchase, manufacture, distribution, sales and so on. Supportive activity means the activity which assists main activity, such as development of technology, management of human resources, and management of entire company. The figure above only describes company activity and, if examining the whole industrial scale, other support policies by other organizations as well as governments (industrial support measure, international normalization measure, and support situation of institution) are conceivably included in support activity.

Needless to say, resources (people, goods, money, information, etc...) are needed for each activity to produce value in products. These resources are costs. The gap between value and cost that are produced in the successive value-producing process makes margin. To reveal how much margin is produced in each level of activities enables to evaluate the competitiveness of the product or the industry.

Following parts clarify, the process of the products this report deals with, the cost-structure (including the idea of time), the problems in the relation with value chain. This research focuses on comprehending the current situation of process of manufacture and sales in Bangladesh and it does not deal with an analysis of advantages and disadvantages.

#### 7.2.3. Current Situation of Mango Breeds and Mango Products

Mango has various breeds but they are divided into two major categories: the existing breed and the

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hybrid breed. The existing breed is characterized by its smaller size and it can grow without much water and fertilizer. On the other hand, the hybrid breed features its big size and it requires much more water and fertilizer. In many cases, natural precipitation is not enough for the hybrid breed to well grow and the cultivation of the hybrid breed mangos needs to supply much water by irrigation. According to the Garden manager of mangos, the hybrid breed is superior to the existing breed with regard to its taste as well as its size, the amount of water and fertilizer required. Generally, the existing breed is resource of various mango products and the hybrid products are consumed without processed.



Source: Interviews by JICA Study Team

As for the mango products which are mainly made of the existing breed mangos, ripen mangos are used for juice, puddings, and candies, the products that we enjoy their sweetness and flavor, unripe green mangos are used for jam and pickles, the products that we enjoy their sour taste and their chewy.

Juice made of mangos occupies an overwhelming share in the mango products market. Juice is followed by mango pickles and mango pudding/jelly but they have an only one-tenth share of that of juice. Juice, bar, and pudding/jelly, which are made of ripen mangos, are produced by pulps. Whether a company owns its pulp factory is the key to expand the business.



Market Scale Image is described with reference numbers including other fruits besides

Source: IFC-SEDF Baseline Survey and Sector Studies in Agribusiness, Light Engineering, and Textiles & Apparels Sectors in Bangladesh (November 2009)

#### 7.2.4. Basic Structure of Mango Products Business

(1) Main Players of the Mango Products

As the main players who are concerned with the production of mango products, there are landowner, Garden manager (farmer), trader, wholesaler, pulp factory, processor (mango juice, bar, jelly, pudding, pickles, and jam), distributor, and retailer. The Study Team visited Narayanganji, the mango-producing area, and its environs, and then, the team had interviews with Garden Managers, traders, pulp factories, and processors of each mango product.

(2) Basic Structure of the Mango Products from Production to Sale



Source: Prepared by the JICA Study Team based on Interviews



#### (3) Process from Landowner to Local Trader

A landowner (farm-owner), who owns his land, leases his land for one or two years, and a Garden Manager cultivates mangos. In order to cultivate mangos, a Garden Manager uses things, such as water and fertilizer, and employs peasants at the expense of himself. A Garden Manager transports mangos in the early morning to the wholesale market that are set by the local government, and there, sells them to local traders. Local traders sell mangos to traders or processors who come from other regions at the wholesale market, and then, processors or retailers purchase them. This is the general process of the mango supply from mango plantation to mango processor.

Besides the case where a Garden Manager and a local trader enter into a contract, there are also the cases where a landowner and a trader make a contract or where a company enters into a contract directly with a Garden Manager or a landowner. To give an example of the plan of the major food processing company, it buys directly from Garden Managers around 20% of the crops to be processed, which means that other around 80% is purchased through traders.

The mango harvest comes only once a year. The process of the mango cultivation is mainly divided into two processes: the process during the harvest and the process from post-harvest to pre-harvest. The harvest varies according to breeds of mangos but it, in Rajshahi District especially in Chapai, usually comes in June or July.

Mangos, the duration depending on the state of preservation, normally cannot be preserved for 7 days after the harvest and the duration could be shortened by storage conditions. Particularly in the hot and humid area (Rajshahi District), it is necessary to pay much attention to the rain after the harvest because mangos wet in the rain are quickly damaged.

Mango trees after the harvest receive treatments which help strengthen the trees themselves from August to September, that is to say, they are given fertilizer once a year during this season. What kind of nutrient the mango trees are given has an influence on the growth state of the mangos next year. The synthetic chemical fertilizer, which is made from UREA, POTASH and GIPSAM, is generally used and all of the chemical fertilizers can be obtained in Bangladesh.

(4) Local Market

The mango producing areas, such as Chapai and Rajshahi, have several local markets. The products at the markets differ according to the seasons and the market in June and July are almost occupied by mangos. Local governments provide local markets with grounds exclusively used for markets. In order to trade goods through these markets, it is required to pay 20 taka/day for charge to local governments. Approximately 80% of the amount of the mangos at the markets is directly brought from Garden Managers and the rest of 20% is come from local traders, who directly make contracts with Garden Managers. Mangos are transported by tracks. 80% of those who buy products at the markets are traders from other districts and the rest are agents that are consigned by companies. Individuals can also buy products at the market only in the case of buying them per kg.

The products from Garden Managers cost 50 taka/kg and the products which are sold from local traders to traders from other districts cost 50~60 taka/kg. As a rule, products are traded per 45kg. The margin of traders is estimated 10 taka/kg at the maximum and the margin rate is 2~15% per trade.

The only cost required is 20 taka/day for charge paid to local governments but those who, such as agents and so on, make contracts with processors need to pay the cost for transportation.

Products cost 60 taka/kg which includes 50 taka/kg of the Garden Manager's selling price and the margin of local traders in the case where they are sold to local managers. In the case where products are sold to traders from other districts, they are brought to Dhaka or Chittagong and sold over 100 taka/kg because around 40 taka/kg is added to the price as the cost for transportation or margin. Sometimes other middle men enter this process. In Dahka and Chittagong, products are sold also through the markets and they are sold to distributers of retailers with the price added further margin by local traders there. The Garden Manager's selling price is doubled or tripled when the final





consumer buy the products for several agents intervene in the process from producing areas to consuming areas.

#### (5) Pulp Factory

Many of ripen mangos are preserved after processed into mango pulp, which is made from pated flesh of mangos. There are two ways to preserve mango pulp: one is to pack in a can after heat treatment, and the other is to pack in a plastic case after chemical treatment.

Both Guty (smaller and much fiber), the mango harvested during the ordinary season for the mango, and Ashina (strong acid, high quality and high price), the mango harvested a little bit later than the ordinary season, are mainly used to make mango pulp. The mangos are bought for 22 taka/kg from local traders and caustic soda for production of pulp and tin plate for can are also needed in order to produce mango pulp. Chemicals are bought from the domestic market and tin plates are imported from India for 90-100 taka/can. The mango pulp from Guty is made from the beginning to 20th of June, and on the other hand, the mango pulp from Ashina is made during July only. During the seasons other than those of mango, the factories produced other pulp such as that of tomato.

The production process is the following: Delivery of ripen mangos, Assortment, Hand-cleaning, Blow-cleaning (examination), Blow-cleaning (dissolution of 5ppm chronicle), Rinse with drinking water, Peeling and cutting, De-stoning, Fine screening, Balance tank, Vacuum De-Aerator, Pasteurization (95  $\pm$  2), Cooling (5ppm chronicle), Culture and QV Test, and Storage and Delivery (a ton of mango pulp can be delivered by one track and it costs 15,000 taka/track).

According to the cost structure of the pulp factory, in ratio to sales, raw materials cost occupies 20%, wages 3-4%, utility cost 3-4%. Three main problems for the business of mango pulp are pointed out. Firstly, the companies, which the Study Team visited, have introduced the automatic to the most processes in the factories but the packing process is still manual. Therefore, this packing process remains the bottleneck for the capacity of the factory production however quickly other processes are done.

Secondly, the fact that the factories do not possess any warehouses equipped with refrigerators is an obstruction to expand business. The factory runs to produce pulp for only the short term but the pulp factory is required to preserve a certain amount of products in order to meet various needs of customers. If the company had warehouses equipped with refrigerators, the company would not need to use chemicals for preservation. However, the company does not have such warehouses and chemicals for preservation are indispensable. The problems of these chemicals are that a smell of these chemicals remains on products and that customers do not prefer the products with preservatives with regard to food. Using these chemicals also has an impact on the price. Major companies in the country with which the company is in competition have already introduced warehouses equipped with refrigerators. If the company introduces such warehouses, it needs 1000-1500 ton at least.

Thirdly, as for utility, the company possesses private electric generators (diesel) to supply electricity but it does not have a means of supplying gas, which is a big problem.

There are six pulp factories in Bangladesh and Pran, Inc is the strongest company among them. Exportation of products is under consideration but, in that case, it is necessary to stock mangos of high quality. The industry has competitiveness in price but its production capacity is not good enough and it actually imports some mango pulp from India or Pakistan. However, there is the big potential for import displacement.

#### (6) Disposal Rate

In Bangladesh, 13 millions tons of mangos are harvested but only 6 million tons of them are finally consumed. The disposal rate of domestic mangos marks over 53%.



	Local retail market	local supermarket	Local other institutional	Export market
Frozen fruits	0%	0%	0%	100%
Juice	76%	10%	2%	12%
Picles	68%	18%	4%	10%
Fruits bar	80%	17%	0%	3%
Jam	50%	42%	5%	3%
Jelly	68%	27%	4%	2%

#### Figure 7.9 Ratios of each Distribution Channel of Fruits

Source: IFC-SEDF Baseline Survey and Sector Studies in Agribusiness, Light Engineering, and Textiles & Apparels Sectors in Bangladesh (November 2009)

#### 7.2.5. Analysis of Value Chain of Mango Products

#### (1) Mango Juice

According to the research of IFC, the value chain and the cost structure of mango juice is the following.

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Activities	Cost Involved	Activities	Cost Involved	Γ
	(Tk.)	, iou nuos	(Tk.)	
<ol> <li>Procurement of 1 kg mango from Farmer</li> </ol>	20.00	<ol><li>Citric Acid, Flavour etc</li></ol>	3.00	
<ol><li>Packing, Loading, Transportation to Pulping Factory and</li></ol>	0.50	11 Sugar (632 gm)	22.00	Γ
unloading	0.00	The ougan (ooz gin)	22.00	
<ol><li>Profit of Supplier</li></ol>	3.25	12. Bottle & Cap (23 no. 230 gm each)	92.00	
<ol><li>Post harvest loss, Tk.1.25</li></ol>		13. Factory Cost due to Juice manufacturing	23.00	Г
<ol><li>Pulping Factory Cost due to Washing, Peeling, Crushing,</li></ol>	1.25	14 VAT @15% of Sale value	41.00	Γ
Seed and Peel removal, drying of seed and peel	1.23	14. VAT (@1576 01 Odie Value	41.00	
<ol><li>Pulping Factory Cost due to Mixing of Preservative,</li></ol>	2.50	15 Juice Factory Profit @22%	60.50	Г
Pasteurization and drum packaging	2.00	15. Suloc Factory From @2270	00.00	
<ol><li>Pulping Factory Cost due to storing year round in cold</li></ol>	2.00	16 Distributado profit @ 8%	22.00	Γ
Storage	2.00	16. Distributor's profit @ 6%	23.00	
8. Pulping Factory Profit @13.25%	4.50	17. Retailer's profit @13%	46.00	Г
9. Loading, Transportation by refer van to Juice Manu. Factory	0.50			Γ
and unloading	0.50			
Total Cost Involved for 1 kg Mango to produce 23 no. Bottles (230ml	) of mango juice		345.00	

(Source: Survey Data)

#### (3) Mango Bar

The value chain and the cost structure of mango bar is the following.



Figure 7.11 Production Process and Production Cost of Mango Bar

Source: Data received by Mango Production Company

#### (3) Mango Pickles

The production process of mango pickles is the following. Green mangos delivered are preserved pickled in a mixture of chemicals (salt and turmeric) for one year. They are prepared with salt, olive oil, chili sauce, and spices (2 hours), and then, are pickled in mustard oil for 24 hours. The process ends up with cutting and trimming of mangos for bottling. The cost structure is not clear from the interviews with the officer in charge of the manufacturing sector.

There are six problems concerning the production and sale of mango pickles and they are examined as the problems of small to middle agro-processing companies in the following part.

Firstly, the inflation has increased prices of raw materials and wages by 30-50% every year but these increases cannot be reflected in the selling price and, as a result, profit has decreased. For example, the wages of unskilled workers is 3,000-4,000 taka/month but it is difficult to retain skilled workers who have worked over 3 years if they are not paid over three times the wages of that of the unskilled.

Secondly, there are not any skillful marketing staffs that can negotiate with clients from the countries to which products are exported although the industry hopes to export their products. Thus far, foreign buyers have sometimes offered demands after the exhibition of products in the trade fair but no demands ended with an agreement because of lacking specialists in marketing. Taking cash flow into consideration, it is desirable to realize export of the products. At this moment, the acquisition of ISO22000, which are required to export, is under preparation with the support of SME Foundation. On the side of technology, the industry still depends on the traditional method which employs manual techniques and therefore mechanization, especially the introduction of homogenizer, automatic filling and sealing machine to mix, is needed. Training for unskilled workers is also necessary.

Thirdly, the extremely high interest rate inhibits borrowing.

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Fourthly, BSTI that does registration of products has no modern testing machine, which makes the things ineffective. As for the company private brand label, there is not any problems because the companies have own designers under the contract to the companies, but it is preferable that the validity period is prolonged because it takes 1 or 2 months to be attested and this attestation is validate for only one year.

Fifthly, there are problems related to marketing and mechanization. The quality of products is quite high thanks to the materials of the best quality, which enables the product to gain good reputations from upper-middle class as well as repeaters. Currently, the traditional method is employed for production, which is not suitable for mass production and thus mechanization is needed for further growth of the industry. In addition, improvements in sales promotion, such as marketing and advertising, need to be achieved in order to gain new customers.

Sixthly, small to middle companies lack various resources and they are required to introduce systems to improve finance, training of human resources, and supporting of technology.

(4) Mango Pudding

The interviewee company does not possess any pulp factories and stock mango pulp from other factories. Many of the mango products, such as mango juice, pudding, bar, and candy, are mainly made from mango pulp. Whether a company has pulp factories heavily depends on its business capacity of mango products. At the present moment, the major five companies monopoly the market of mango pulp. Therefore, the price of mango pulp is extremely high. Purchasing pulp from the outside terribly decreases the profit ratio but vast investment amount is needed to possess pulp factories. Production of mango pulp is obviously the key to mango business but it is difficult for small-middle companies to enter the industry.

#### Figure 7.12 Production Process and Production Cost of Mango Pudding

	Composition Patio
	Composition Natio
Sales Volume	100%
Raw Material Cost	63%
(Pulp)	40%
Wage (Factory)	7%
Utility Cost	7%
Marketing Cost	6%
Cooperation Tax	15%
Profit	3\$

#### Cost Structure of Mango Pudding

#### Profit Distribution Image of Each Player

	Compositoin Ratio
Farmer (Owner, Garden Manager	30%
Trader	10~20%
Pulp Company	20%
Processor	5 [~] 20%
Dealer	10%
Retailer	5%

Source: Prepared by the JICA Study Team based on Interviews

Chan 01 .	All to see the second structure in this was a second size of the table in the second table
Step = 01.	An ingredients accurately weighing as per receipe of batch in the cetral lab.
•	
Step - 02 :	Then ingredients are counter check in the floor lab.
+	
Step - 03 :	Take some water in a jacketed vassel & Pre heated for batch preparation.
•	
, Ci 04	
Step - 04 :	After pre heating the water, all ingredients are mix with water gradually & blending @ temp: of
	(80~85)°C for 30-40 minuts. That is pasteurization.
•	
Step - 05 :	After pasteurization products are finally check the Brix, Acidity, pH, Colour, Flavour & kept record.
•	
Step – 06 ·	After checking all parameter. Products are ready for filling ( Hot fill) @ temp: (80~85)* C
	Anter encerting an parameter, in oddets are ready for himing ( not him) (at temp. (ob. co)) o
	by Auto filling machine.
•	
Step - 07 :	After Cup filling, Product are hot bath by hot water @ temp: (80~85)°C due to free of sticky condition.
+	
Step - 08 :	After hot bath product are cool with chilled water @ temp: of (10~12)°C.
+	
Char 00 -	Then Decidents are used for decivity sin drive
Step - 09 :	Then Products are ready for dry with air drier.
•	
Step - 10 :	After dry, Products are staying for curing @Time of (24-36) hrs.
•	
Step – 11 ·	After curing Products are ready for packaging & Cartooning then finally ready for Marketing
prop II.	and carried to ready for packaging a cartooning then many ready for marketing.

Figure 7.13 Production Process of Mango Pudding

Source: Prepared by the JICA Study Team based on Interviews

The problems regarding the production and sale of mango pudding are the following. Filling process is done manually. In order to improve productivity, automation of the key processes is indispensable but, in the first place, the charges for electricity are high and the charges have recently increased significantly, which means it is required for food processing companies to have their own diesel generators. The problem is that to equip diesel generators costs much (around 1 carore taka = 10 million taka) and, in addition, the cost to run the machine

In Bangladesh, the inflation rate is tremendously high and consequently wages has increased at the remarkable rate of 10-20%. The price of mangos, which is used for mango pudding, has also increased. To sum up, the cost for production of mango puddings has risen at high speed. In order to tackle this increase in the cost, achieving higher growth is needed by improving the productivity with introducing machines of new technology. The introduction of new machines requires the education of employees, which enable them to run and manage the machines. Besides, the education for employees in marketing departments is needed for maintenance of management framework, improvement for marketing skill, and so on.

As for the expansion of exports from now on, further improvement of brand images and adjustment of products supply to importing countries cannot be ignored. In order to achieve the expansion of exports, to put a base oversea, which costs much, and to pay attention to containers and labels are necessary. Exporting products cost 10-12% more than selling them domestically. (glass is damaged during transportation or importing vinyl increases cost). Packaging and design also need to be refined. The government scarcely supports for the industries other than the RMG sector, which means that companies should deal with the problems mentioned before

is also extremely high.

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by themselves.

Today, the domestic demand is remarkably high, which requires dramatic improvement of capacities in various divisions, such as the productivity growth. There are several possibilities to improve the productivity capacity but it is ideal to do JV with foreign companies from the point of speed for the improvement.

#### 7.2.6. Summary of Problems

(1) Summary of Problems from Value Chain

In the first place, the problem about the production flow from Farmer (Garden Manager) and Trader to Processors is that a number of middle men, who do not contribute directly to the improvement of added value of products, intervene in the process. These middle men cause middle margins several times, which is one of the factors of the high price for final consumers, in spite of the little profits for related actors who are engaged in each process, such as cultivating mangos.

Secondly, the problem of stocking mangos is that the percentage of purchasing mangos directly from farmers with who enter contracts is extremely low. In many cases, middle men intervene in the stocking process. It cost much and takes much time to stock mangos with a lot of middle men. This current situation can be explained by the fact that there are few large-scale farmers and a number of small farmers that have a small amount of harvest.

Thirdly, the problem of technology and equipment is that processes have been gradually mechanized to some extent but the key processes have not yet been mechanized, which is the bottleneck for the productivity growth (except major companies). Retaining workers steadily is necessary with solving the problems of the increase in wages and workers liquidity. Security for workers and sanitation is not well maintained, which is also the problem needed to be solved.

Fourthly, the problem of logistics, including storage, is that the preservation state of crops and processed goods is poor because of mal-equipped warehouses, which cased the high disposal rate. Although it is difficult to maintain the good preservation state due to hot and humid climate in the country, only 6 million tons mangos are finally consumed out of 13 million tons mangos harvested. There are several causes for this high disposal rate. First, cold storage is not well maintained. In addition, lack of airplanes and containers for marine transportation equipped with refrigerators obstructs the exports of processed agricultural products. For reference, it takes 28 day to export products to Europe, which is the main export destination, via Singapore, and takes around 14 days to the Middle East via Singapore.

Fifthly, the problem of finance is that the finance in the country is not conducted under the reasonable interest rate though the county has a financial system, which prevents indispensable equipment investment. Companies are hardly financed by financial institutions but by friends or relatives. Concerning the enforcement of international competitiveness, the improvement of packaging technology as well as the improvement of productivity and products quality is necessary.

Sixthly, the problem of marketing is that a number of opportunities for exports have been lost owing to lack of knowledge and information to expand exports.

In addition to the six problems mentioned before, there is a necessity of environment-friendly urban development to protect mango business while developing mango producing areas. In addition, the improvement of small-middle companies' governance is preferable as the base of strengthening the relation between major companies and small-middle companies. Additionally, the problem for the strengthening the industrial base is that management teams are not well educated and they cannot manage successfully marketing, accounting, and governance.



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To sum up, there is a possibility to expand exports at the high rate with mechanization of processing method, perfection of quality control, and growth of productivity, for the country has the high quality mangos and price competitiveness, which allows the country to well compete internationally. In order to achieve the expansion of exports, it is required to reduce the disposal rate of mangos with the maintenance of cold storage and to improve price competitiveness by progressing efficiency of value chain related with agricultural products. The policy is expected that enforce the competitiveness of the industry with the strong relationship among the industry, the government, and the academics.

#### (2) Problems on Policy/ System/ Cluster

Looking at the demand trends, the domestic market has been vigorously expanding due to change of the people's consuming pattern, and diversification of foods. The production rate, however, fails to catch up with the growth rate of demands and the trend of growing imports has been observed.

Firstly, the problem of the policy concerning the government is that adjustment function among related agencies does not work properly. Neither the plan how to develop the agro-related business in the country nor the agencies to take initiative in the industry is clear, even though relatively more supports, compared with other industries, are offered to the industry by the government for the growth of productivity and the enforcement of export competitiveness, such as exemption of income tax, subsidies for air transport costs, low-interest loan, and cash incentive for exports (20%). The agencies related are MOA, MOI, MOHFW and MOLGRD. Furthermore, the essential supports for the industry, such as cluster formation support, have not yet offered.

Secondly, the problem of institutions (Research Center of Mango, BARI, BAU, BRRI, DAE and so forth) is that they have not offered effective supports which help generate new cash flow even though they have already provided supports of development of new breeds, of information, of money, and of technology. There is a gap between the information already offered to agencies and the information needed on the actual spots.

Thirdly, the problem of quality standards is that the national quality standards of foods do not correspond to those of the international market, which means that products cannot be exported in the international markets even if they meet the national standards. To overcome this situation, enactment of the national quality standards which are accepted by the international market is necessary. In addition, the advance of efficiency in BSTI certification operation is anticipated.

Finally, the problem of cluster is that only 56 agro-processing companies participate in BAPA and the role of the association to initiate the whole industry is pretty limited. There are 6,000 agro-processing companies. Approximately 200 companies of them are major companies and the rest are SME. The current situation that small companies are scattered, according to producing areas, around the country restricts cooperation among companies and effect of industrial clusters.

#### 7.3 Value Chain of Casting

#### (1) Trend of Product Demands

According to the report of the casting industry by IFC, "Baseline Surveys and Sector Studies in Agribusiness, Light Engineering and Textiles & Apparels Sectors in Bangladesh – Sector Light Engineering, Sub-Sector:Foundry," the total revenue of the domestic companies in the industry amounts to 300 billion taka in Bangladesh in 2009 when the research was conducted. As for the production volume, the country had a capacity of producing around 400,000 tons/year of casting but the country, in reality, produces 285,000 tons, 70% of the capacity estimated.

Examining the market including imports and exports, the import volume(July 2008- June 2009) reached about 5 billion and, on the other hand, the exports volume of the same period amounted to 100 million takas, which was so small amount that can be ignored from the total amount.



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In the domestic market, the total amount was estimated 35 billion takas/year in 2009. Afterwards, the domestic market has been considered to grow with the economic development. From this research, those who concerned with the industry have agreed that the growth rate has been 20% per year the past few years. Estimating from this supposition, the amount in 2012 can be estimated 43 billion takas, 1,7 times of 2009. (calculated on nominal base.)

Figure 7.14



Source: Baseline Surveys and Sector Studies in Agribusiness, Light Engineering and Textiles&

Apparels Sectors in Bangladesh - IFC-SEDF (Associates for Development services Limited)

Fore reference, the list of items of casting is categorized into agriculture-related products 34%, household products 34%, industrial products 18%, non-ferrous castings 14%.

#### (2) Situation of Industrial Cluster of Casting Industry

#### 1) Summary of Cluster

According to the research report on the casting industry of IFC, there are approximately 430 casting companies in the country and they are distributed in Dhaka district, Chittagong district, Bogra district, and Khulna/Jessore district. Dhaka district has around 120 companies, Chittagong district has around 50, and Bogra area and Khulna/Jessore have around 30 respectively. However, from the value chain research and the interviews by the Study Team, there are estimated to be 71 companies which participate in Foundry Owner's Association of Bangladesh, the association consisted of the companies around Bogra district. There are possibly more companies than 430 actually. More over it is possible that small companies not listed in the report may exist. And the number may have increased after 2009 when the report was drafted.



Source: Baseline Surveys and Sector Studies in Agribusiness, Light Engineering and Textiles& Apparels Sectors in Bangladesh - IFC-SEDF (Associates for Development services Limited)

In fact, the IFC's research report documented the increase in the number of companies. Casting

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companies had been existing from the times when Bangladesh was the part of Pakistan , then the number of casting companies has increased since 1971 when Bangladesh became independent from Pakistan. The rate of the growth marks around 6% per year and the number continues to expand.

#### 2) Industry Level

Bangladesh, the country itself, is still growing rapidly and the industries in the country are also growing, in other words, the casting industry is to be matured.

The casting industry level in the country is still low. When visiting several companies in Bogra, the manufacturing sites and process, compared with those in developed countries, are in much more primitive state. The working circumstances are in low level, that is to say, factory workers, men and women, worked in traditional clothes and they carry melted iron in ladles, which was the state far from secure.

According to the IFC's report as well as the interviews in Bogra, although there is not any accurate statistics, even the major companies which employ around 200 workers are not yet industrialized and are owned by individuals.

Overall, the casting industry in Bangladesh is not well-developed, compared with those of developed countries, with numbers of small-middle companies and with low level of quality and of management.

#### 3) Relation with Peripheral Industries

The production process of casting industry is a relatively simple value chain from purchasing raw materials to manufacturing finished products. The actors in the industry are categorized into two: one includes raw materials provider, and trading or transporting company, and the other includes wholesaler, retailer, transporting company. Both of them do not have to exist in the same district because they do not need intimate corporation and they are able to provide fundamental services such as deliverly.

In Dahka and Chittagong, which are large industrial areas, the casting companies are consequently accumulated. On the other hand, in Bogra, the fact that companies are accumulated is not confirmed from the interviews even though some casting companies (casting products manufacturers) exist.

As far as the example of Bogra is considered, a trend is not detected that clusters of casting industry form large clusters involving companies which provides peripheral functions. Such a trend may be remarkable in the automotive or motorcycle industry which form large clusters of parts supplying companies. In casting cluster, it seems to be difficult to develop multi-layered clusters unless movements occur in Bangladesh in which automotive manufacturers, motorcycle manufacturers start to construct factories.

#### (3) Situation of Value Chain of Casting Industry

1) Contents of Research

The Study Team had interviews with the major members in Foundry Owner's Association of Bangladesh, the association of the casting industry in Dahka. Then, the team visited factories of five companies in Bogra and had interviews with owners and directors. The team also visited the Bogra office of BSCIC.

The summary of the companies the team visited is the following.

- All of the companies are the members of the association.
- > They are middle or major companies ( $100 \sim 200$  employees).
- Four of them are placed in the industrial areas in Bogra/ one is in the suburbs of the industrial areas.
- ► Four of them are owned by individuals/ one is managed by 4 partners system.
- > Production volume: 25 tons at the maximum/day. Around 20 tons/day when



interviewed held during non-high season. (There is only one cupola and there is not a big difference in production volume among the companies.)

- Household products occupy 70% of their products, and especially they produce a lot of pumps (small size pumps for drinking, big size pumps for irrigation). They have similar lists of items and there are not many factors to differentiate.
- 2) Substance of Value Chain

Summary of Value Chain

Roughly speaking, the value chain of the casting industry is: purchasing raw materials (scrap iron), casting at own company, constructing products according to needs, and shipping products.



Cost Raw Material occupies 80% of the Price

Source: Prepared by the JICA Study Team based on Interviews

Import of raw materials and Domestic Transportation

The iron which is used for casting industry in Bangladesh has two types: the iron came from China (Pig Iron), and the scrap iron made in the country. The scrap iron is collected from around the country, most of which is from steel plates of ships dismantled in Chittagong. The casting companies already have the close relationship with the supplier, professional trader, and are purchasing continuously. The traders transport iron to casting factories and casting companies just wait for the delivery of iron. Transportation fee is already included in the price of scrap iron. The price of scrap iron itself is 43 takas/kg and the taxed price is 70 takas/kg.

In addition to iron, the companies import cokes used for cupola from China.

Some companies import materials by themselves but many of the companies purchase from professional traders.

Purchase/ Storage

Production process is the internal process of casting manufacturing.

As mentioned before, delivery of purchased materials is done in casting manufacturing factories. Much of the materials is iron, which does not go bad, and it is heaped up at this process. A certain amount of iron, which is to be melted for a day, is thrown into cupolas. It is

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not evident whether they control the amount of stock or how long they stock the materials.

Source: JICA Study Team

Dissolution, Pouring, Cooling, Construction

These processes are different in each other, but they are operated in the same timeline.

As for the process of dissolution, they build a fire in cupolas in the morning and start to throw scrap iron in the cupolas from one o'clock when the cupolas are enough heated. Throwing iron into cupolas continues until around nine o'clock in the evening, and they pour the melted iron into molds by man power, that is to say, one or two workers carry the melted iron in a thing like a big bucket and pour it into the molds. Then, it takes one night to cool the iron and retrieve it next day. There are some products needed only to be polished in order to be shipped (spare engine liners for tractor) and others also needed to be painted or constructed (pumps for drinking).



Source: JICA Study Team

Storage/ Ship Completed products are to be stored and shipped.

In many cases, they decide the production volume based on the estimation of demands and



therefore, it is rare to produce excessively. According to the interviews, products are shipped 1-2 days after completed.

Transportation cost is not applied for casting companies because, generally, buyers come to factory to pick up products they ordered.

As a whole, the style of business operation is specialized in the production process and they are unaware of or are not interested in the overall picture of value chain.

#### 3) Cost Structure

The cost structure assumed from the several interviews is the following.

The cost structure is supposed to be similar because the price of raw materials, the selling price and wages are not so different although there would be slight differences. The interviews confirm this supposition.





Source: Prepared by the JICA Study Team based on Interviews

The most remarkable feature of the cost structure is that the greater part of the cost is occupied by the price of raw materials. Other costs are extremely low. Is is expected that those companies generates profit continuously, although the profit level varies in years.

However, from the interviews, it is highly possible that they do not calculate with the same corporate accounting standard of developed countries. Especially, it is highly unlikely to reflect depreciation accurately. It is surmised that they rather make sure income and expenditure, namely, managers pay attention to balance of payments based on cash flow. According to them, they settle an account with public accountants outside of the companies every year but it is uncertain how accurately they use the accounting standard and how correctly they reflect the actual status of their business.

Therefore, statics here is just for references.

4) Situation of Other Factors

Human Resources

The business of the industry is administered under the situation where there is complete separation between managers/owner and workers.

In the industry, even middle-major companies have around 200 employees and basically the positions of owner companies are clearly observed. In fact, only owners, their families, or a few executives manage the whole companies. Generally, one owner is responsible for the whole control and business, one engineer is in charge of whole technology, and there is one person who is responsible for accounting. Educational backgrounds and professional backgrounds depend on individual owners and they neither are far from fluent speakers of English nor are specialized in accounting or technology. In many cases, it is possible that they do not learn expert knowledge in college level educational institutions. However, they have rich knowledge as managers or good personality because they grow their companies from small factories with few people.



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Many of the employees work in line operation. According to the IFC's report and the interviews, most of them are assumed to have only primary education or even have no education. They receive wages of 2,000~5,000 takas/month and it is natural that skilled workers or employees in manager class get high salary. Additionally, to work in casting factories is not popular in Bangladesh, because the working environment is far from safe and work itself is hard. In many cases, wages would not increase, because there are not enough employments opportunities in the area. It seemed that wage increase is not a big burden on the employers.

#### Technology

The current technology meets the standard demanded by the domestic market. However, high technology is not necessary because they produce manual pumps for drinking or brake liners for spare parts of tractors. For example, as for second-hand imported tractors or car parts, there is no serious problem as long as they work because the clear standard does not exist.

In the first place, factories in Bogra do not use drawing print plans and they duplicate molds from completed products by using sand molds. Appearently their production level does not meet the standard of developed countries. It can be said that Bangladesh's casting industry is not developed to provide products to the market in the developed countries.

Making molds depends on manual work, which means it takes time to pour iron and the rate of producing inferior goods is high. The interviews reveals that the percentage of returning goods from customer is under 2%, but it sometimes exceeds 10% in poor situation when the quality checking before completing manufacturing process. Some managers desire to mechanize the processes of pouring and inspection.

Because of the limit of technology, there is no choice other than using cupolas, which means that it is impossible to make high standard products (Ductile Iron). That is the limit of the current technology. Some managers are considering purchasing induction furnaces which are possible to deal with ductile iron, and, in fact, try to expand factories.

The casting industry in Bangladesh is not well developed to operate R&D and a few technicians in the companies strive to improve technology. As for R&D, some says that there is a possibility to cooperate with foreign companies.

A few supports for technology can be found from the interviews but they do not realize that there is improvement in technology thanks to the supports. They expect the supports from foreign companies concerning technology.

#### Marketing

The casting industry in Bogra is on the stage of lacking efficient business with modern marketing ideas, because demands in the domestic market are evident and active, and furthermore, it is specialized in production process. However, managers understand correctly the needs of wholesalers, retailers and consumers from the direct interaction with them. Therefore, the sale amount is going up smoothly regarding the products which can be made at the current technology level.

On the other hand, they recognize that they lack the capacity of marketing for exporting products to oversea, even though it is difficult at the current level. For reference, they are open to cooperate with foreign companies for foreign markets.

#### Finance

As for finance, they are not financed from financial institutions but from relatives or their own funds, which is popular way.

According to the IFC's report, more than half of the companies do not have any bank accounts. From the interviews in Bogra, they can be financed by their own accumulated profits to run the company and, in the only case where they need capital investments, they are financed by financial institutions.



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It is not detected cases where they are financed directly from donors.

5) Problems of Individual Companies

It seems that there is no serious problem because the current business is assisted by the favorable growth of the domestic market.

The current technology meets the level required to produce the articles which are produced today (approxately 70% is agricultural-related products, much of which are spare parts). Besides, Bangladeshi products have the high cost competitiveness, compared with foreign products including that of India. They are very competitive in the domestic market.

However, there are only slight differences among the products of each company, which is likely to pressure the products price to fall, even though this is the rapidly growing industry.

The problems and countermeasure from now on are considered as the following.

- The advance of technology with the introduction of induction furnaces (electric furnace)
- The export of products and the production of new types of articles with the improvement of the products quality (especially, aiming market of automotive parts, which are more value added.)

6) Situation and Strategy of Cluster

The problems and strategy of the whole cluster are closely related to those of each company.

They are, roughly saying, opening up foreign markets as well as the increase in the number of product articles and of the products quality with the advance of technology.

From the macro viewpoints, the improvement of the working environment and the eco-friendly development would be problems to be tackled in the long run, even though those who concerned with the industry themselves have not yet realized them.



# 8. The analysis and the issues of the international comparison on the international competitiveness of the industries in Bangladesh

#### 8.1. Comparative evaluation on international competitiveness and competitive advantage

In this chapter, in order to evaluate the international competitiveness and competitive advantage of Bangladesh in comparison with other countries, the JICA Study Team adopted and utilized the data of comparative competition prescribed in the "World Economic Forum – The Global Competitiveness Report (2011 2012)", which currently offers the most comprehensive analysis of competitiveness.

#### (1) The Adopted Criteria for Evaluating Competitiveness

The "World Economic Forum – The Global Competitiveness" states international competitiveness and its criteria of evaluation are as follows:

The definition of competitiveness: The JICA Study Team defines competitiveness as the set of institutions, policies, and factors that determine the level of productivity of a country. The level of productivity, in turn, sets the level of prosperity that can be obtained by an economy. The productivity level also determines the rates of return obtained by investments in an economy, which in turn are the fundamental drivers of its growth rates. In other words, a more competitive economy is one that is likely to grow faster over time. The concept of competitiveness thus involves static and dynamic components: although the productivity of a country determines its ability to sustain a high level of income, it is also one of the central determinants of its returns on investment, which is one of the key factors explaining an economy's growth potential.

Criteria (The 12 pillars) of competitiveness: There are many determinants driving productivity and competitiveness. But, here, these components are grouped into 12 pillars of competitiveness, which are classified into 3 large categories: - 1.Basic Requirement, 2.Efficiency Enhancers, 3.Innovation and Sophistication factors, the details of which are shown in Figure 8.1.

3 major categories of		12 Pillars
determining factors		
1.Basic Requirement	$1^{st}$	Institutions
$\square$	$2^{nd}$	Infrastructure
Key for factor-driven	$3^{rd}$	Macroeconomic environment
economies	$4^{\text{th}}$	Health and primary education
2. Efficiency Enhancers	$5^{\text{th}}$	Higher education and training
$\bigcup$	6 th	Good market efficiency
Key for efficiency-driven	7 th	Labor market efficiency
economies	8 th	Financial market development
	9 th	Technological readiness
	$10^{\text{th}}$	Market size
2. Innovation and	$11^{\text{th}}$	Business sophistication
Sophistication factors	12 th	Innovation
Ţ		
Key for innovation-driven		
economies		

Figure 8.1 Criteria (The 12 pillars) of competitiveness

The index of evaluation on competitiveness is shown by the competitiveness ranking and scores (7 grades 1-7, 7 is the maximum figure) out of 142 countries all over the world. Source: Prepared by the JICA Study Team with reference to the "World Economic Forum – The Global Competitiveness"

(2) The Evaluation of Competitiveness of Bangladesh (1)



#### (Figure 8.2 shows the details)

The competitiveness of Bangladesh is low – 108th in ranking out of a total of 142 countries with score 3.7/Max 7.

The evaluation of 3 major categories of determining factors are Basic Requirement (Rank 112, Score 3.8) Efficiency Enhancers(Rank 99, Score 3.7), Innovation and Sophistication Factors(Rank 113, Score 3.0). Factors that lowered competitiveness, in particular, were infrastructure of the Basic Requirement (Rank 134,Score 2.2), institution of the Basic Requirement (Rank 112, Score 3.3), higher education and training of Efficiency Enhancement (Rank 126, Score 2.8), labor market efficiency (Rank 100, Score 4.4), technological readiness (Rank 122, Score 2.8), all of which are factors of Basic Requirement, while innovation out of Innovation and sophistication factors also proved to lower competitiveness. (Rank 124, Score 2.6)





Source : World Economic Forum - The Global Competitiveness

The factors reducing competitiveness are as follows:

- Institutions (Rank 112, Score 3.3) : Irregular payments and bribes (Rank 138, Score 2.5), Favoritism in decisions of government officials (Rank 128, Score 2.2), Intellectual property protection (Rank 129, Score 2.4), Public trust of politicians (Rank 118, Score 2.0), Ethical behavior of firms (Rank 119, Score 3.2), Protection of minority shareholders' interests (Rank 121, Score 3.5), Strength of auditing and reporting standards (Rank 122, Score 3.8), Efficacy of corporate boards (Rank 114, Score 4.1)
- Infrastructure (Rank 134, Score 2.2): Quality of overall infrastructure (Rank 129, Score 2.8), Quality of roads (Rank 111, Score 2.9), Quality of air transport infrastructure (Rank 117, Score 3.5), Quality of electricity supply (Rank 135, Score 1.6) ···Electric supply is unstable. Fixed telephone lines /100 pop. (Rank 135, Value 0.6 lines), Mobile telephone subscriptions/100 pop. (Rank 127, Value 46.2 units)
- Macroeconomic environment (Rank 75, Score 4.7): Inflation, annual % change (Rank 120, Score 8.2%), Country credit rating, 0–100 (best)* (Rank 105, 31.8/Max 100)
- Health and primary education (Rank 108, Score 5.0): Malaria cases/100,000 pop. (Rank 113, Value 1,906.9), Tuberculosis incidence/100,000 pop. (Rank 114, Value 225), Quality of primary education (Rank 119, Score 2.8), Primary education enrollment, net %* (Rank 113, Score Value 86.3%)
- · Higher education and training (Rank 126, Score 2.8) : Secondary education enrollment,



gross %* (Rank 119, Score 42.3%), Tertiary education enrollment, gross %* (Rank 116, Score 7.9%), Quality of math and science education (Rank 106, Score 3.3), Internet access in schools (Rank 128, Score 2.5), Availability of research and training services (Rank 133, Score 2.7), Extent of staff training (Rank 121, Score 3.3) Competitiveness in education is low.

- Goods market efficiency (Rank 81, Score 4.1) : Extent of market dominance (Rank 102, Score 3.3), Effectiveness of anti-monopoly policy (Rank 105, Score 3.5), Trade tariffs, % duty (Rank 127, Score 13.1%), Prevalence of foreign ownership (Rank 115, Score 4.0), Burden of customs procedures (Rank 117, Score 3.4), Imports as a percentage of GDP* (Rank 112, Score 30.2%)
- Labor market efficiency (Rank 100, Score 4.0) : Redundancy costs, weeks of salary (Rank Value 130, 104), Brain drain (Rank 101, Score 2.9)
- Financial market development (Rank 67, Score 4.1) : • Regulation of securities exchanges (100, Score 3.7)
- Technological readiness (122, Score 2.8) : FDI and technology transfer (101, Score 4.1), Internet users/100 pop. (Rank 130, Value 3.7), Broadband Internet subscriptions/100 pop. (Rank 127, Value 0.0), Internet bandwidth, kb/s/capita*. (Rank 118, Value 0.1)
- Business sophistication (Rank 98, Score 3.5): Nature of competitive advantage (Rank 139, Score 2.3), Control of international distribution (Rank 106, Score 3.6), Production process sophistication (Rank 115, Score 2.9), Extent of marketing (Rank 112, Score 2.9), Willingness to delegate authority (Rank 126, 2.9)
- Innovation (Rank 124, Score 2.6) : Capacity for innovation (Rank 121, Score 2.4), Quality of scientific research institutions (Rank 115, Score 2.7), Company spending on R&D (Rank 128, Score 2.4), University-industry collaboration in R&D (Rank 127, Score 2.6), Government procurement of advanced tech products (Rank 117, Score 3.0)

The most problematic factors for doing business (Respondents were asked to select the five factors) are as follows: (from high rank to low rank)

Inadequate supply of infrastructure (21.8), Corruption (18.5), Inefficient government bureaucracy (17.3), Policy instability (6.7), Access to financing (6.3), Inadequately educated workforce (6.2), Inflation (5.1), Foreign currency regulations (4.4), Tax regulations (3.9), Crime and theft (2.7), Tax rates (2.2), Government instability/coups (1.8), Poor work ethic in national labor force (1.7), Restrictive labor regulations (0.9), Poor public health (0.3)

On the other hand, there are factors in which Bangladesh has a comparatively high level of competitiveness. They are Macroeconomic environment (Rank 75, Score 4.7), Goods market efficiency (Rank 81, Score 4.1), Financial market development (Rank 67, Score 4.1), and Market size (Rank 49, Score 4.3).

In market size, Bangladesh has more competitiveness than the average score of 37 other countries in the same category with Bangladesh.

The details of the factors that have potential of competitiveness and growth for Bangladesh are shown as below:

Strength of investor protection, 0-10 (best) (Rank 20, Score 6.7/best 10) Institutions :

Government budget balance, % GDP* (Rank 33, 26.7%) Macroeconomic environment :

Health and primary education : HIV prevalence, % adult pop. (Rank 1, less than 0.1%)

Goods market efficiency : Extent and effect of taxation (Rank 47, Score 3.7), Agricultural policy costs (Rank 13, Score 4.7), Business impact of rules on FDI (Rank 25, Score 5.2)

Financial market development : Financing through local equity market (Rank, Score 4.5), Legal rights index, 0–10 (best) (Rank 39, Score 7.0/Max 10)

Market size : Domestic market (Rank 49, Score 4.3/Max7), Foreign market (Rank 63, Score 4.5/Max 7)



Business sophistication : State of cluster development (Rank 45, Score 3.9)

The following issues should be addressed:

- ▶ How to utilize gross national savings for investment,
- ➢ How to take advantage of domestic and foreign market size to increase industrial competitiveness and the development of the industry.

(3) The Evaluation of Competitiveness of Bangladesh (2) – Comparison with ASEAN countries

It is significant to compare the competitiveness of Bangladesh with developed countries in ASEAN (Thailand, Malaysia and Indonesia : Stage 2 Efficiency-driven economy) as benchmarking and less developed countries (Vietnam and Cambodia : Stage 1 Factor Driven Economy) as the competitor. The outcome is as follows:

The competitiveness of Bangladesh (Rank 108, Score 3.75) is far lower than the competitiveness of Malaysia (Rank 21, Score5.08), Thailand (Rank 39, Score 4.52), Indonesia (Rank 46, Score 4.38) and Vietnam (Rank 65, Score 4.24) but is nearly the same as Cambodia (Rank 97, Score 3.85).

World Economic Forum- The Global Competitiveness (2011)											
Overall Index			Basic Requ	uirement	Efficiency	enhancers	Innovation a	nd sophystica			
Country	Rank	Score	Rank	Score	Rank	Score	Rank	Score			
Malaysia	21	5.08	25	5.45	20	4.88	22	4.65			
Thailand	39	4.52	46	4.88	43	4.38	51	3.75			
Indonesia	46	4.38	53	4.74	56	4.8	41	3.90			
Vietnam	65	4.24	76	4.41	66	4.05	75	3.44			
Cambodia	97	3.85	108	3.99	98	3.69	91	3.11			
Bangladesh	108	3.73	112	3.81	99	3.69	113	3.04			

Figure 8.3 Overall comparison – Bangladesh and ASEAN countries

Source : Prepared by the JICA Study Team with reference to World Economic Forum – The Global Competitiveness

As to "Institutions" and "Infrastructure" of "Basic Requirement", Bangladesh has less competitiveness than all five countries in ASEAN. However, in the "Macroeconomic environment" and "Health and Primary education", Bangladesh has more competitiveness than Cambodia but less competitiveness than the rest of the 4 countries of ASEAN.

Figure 8.4 Comparison of Basic Requirement – Bangladesh and ASEAN countries

	<u>Basic Requirement</u>													
							Macroe	econo	Hearlth and					
	Basic Requirement		Institut	Institution		Infractructure			Primary					
							Environment		educat	ion				
Malaysia	25	5.45	30	4.94	26	5.22	29	5.50	33	6.14				
Thailand	46	4.88	67	3.85	42	4.65	28	5.52	83	5.49				
Indonesia	53	4.74	71	3.81	76	3.77	23	5.66	64	5.74				
Vietnam	76	4.41	87	3.63	90	3 59	65	4.78	73	<u>5</u> .66				
Cambodia	108	3 99	79	3.69	107	3.01	101	4.42	111	4.86				
Bangladesh	112	3.81	112	3.31	134	2.24	75	4.7	108	5.01				

Source : Prepared by the JICA Study Team with reference to World Economic Forum – The Global Competitiveness

As to "Efficiency Enhances", in particular, in "Higher Education", "Good Market Efficiency", "Labor Market Efficiency" and "Technological Readiness", Bangladesh has less competitiveness than all 5 ASEAN countries. In "Financial Market Development" and "Market Size", Bangladesh has more competitiveness than Cambodia but has less competitiveness than the rest of the 4 countries of ASEAN.

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	ingute one comparison of Enterency Enhances Danghadesh and HSERIA													
<u>Efficiency Enhances</u>														
	Efficiency E	nhonean	Higher	Higher (		Goods market l		Labor Market Fi		ial	Techno	logical	Market	Size
	Efficiency Enhances		Educat	ion	Efficiency		Efficie	ncy	Market		Readine	ess		
Malaysia	20	4.88	38	4.76	15	5.06	20	4.87	3	5.53	44	4.29	29	4.75
Thailand	43	4.38	62	4.25	42	4.47	30	4.75	50	4.35	84	3.47	22	5.02
Indonesia	56	4.18	69	4.16	67	4.23	94	4.06	69	4.06	94	3.33	15	5.22
Vietnam	66	4.05	103	3.47	75	4.16	46	4.60	73	4.00	79	3.51	33	4.59
Cambodia	98	3.69	120	3.07	58	4 30	38	464	74	4.00	110	3 03	93	3.07
Bangladesh	99	3.69	126	2 8 1	81	4.09	100	4 0 2	67	4.07	122	2.82	49	4.32

Figure 8.5 Comparison of Efficiency Enhances – Bangladesh and ASEAN

Source : Prepared by the JICA Study Team with reference to World Economic Forum - The **Global Competitiveness** 

As to "Innovation" and "Business Sophistication", Bangladesh has less competitiveness than all ASEAN countries.

Innovation and Sophistication Factors											
	Innovation a	ind	Busines	s	Innovation						
	Sohistication	<u>n Factors</u>	Sophist	ication							
Malaysia	20	4.88	38	4.76	15	5.06					
Thailand	51	3.75	47	4.20	54	3.30					
Indonesia	41	3.90	45	4.22	36	3.59					
Vietnam	75	3.44	87	3.72	66	3.16					
Cambodia	91	3.31	90	3.63	85	3.00					
Bangladesh	113	3.04	98	3.51	124	2.57					

Figure 8.6 Comparison of Innovation and Business Sophistication **Bangladesh and ASEAN** 

Source : Prepared by the JICA Study Team with reference to World Economic Forum - The **Global Competitiveness** 

#### 8.2. The Analysis by Conditional Elements

(1) The criteria of conditional elements to compare and evaluate the competitiveness are set to be (a) "Basic and common costs in the industry" and (b) "Industrial infrastructure environment". Here Bangladesh is compared with Thailand, Malaysia, Cambodia and Myanmar of ASEAN.

Basic and common costs (in other words, investment costs) include personal expenses, land and office expenses (purchase /lent), and utilities (electricity, water supply, gas).

Industrial Infrastructure environment (in other words, Business Environment) includes labor force, labor conditions, electric supply, tax system and financing.

Other infrastructure such as roads, international sea port and distribution & logistics are referred to in "8.5.3 Competitiveness in international trading" and "8.5.4 An analysis of global distribution and logistics

(2) Basic and common cost in industry and competitiveness of Industrial infrastructure..

Basic and common costs (Refer to Figure 8.7)

[Personal Expenses • Wages & Salaries]

- At Japanese based factories located in Bangladesh, the monthly wages (average) payable to workers are US\$78 which is approximately 27% of monthly wages US\$286 payable to workers in Japanese based factories in Thailand. This is almost the similar level as monthly wage of US\$82 payable to factory workers in Cambodia and higher than monthly wage of US\$68 payable to factory workers in Myanmar.
- The annual personal expenses per head born by the company is US\$1,438 in Bangladesh, which is approximately 25% of US\$5,662 in Thailand, being the same level of US\$1,438 in Cambodia and higher than US\$1,137 in Myanmar.
- In Bangladesh the monthly wages and annual personnel expenses of engineers are US\$251 and US\$4,721 respectively, which are higher than the wage of US\$204 and personnel expenses of



US\$3,000 in Cambodia, and wage of US\$176 and personnel expenses of US\$2,623 in Myanmar.

- In Bangladesh the monthly wage and annual personnel expense of management are US\$578 and US\$9,843, which is lower than the wage of US\$663 and annual personnel expenses of US\$10,450 in Cambodia. The monthly wage of a manager in Bangladesh is the same level as the wage of US\$578 in Myanmar but the annual personnel expense of managers is higher than the personnel expenses of US\$8,449 in Myanmar.
- Generally speaking, in Bangladesh bonuses and social welfare fees borne by the company are higher in comparison with the basic wages and total costs borne by other companies in ASEAN.

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Basic and common	Bangladesh	Thailand	Malaysia	Cambodia	Myanmar
costs in the industry	(Dhaka)	(Bangkok)	(Kuala Lumpur)	(Phnom Penh)	(Yangon)
(Exchange rate US\$1=)	82.325 Taka	31.637 Baht	31.505 Ringgit	4.039 Riel	805 Kyat
Wage (Manufacturing)	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)
1 . Worker					
Basic Wage/Month	78	286	344	82	68
Annual personnel	1.429	5.60	6240	1.429	1 127
expense *	1,458	3,002	0,540	1,438	1,157
2 . Engineer					
Basic Wage/Month	251	641	973	204	176
Annual personnel	4.701	11.464	16.002	2 000	2 622
expense	4,721	11,404	10,092	3,000	2,025
3 . Manager					
Basic Wage/Month	578	1,565	1,926	663	577
Annual personnel	9,843	26,580	30,990	10,450	8,449
4 . Legal minimum					
wage	Apprentice 39 ~ 41	300 Baht	n.a.	55 ( + allowance10 )	n.a.
	Skilled worker 109				
5 . Bonus					
(Basic Wage X Month)	2	3	2	1	2
6 . Social welfare		-			
Employer	7% ~ 8%	0	0	0	1.63% ~ 3.3%
Employee	7% ~ 8%	0	0		1.0% ~ 2.0%
7 . Nominal wage rise					
Year 2010	10.70%	6.50%	a. 5.68%, b. 5.28%	n.a.	
Year 2011			a. 6.45%, b. 5.37%		
			a. Manager b.Non manager		
Land cost/office rent					
1 . Land price of	1.000 1.070 (Divelopedary)	119 ( Amata Nakorn Industrial	20. 25.(0)	Land purchase by 100%	Land purchase by foreigner or
industrial estate	1,089~ 1,270 (Dhaka city)	Estate )	$20 \sim 25$ (Selangor)	foreign investment is not	foreign enterprise is not accepted
$( per M^2 )$	636 ~ 872 ( Outskirt of Dhaka)			accepted.	
2 . Rent of industrial	0.10~0.18 (FP7)	6.05	n c	0.001	0.15 ~ 0.255
estate	0,10  0.10 (L1Z)	0.95	II.a.	0.091	0.15 0.255
$( per M^2 )$					
3 . Office rent	5.24 ~ 28.76	20	19 ~ 27	12 ~ 22	45 ( Down town )
$( per M^2 )$	( Central district in Dhaka )				1.86 ~ 3.11
Utilities					
Electricity Industrial					
Monthly basic fare	7.29	9.86	190	None	None
per 1KW	0.05 ~ 0.09	0.14	0.09	0.216	0.12
Water supply Industrial					
Monthly basic fare	None	2.84		0.37	None
Per M ³	0.31	0.30 ~ 0.51		0.235 ~ 0.359	0.88
Gas supply Industrial					
Monthly basic fare	None	None	11.43	None	None
Per M ³	0.03 ~ 0.12	4.36	0.66 ~ 0.72	1.33	7.74/1mmBtu
	* A nnual personnel expense	as borne by the company			

Figure 8.7	<b>Basic</b> and	common	costs	in	industry
riguit 0.7	Dasic and	common	CUSIS		muusuv

Source : Prepared by the JICA Study Team with reference to JETRO Sensor and website

[Land Price • Rental fee]

- The purchasing price of land in real estate in Bangladesh is much higher than that of other ASEAN countries. A subsidiary company of 100 % foreign capital incorporated in Bangladesh is able to purchase land in Bangladesh. Foreign capital cannot purchase land in any form in Cambodia and Myanmar.
- The rental fee of the land at EPZ in Bangladesh is almost the same level as the rental fee of the • land in Cambodia and Myanmar.
- All the utility costs (including electricity, water supply and gas) in Bangladesh are cheaper than

#### those in all other ASEAN countries.

#### Competitiveness of Industrial Infrastructure (Business environment) (Refer to Figure 8.8 Industrial Infrastructure)

Infrastructure (Industry)	Bangladesh	Thailand	Malaysia	Cambodia	Myanmar		
	(Dhaka)	(Bangkok)	(Kuala Lumpur)	(Phnom Penh)	(Yangon)		
Labor force/ Environment	Labor force is supplied stably. But it is difficult to employ good managers. Skilled worker is in shortage. Major labor force is concentrated in Ready Made Garment Industry(3 million) Overseas Bangladesh and workers (7 million)	Unemployment rate is less than 1 % as of Oct., 2011. Close to full employment and shortage in labor force. Employment control to foreign labor was strengthened.	Unemployment rate in 2011 was 3.1%, being the lowest level since 2,000. Employment control to foreign labor was strengthened. Unskilled labor force is in heavy short. Wage raise is gradual.	Population under 20 years old occupies 46 % of total population. Young population. There is a potential labor force in rural areas but skilled laborers are in short.	Wages in Myanmar are the lowest in ASEAN. There is an abundant labor force in rural areas. But the population is near the factories or in urban areas sometimes makes it hard to employ workers sufficiently		
Electricity							
Electricity supply	Shortage of electricity			Shortage of electricity	Shortage of electricity		
Fuel for electricity	Depend on natural gas	Depend on natural gas (72% in year 2010)	Depend on natural gas	Depend on the import (61.5% of consumption). 91% of electric power is generated by small diesel generators by independent electric producers.	Depend on hydro electric power (shortage of electricity in dry season)		
Tax system (%)							
Corporate tax	(Listed company) 27.5	30	25	20	30		
(effective tax rate)	(Unlisted company) 37.5			(Com	pany incorporated under FDI law)		
Personal Income tax	25	37	26	20	30		
( In case of progressive tax, the n	naximum rate is indicated)						
Withholding tax							
Dividend	20	10	0	14			
Interest	10	15	10	6	15		
Royalty ( Copyright, Patent)	10	15	10	14	15		
VAT	15.0	7.0	10.0	10.0			
Tariff (Average)	14.7	9.9	6.9	14.2	17.6		
WTO MFN average,2010							
Other Import Duty	VAT, Advance income duty	VAT	VAT	VAT, special tax	VAT		
Financing							
Loan from domestic banks	(a)Except EPZ: Able to borrow loans in Taka. Maximum is 50% of total of paid-up capital and reserve. (b)EPZ: Unable to borrow loans in Taka	Domestic loan (Baht) interest rate is 6% ~ 7%. Restriction on large lot loans. Loans to excessive debt company is not permitted. (Central Bank rules)	Domestic loan (Ringit) interest rate is 6% ~ 7%. There are restrictions on large lot loans.	It is comparatively difficult to receive loans without mortgage collateral. In general, the loan period is short and interest rates are high.	Mortgage collateral is requested when a foreign company borrows loans. In case of a JV partner being a state owned company, special corporate law is applicable and it is able to borrow local currency from the state bank.		
Loan from overseas banks	When Bangladesh companies borrow from overseas banks, it shall apply to the BOI. Max. Ioan period is 5 years.	It is able to be financed from overseas freely. ( including loans from foreign parent companies )	It is able to be financed by overseas parent companies. (Mainly via Japanese based banks in Malaysia )	There is no restriction on loan from overseas. Loans from overseas parent companies are generally prevailing.			
of bills		Check payment is most popular	Remittance, check, draft. Electric remittance is available.				

Figure 8.8	Industrial	Infrastructure

Source : Prepared by the JICA Study Team with reference to JETRO Sensor, website and "Comparison of Business Environment in major Asian countries"

[Labor force • Labor environment]

There are abundant labor populations in Bangladesh and the labor force is supplied stably. [Electricity]

In Bangladesh, Cambodia and Myanmar, electric supply cannot catch up with the increase in electric demand due to economic growth and electricity is in short and supplies stop sometimes.

[Tax system]

- · The corporate tax in Bangladesh is 27.5% for listed companies and 37.5% for unlisted company. They are in the same zone as in Thailand 30%, Malaysia 25% and Myanmar 30% but higher than Cambodia 20%.
- Personal income tax rate in Bangladesh is 25% which is lower than 37% in Thailand and

30% in Myanmar, being almost the same as 26% in Malaysia but higher than the 20% in Cambodia

- Withholding tax on dividends in Bangladesh is 20%, which is higher than withholding tax in ASEAN countries.
- VAT is 15% in Bangladesh, being higher than VAT 10% in Thailand and 14% in Cambodia.
- The average tariff rate on imports in Bangladesh is 14.7% and is higher than 9.9% in Thailand, 6.9% in Malaysia but is almost equivalent to 14.2% in Cambodia, being lower than 17.6% in Myanmar.

	Bangladesh	Thailand	Malaysia	Cambodia	Myanmar
Incentive and industry to Foreign Direct Investment	BangladeSII Export oriented industry, High-teck Industry, Industry making use of natural resources, The industry depending upon Domestic material and resources	Agriculture and agricaltural products, mining, Ceramics, M aterials, Light Engineering Industry, M etal products, M achinery, Transport machinery, Electronic device/ Electric parts, Chemical, Paper, Prastics, Service and Community facilities	MatelySta Manufacturing, Agriculture, Sightseeing Industry, Hotel Industry, R&D Institute, Job Training, International Procurement Center, Regional Distribution Center, Reginal HQ, Multimedia Business and etc.	Cambodia Qualified Investment Project (QIP)	INIVALINEAT Export expansion, Natural Resource Development accompanied by large scale FDI, Transfer of High-tec Technology, Production of goods and services requiring a lot of capital, Increase of employment opportunity, Saving energy consumption, Rural area development
Preferential treatment for investment (Tax holiday)	Depending up on the area the nominated industry is invested and depending up on the category of the industry, conditions of corporate tax exmption may be baried. In case of traditional industy: holiday tax period is applicable for 5 -7 years. Tax reduction 100% ~ 25%. New industry : Period 5-7 years, Tax reduction 95% ~ 85%	BOI judges to exempt corporate tax from the company with the incentives for 3-8 years. If lost has occurred during exemtion peiod, the the lost amount will be deducted from net profit within 5 years period.	In case of the enterprise of which pioneer status is certified, 70 % of corporate tax is exempted for 5 years.	In case of tax Holiday (exemption of Corporate tax,) (Selection) : (Trigger period) 3 years + Priority Period) will be changed.	In case of the company under the FDI Law, corporate tax is exempted for 3 years from the day commencing production and/orn or service
Other preferential treatment	Rapid amortization is applicable. 1 year 50% 2 year 30%, 3 year 20% As to 80 100% export oriented industry, 1% Taxes on machierry is applicable. There is refund imported duty.	Depending on project, import duty on equipment, parts & materials chall be exempted.	In case of the enterprise to which Investment Tax Allowance (ITA) is approved instead of Pioneer Status, 60 % of expenses for capital outlay for 5 years since the accrual of such outlay.	Special depriciation (Selective) : In case of new or used tangible fixed assets, 40 % of the value can be depreciated secially.	Rapid amortization for equipment, machinery and other tangible fixed assets. The losses can be carried forward for 3 years. Tax reduction is applicable to machine- equipment, parts, spare parts and raw materials during the start-up period and for 3 years after start-up.

Figure 8.9 Preferential Treatment for FDI

Source : Prepared by the JICA Study Team with reference to JETRO Sensor, website and "Comparison of Business Environment in major Asian countries "

#### [Financing]

- There are some restrictions on loans from domestic banks but there are not any restrictions on loans except for large lot loans.
- It is necessary to apply to the BOI and obtain approval for cases in which a company incorporated in Bangladesh obtains a loan from an overseas financial institute. In Thailand and Malaysia any company can freely obtain a loan from overseas financial institutes.

Comparison of preferential treatment on FDI in Bangladesh and ASEAN countries are shown in Figure 8.9. It is not easy to compare simply, as the preconditions are different from country to country. In Bangladesh, the maximum period of tax holiday is 7 years while in other ASEAN countries it is 3-5 years. As to other preferential treatment, there is a "rapid amortization system" in Bangladesh, while there is a "special amortization



system" in Cambodia and Myanmar.

#### 8.3. The Analysis by Demand Condition

(1) Domestic market size inde	x & Foreign market size index
Figure 8.10	Size of Market in comparison with ASEAN countries

Size of Banglades		adesh	Thailand		Malaysia		Cambodia		Vietnam	
Market	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Domestic	41	4.3	23	4.8	32	4.4	95	2.8	38	4.3
Foreign	63	4.5	16	5.8	18	5.8	87	3.8	26	5.4
GDP(PPP)	44	258.6	24	586.9	29	414.4	98	30.2	41	276.6
Export ratio*	126	19.4	21	71.9	7	97.2	27	57.7	14	76.9
*Export ratio out of GDP (%)				Score =	= Value	1-7(bes	t) scale			

Source : Prepared by the JICA Study Team with reference to World Economic Forum – The Global Competitiveness

According to the 10th Pillar of the Global Competitiveness Index, the domestic market size in Bangladesh is at Rank 41 and has Score 4.3. It is lower than Thailand (23) and Malaysia (32) but the same level as Vietnam (38) and far higher than Cambodia (95). The foreign market size of Bangladesh is at Rank 63 and has Score 4.5.

- (2) Past records of Export amounts in Bangladesh have increased by 16.2%-20.4% annually during the 5 year period from 2005 to 2010. In the interview research with major industry associations, it is found that all industries are forecasting growth of both domestic and foreign markets, with the expectation of further export expansion. The JICA Study Team also conducted the survey on needs of investment and trade. The outcome of the survey shows that 85% of the respondents answered that they planned to increase investment and trade more, while 40% of the companies which did not export at that time planned to export in future.
- (3) The issues in market are as follows: EU countries are the countries that import the most from Bangladesh, but the EU is in the midst of a financial crisis and recovery is still unforeseen. It is worried that the EU financial crisis will have a reverse influence on export trends from Bangladesh. Furthermore, the trade volume between Bangladesh and India/SAFTA countries is small. In the global economy, the expansion of trade is attempted by regional economic partnerships and removal of tariffs. Bangladesh is located at a strategic spot which intersects India and SAFTA, and this is important in geopolitical terms. There is also a vision of an "ASEAN Highway" from ASEAN to India. Bangladesh will be required to expand the market in its economic and trade partnership with India/SAFTA and ASEAN. In addition, it is expected to promote overseas market development in cooperation with Islamic countries such as Malaysia, Indonesia and Middle East countries and in linkage with the Bangladesh overseas community of approximately 7 million people.

#### 8.4. The Analysis of Linkage Among Industries Such As Supporting Industries

According to the Global Competitiveness Index 11th Pillar: for Business Sophistication, the ranking of Bangladesh is 45 with a score of 3.9. Ranking and score of other factors are shown as per Figure 8.11. The development of supporting industries is ranking 45 with a score of 3.9, which is at mid-level among ASEAN countries. Out of these factors, it is notable that the state of cluster development is ranking at a higher position (Rank 45, Score 3.9). Others are: Local supplier quantity (Rank 81, Score 4.6), Local supplier quality (Rank 76, Score 4.4), Value chain breadth (Rank 80, Score 3.4). However, the Control of International distribution is at a low level (Rank 106, Score 3.6). This shows that in Bangladesh the global supply chain is at a disadvantageous position.



Business Sophistication		Bangladesh		Thailand		Malaysia		Cambodia		Vietnam	
-	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	
Local supplier quantity	81	4.6	24	5.3	15	5.5	130	3.9	32	5.2	
Local supplier quality	76	4.4	47	4.9	24	5.3	115	3.8	92	4.1	
State of cluster development	45	3.9	36	4.1	12	4.9	51	3.8	14	4.8	
Nature of competitive advantage	139	2.3	78	3.3	29	4.3	66	3.4	134	2.4	
Value chain breadth	80	3.4	36	4.1	23	4.8	78	3.5	101	3.1	
Control of International distribution	106	3.6	42	4.3	12	5	103	3.6	112	3.5	
Production process sophistication	115	2.9	61	3.8	27	4.9	102	3.2	108	3.0	
Extent of marketing	29	5.1	48	4.4	112	3.4	89	3.7	83	3.8	
Willingness to delegate authority	126	2.9	77	3.6	14	4.9	93	3.4	95	3.4	

Figure 8.11 Business Sophistication – in comparison with ASEAN countries

Source : Prepared by the JICA Study Team with reference to World Economic Forum – The Global Competitiveness

### 8.5. Analysis of Competitive Environment Among Enterprises

#### 8.5.1. 6th Pillar: Evaluation on Good Market Efficiency, A. Competition

According to 6th Pillar, Bangladesh shows domestic competition (Rank 92, Score 4.5) This means that in Bangladesh, the degree of competition is less than Malaysia (Rank 26, Score 5.4), Thailand (Rank 52, Score 5.1) and Vietnam (Rank 62, Score 5.0)

Compositivo Environmonnt	Banglades		Thailand		Malaysia		Cambodia		Vietnam	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
(Domestic Competition)										
Intensity of local competition	92	4.5	52	5.1	26	5.4	88	4.6	62	5.0
Extent of market dominance	102	3.3	83	3.5	14	4.9	54	3.8	57	3.7
Effectiveness of anti- monopoly policy	105	3.5	77	3.9	25	4.8	70	4.0	85	3.8
Number of procedure required to start business *	65	7	65	7	94	9	94	9	94	9
Time required to start business *	74	19	103	32	70	17	134	85	119	44
(Foreign Competition)										
Prevalence of trade barriers	93	4.2	86	4.3	44	4.8	83	4.3	129	3.7
Trade tariffs *	127	13.1	77	6.4	78	6.4	124	12.5	86	7.4
Prevalence of foreign ownership	115	4.0	70	4.7	46	5.1	96	4.4	117	3.9
Business inpact of rules in FDI	25	5.2	38	5.0	12	5.5	40	5.0	86	4.5
Burdon of custom procedure	117	3.4	82	3.9	25	5.0	91	3.7	112	3.4
Imports as a percentage of GDP *	112	30.2	26	71.5	13	82.7	21	74.0	9	90.0
* Shown in Value	Tariff rate is the			ight ave	erage					
	Thaila	nd: y	ear 200	6, Mala	aysia, C	Cambod	lia, Ban	gladesl	n: yea	ar 2007
	Vietna	m: yea	r 2010							

Figure 8.12 Competitive Environment among enterprises in comparison with ASEAN

Source: Prepared by the JICA Study Team with reference to the World Economic Forum

- The Global Competitiveness



As to the Extent of market dominance, the ranking of Bangladesh is low (102) with a score of 3.3, being lower than Malaysia (Rank 14. Score 4.9), Thailand (Rank 83, Score 3.5), Cambodia (Rank 54, Score 3.8) and Vietnam (Rank 57, Score 3.5). This indicates that the Bangladesh domestic market is dominant by a few/several market leaders.

As to the number of procedures required to start a business, the ranking of Bangladesh is 65 with 7 times as many procedures. This is the same level as Thailand. Simplification in procedures in Bangladesh has advanced further than Malaysia, Cambodia and Vietnam. Besides, time required to start a business in Bangladesh is 19 hours showing ranking 74. Bangladesh cannot catch up to Malaysia (Rank 32, time 17 hours) but speed in procedure in Bangladesh is far faster than Thailand (Rank 103, 32 hours), Vietnam (Rank 119, 44 hours) and Cambodia (Rank 134, 85 hours).

Prevalence of trade barriers in Bangladesh (Rank 93, Score 4.2) is more than Malaysia (Rank 44, Score 4.8), Thailand (Rank 86, Score 4.3) and almost equal to Cambodia (Rank 83, Score 4.3) but less than Vietnam (Rank 129, Score 3.7). Trade Tariffs (Weight average tariff rate) in Bangladesh is 13.1% (Rank 127), being higher than all 4 ASEAN countries; Thailand (6.4% with rank 77), Malaysia (6.4% with rank 78), Vietnam (7.4% with rank 86) and Cambodia (12.5% with rank 124). Prevalence of foreign ownership in Bangladesh shows Rank 115 with score 4.0, which is low. This is lower than Malaysia (Rank 46, Score 5.1), Thailand (Rank 70, Score 4.7), and Cambodia (Rank 96, Score 4.4) and almost equivalent to Vietnam (Rank 117, Score 3.9).

As to Business impact of rules on FDI, Bangladesh ranks high (Rank 25, Score 5.2). This is less than Malaysia (Rank 12, Score 5.5), exceeding Thailand (Rank 38, Score 5.0), Cambodia (Rank 91, Score 3.7), and Vietnam (Rank 112, Score 3.4). Burden of Custom procedures in Bangladesh ranks high at 117 with score ??, which is more than the burden in Malaysia (Rank 25, Score 5.0), Thailand (Rank 82, Score 3.9) and Cambodia (Rank 91, Score 3.7) being almost equal to Vietnam (Rank 112, Score 3.4). Imports as a percentage of GDP in Bangladesh are shown at 30.2% (Rank 112) being less than Vietnam 90.0% (Rank 9), Malaysia 82.7% (Rank 13), Cambodia 74% (Rank 21) and Thailand 71.5% (Rank 26).

For all of these reasons, there is a lot of constraint in free and fair competition in the domestic competitive environment. However, Procedure and time required to start of business in Bangladesh are comparatively simpler and faster. There is also constraint in fair competition due to inefficiency in tariff and custom procedures.

#### 8.5.2. Analysis of Policy/Institution, Economic Zone/Industrial Park

(1) Comparative Evaluation of Foreign Direct Investment policy and institution

Attraction of FDI is an indispensable factor to the industrial development policy in developing a country. Accordingly whether FDI policy/institution is good or not shall give a big influence to the competitiveness of the industry. According to the "World Economic Forum – The Global Competitiveness", the business impact of rules on FDI is Malaysia (Rank 12, Score 5.5), Bangladesh (Rank 25, Score 5.2), and Thailand (Rank 38, Score 5.0). As to the rules on FDI, Bangladesh goes toe-to-toe with other advanced developing countries in ASEAN. Investment Promotion Organization:

- In Bangladesh, the Bangladesh Board of Investment (BOI) is the supervisory authority to give approvals to investments in all kinds of industries. The BOI promotes a One-Stop-Service but in reality, the investors visit relevant government offices to take various procedures on various applications.
- In Thailand, the Thailand Board of Investment is the supervisory authority to give approvals to investment in the manufacturing industry, and the Ministry of Commerce is the supervisory authority to give approvals of investment in the wholesale, retail and transport industry.
- In Malaysia, the Malaysia Industrial Development Authority (MIDA) is the supervisory authority to give approval to the investment in manufacturing as a window, providing a One-Stop-Service in the MIDA office. The Ministry of Domestic Trade, Cooperative and Consumerism (MDTCC) is also the supervisory authority in the wholesale, retail and transport industry.



**Regulatory Industry** 

- In Bangladesh, the regulatory industry for FDI is the industry of resource, infrastructure and communication & transport. In principle, 100% FDI (except shipping and distribution) is acceptable.
- In Thailand, there are many regulatory industries for FDI but more than a 50% share by • foreign investors is acceptable in principle. The manufacturing industry is not regulatory and 100% foreign ownership is acceptable.
- In Malaysia, 100% foreign ownership in the manufacturing industry except the automobile • industry is acceptable.

FDI Policy/	Bangladesh	Thailand	Malavsia
Institution			
Investment Promotion Organization	Bangladesh Board of Investment(BOI), Bangladesh Export Processing Zone Authority (BEPZA)	Board of Investment(BOI), Industrial Estate Authority of Thailand (IEAT) _o	M mistry of 1 rade and Industry, Malaysia industrial Development Authority(MIDA), Multimedia Development Corporation, Invest KL.
Industry FDI is prohibited	Arms and ammunitions and other military equipments and machinery, Nuclear power, Security printing and minting, Forestation and mechanized extraction within the boundary of reserved forest	Newspaper, Radio & TV Broadcasting, Agriculture/fruit farm, livestock, forestry/wood processing, fishery, medical plant extract, antiques (sales, auction), production of buddist altar & monk pot, real estate trading	
Industry FDI is regulated	Fishing in the deep sea, Bank/financial institution, Insurance Company, Generation, supply and distribution of power, Exploration, extraction and supply of natural gas/oil, Exploration, extraction and supply of coal, Exploration, extraction and supply of other mineral resources, Large-scale infrastructure project (e.g. flyover, elevated expressway, monorail, economic zone, inland container depot /container freight station), Crude oil refinery, Medium and large industry using natural gas/condescend and other minerals as raw material, Telecommunication Service, Satellite channel, Cargo/passenger aviator, Sea bound ship transport, Sea-port/deep sea-port, VOIP/IP telephone, Industries using heavy minerals accumulated from sea beach	Weapons, fighting ships, airplane and vehicles, domestic land, sea and air transport, sales of antique and fold handicraft, manufacturing wooden sculpture, raising silkworms, manufacturing Thailand music instruments, gold and silver products, lacquer ware, tableware belonging to Thailand culture and art, sugar manufacture, mining, wood processing such as furniture, rice milling, flour milling, fishery, planting trees, manufacturing veneer and chipboard, producing coals, Service such as accounting, law, building design, and engineering, construction, agency and intermediate, auction, domestic trading of domestic agricultural products, retails & wholesale under certain size, advertising, hotel, tourism, sightseeing, cultivating plant trees, breeding	In general, the M alaysian government regulates foreign ownership up to 30% regarding the business relating to national interest, viz., water, energy, electricity supply, broadcasting, defense and security.
Share ratio of foreign investors	100% foreign equity may be allowed in all areas of investment. However, Private investment (local as well as foreign) is restricted in four sectors on strategic grounds as mentioned in the Industrial Policy-2010.	Company of exceeding 30% foreign investment is prohibited in investing in the 43 industries mentioned above (prohibited industry and regulated industry) with some exceptions.	In principle, ratio of FD1 to the private sector is subject to the conditions of investment imposed on the license and/or ap proval by government offices. In the manufacturing, distribution and service industry, with some exception, 100% foreign ownership is approved.
Land ownership by foreign investor	<ul> <li>a)Export processing zones (EPZ): The land in the EPZ enclaves is allotted by the EPZ authority.(30 years long term lease)</li> <li>b) Private lands : The private lands can be scouted by the investors himself/herself. A locally incorporated company of foreign ownership can own land in its name.</li> </ul>	In principle, foreigners (including foreign companies) are not allowed to acquire land. However a BOI promoted company and IEAT approved company can acquire land irrespective of the share ratio of foreign investors. Further, according to the land law revised in M ay, 1999, those who satisfy the conditions of more 40 million baht, can purchase residential land of less than 1,600 M2.	In principle, the ratio of FDI to the private sector is subject to the conditions of investment imposed on the license and/or approval by government offices. In the manufacturing, distribution and service industry, with some exception, 100% foreign ownership is approved. In Malaysia, state governments have jurisdiction on the land. The investor shall register the land upon approval of state government in order to be the land owner. In case that the land is for commerce, manufacturing or agriculture, the investor shall establish and register the locally incorporated company.
Capital regulated	In principle, there is no restriction minimum or paid up capital except in the financial sector.	Minimum capital of 2 million baht is required in foreign companies. But a minimum capital of 3 million baht is required for the industries that must obtain special approval under restrictions by law as per foreign business law. No minimum capital is not applied to Thai companies (majority of shares are owned by Thai company)	Minimum paid up capital is fixed in accordance with the business contents and required approval. The minimum paid up capital is RM 2.5 million for approved license manufacturing and RM 1 million for distribution and service trade.
Others	Compnay in financial sector is required for special approval by government. There is no ristriction on domestic production ratio, local contents or obligation to export in manufacturing industry.	Before, local contents ratio had been applied to automonile, autobycycle, diezel engine for small truck and dairy puroducts, they except dairy are now removed due to the abolishment of TRIM by WTO.	Industrial Coordination Act, 1975 (ICA), Competition Act 2010. ICA regulates that manufacturing company with paid up capital of exceeding RM 2.5 million or with the employees of more than 75 have duty to apply for manufacturing license. The application for manufacturing license will be submitted to MIDA.

Figure 8. 13	FDI policy and institution – Comparison of Bangladesh, Thailand &
	Malaysia

Source: Prepared by the JICA Study Team with reference to JETRO Sensor, website and "Comparison of Business Environment in major Asian Countries".

Land ownership by foreign investors

- In Bangladesh a locally incorporated company of a foreign investor can purchase land outside EPZ. In EPZ foreign investor leases the land but cannot purchase the land.
- In Thailand a company incorporated by more than 50% of foreign ownership is not approved to purchase the land. As an exception, BOI approved companies and IEAT approved companies can purchase and own the land irrespective of the share of foreign ownership in the industrial park.
- In Malaysia, it is approved that foreigners and foreign companies can acquire the land except for small size residences. However manufacturing companies usually reside in industrial parks. Most developers of industrial parks are either government organization or local developers, while participation by foreign developers is restricted.
- In Bangladesh, foreign investors can purchase general land (not for industrial use) and locally incorporated companies of foreign ownership can use the land for industrial use. Easing regulation is more advanced in Bangladesh than in Thailand and Malaysia. This is favorable for foreign investors but in the future it may or may not cause some inconvenience if it is considered that there is little economically available land in narrow parts of the country.
- (2) Evaluation on comparison of Economic Zone / Industrial zone with ASEAN countries
  - The status-quo of EPZ, Economic Zone and Industrial Park in Bangladesh, Thailand and Malaysia are shown in Figure 8.14 Economic Zone / Industrial Park in comparison with Thailand and Malaysia. There are 3 types of FDI: (A) export oriented, (B) domestic market oriented, and (C) the combination of (A) and (B). In case of (A) and (C), the investors prefer to place the factory site in EPZ, Economic Zone and/or Industrial Park which provides convenient services and preferential treatment in tax.

Availability of Industrial Park

- In Bangladesh, only EPZ is the Industrial Park in which FDI is available. There are 8 EPZ nationwide. Space of each EPZ is 90 186 hectares, totaling to 1,039 hectares (2,572 acres). This is a comparatively small size in comparison with other countries. There are no lots available in EPZ except for 3 EPZ that are located in remote places far from Chittagong international sea port, being inconvenient for business.
- In Thailand, there are more than 60 industrial parks. Each industrial park has a large space of 155 hectares 3,062 hectares. There are lots of land available except in the suburban areas of Bangkok. Rental factory with the size of 400 m2 1,000 m2 are under construction and toward completion in the year 2012, as there are strong needs for rental factories. Laem Chabang industrial park (569 hectares) is located 1 km distance from the Laem Chabang international port, the deep sea port. There are located many industrial parks at 30 km 100 km distance from the port. The industrial parks in Ayutthaya Province were heavily damaged by the river floods in the year 2011, showing the weakness of the place.
- In Malaysia, there are more than 200 industrial parks and 18 FIZ (Free industrial Zone). They are various sizes from 34 hectares to 1,419 hectares. There are many cases in which a rental factory is furnished in the industrial park. Pasir Gudang industrial park in Johor Darul Takzim is located 56km from Tanjung Pelapas international port, deep sea port, while Prai industrial park (934 hectares) in Penang is located adjacent to Penang international sea port. Other industrial parks are located adjacent to or between 20 km – 60 km from the sea port.

Bonded factory

- In Bangladesh, bonded factories are accepted and applied to only a part of industries and companies.
- In Malaysia, bonded factories are easily accepted and applied in the area where FIZ is not practical. Bonded factories are given the same benefit as the factory located in FIZ.

Preferential treatment for FDI

Corporate Tax in Bangladesh is 32.5% (listed company 37.5%, unlisted company 27.5%) being high. Corporate Tax is exempted 100% for 10 years in the case that the company was established on and before 31st December, 2011. However, corporate Tax is exempted 100% for a maximum of 5 years in the case that the company was established after 1st January, 2012: 100% for the first 2 years, 50% for the second 2 years and 25% for the last 1 year. Duty free import of goods to be used for manufacturing export products is applied and Accelerated depreciation on machinery and plant is also applied.



Economic Zone,	Banoladesh	Thailand	Malaysia
Industrial	Dangiaucsii	T halland	171 may 51a
1 . Status quo	Export Processing Zone (EPZ)is stipulated by the Export Processing Zone Act, December, 1980. There are 8 EPZ in Bangladesh. There are no lots available in 5 EPZ near Dhaka, the capital and Chittagong, the 2nd large city. There are available lots in the Uttar EPZ, Ishwardi EPZ and Mongla EPZ. In accordance with the Private EPZ Law, established in September, 1996, a Korean company is now developing the Korean EPZ in Chittagong, promoting FDI. The government decided to set up the Economic Zone instead of EPZ, and the new development of which was stopped.	Thailand BOI makes much of the investment contributing to the following objectives: [1] promoting economic recovery through investment, [2] strengthening the international competitiveness of Thailand, [3] speeding up local development, [4] endeavors by industry to form the infrastructure of industrial linkage and to increase the international competitiveness of Thailand. The government also has the following policy: decentralization policy for local areas in order to develop local economy, promotion of the development of skills, technology and innovation, the expected industry for sustainable development (energy conservation, alternative energy, environment friendliness type industrial state Authority Act, IEAT (Industrial Estate Authority Thailand ) manages the Industrial Estate, while the Industrial Park and Industrial Land are developed and managed by the private sector. There are no available lots in Bangkok, Ayutthaya and Samut prakan but one is able to find available lots in areas remote from Bangkok.BOI promoted companies located in IETA approved industrial estate are able to acquire land.	As of January, 2011, there are more than 200 industrial estate/parks developed by the Malaysian government (Economic Development State Corporation, Regional Development Authority, Port Authority, Local Public Authority ). There are also industrial parks managed by private developers. There are sufficient industrial parks. There are also Free Industrial Zones (FIZ) at 18 places. The import duties on imported raw materials, materials, component parts and machinery equipment required for production activities directly are exempted. The procedure for export is simplified. Furthermore, each factory can obtain a license for a bonded factory where there is no FIZ. Such a bonded factory can enjoy the same benefit as the factory located in FIZ. Thereby the company can select the location flexibly where there is FIZ or not. This is the characteristic of investment in Malaysia.
2. Investment, Procedure	Decision on investment, obtaining trade license, opening bank account, registering he company (in BOI) Apply to BEPZA	Decision on investment, registration of locally incorporated company, reservation of lots, Application to BOI Registration of VAT tax payer, concluding Land purchase agreement, permission of construction commencement, approval of using and/or owning land, registration of land certificate, granting numbers of working permit for foreigners, application for individual work permit starting construction and works, transfer of registration of company and VAT tax payer to factory construction confirmation, permission on starting operation stating connmercial operation	r Establishing company, Registration of business, Environment Influence Assessment(EIA), evaluation of appropriate land location, granting manufacturing license, construction approval construction plan, notify the date of commencing construction, temporary permission construction works, registration for electric engineer, approval of resident officer & work permit approval on the import of production facility and machinery, approval on factory designing approval of expansion of factory production capacity, burner reactor & burner facility approval getting license of commercial vehicle and port transport, and certificate of transporting dangerous cargoes.
3 . Preferential Treatment	The corporate tax is exempted 100% for a maximum of 5 years in the case that the company was established after 1st January, 2012: 100% for the first 2 years, 50% for the second 2 years and 25% for the last 1 year.	Preferential treatment is ruled by industry and by area: First zone : 6 provinces in Bangkok capital	Free Industrial Zone (FIZ) is the area which is especially prepared for manufacturing companies, oriented for products whose main purpose is to be exported. In FIZ, exporting companies have benefits for simplified procedures to import raw material, and material component parts, and import duties are exempted. Furthermore, procedures to export products are also simplified. In the area where FIZ are not practical or it not desirable, each company (factory) can obtain the license of a bonded factory (LMW). LMW can be given the same benefit as factories operated in FIZ. No export duty is imposed on the exported products from FIZ and LMW

## Figure 8.14 Economic Zone and Industrial Estate/Parks – comparison of Bangladesh, Thailand and Malaysia

Source: Prepared by the JICA Study Team with reference to JETRO Sensor, website and "Comparison of Business Environment in major Asian Countries".

- The corporate tax in Thailand is 23% in 2012, and 20% in 2013, being low. In projects of designated industries, the corporate tax can be exempted for a maximum of 8 years by approval of the BOI. Depending on the location, industry and individual project, duty free on capital investment goods and materials is accepted.
- Corporate tax in Malaysia is 25% and low. There is an alternative: Pioneer Status (70% of corporate tax is exempted for 5 years) or deduction of investment tax (60 % of capital investment is deducted from the tax on earnings for 5 years) In the factory in FIZ and bonded factories, duty free on the imported materials and parts is applied.
- Preferential treatment in Bangladesh is across the board but in Thailand and Malaysia

various treatments are applied to various industries, various areas and various projects, which are strategic treatments. As far as the export from Bangladesh is concerned, GSP is applied at the import country, which is a benefit in trading to exporting industries in Bangladesh.

- (3) The Analysis of Economic Zone and Strategic Model
  - In general, Special Economic Zones (i.e., Economic Zone)⁹ in developing countries are classified as per Figure 8. 15.

Type of SEZ	Characteristic
Pure EPZ	In this EPZ, only processing for the export shall be approved to mainly foreign investment. Only the enterprises licensed by the EPZ Authority can do business. This type of EPZ is clearly separated from the domestic economy
Complex type EPZ	In this EPZ, there are zones where only the approved exporting enterprises are located (traditional EPZ) as well as zones where any industries, whether they be for export or not, can do business openly.
Commercial Free Zone Free Trade Zone (FTZ)	This is a smaller sized duty free zone surrounded by fences, having warehouse functions for trade, re-export and tranship. Take Colon FTZ in Panama for instance. It is free to sell to the domestic market only if the duty is paid.
Special Economic Zone (SEZ) Free Port	It is a large scale economic zone which includes the industrial area as well as port facility, residential quarter, commercial area and sightseeing & leisure facilities. It provides wider varieties of incentives than EPZ does. In some SEZ, sales to the domestic market is permitted if the duty is payable, but in other SEZ, sales to the domestic market is restricted. In SEZs in China, sales to the domestic market have been restricted traditionally, but recently it is becoming free.
Single Factory EPZ	In this scheme, some preferential treatment in EPZ is given to specified individual enterprises. Here it is not necessary to locate factories in specific areas to obtain incentives or privilege. We can see such examples in Mauritius, Madagascar, Indonesia and Mexico.
Specialized Zone	This type has several examples such as Technology Park, Science Park, Petrochemical Plant Zone, Financial Service Zone, Software and Internet Zone, Airport-based Zone, Tourism Zone, Logistics Park or Cargo Village.

Source: Mitsubishi UFJ Research and Consulting Co., Ltd. (MURC) "The survey report on the needs for yen credit" (Improving the investment environment) 2006

The EPZ in Bangladesh is classified as a Pure EPZ in Figure 8.15 which is the model that is in the early stage of the Special Economic Zone. EPZ attracted FDI as well as domestic investment as a result of pursued cheap costs including labor costs mostly, but it gave smaller impact to the national economy of Bangladesh than expected. The main reason is because there is less linkage with domestic industry and less spread and synergy effects to supporting industries, although in short term it was successful to increase investment in small sized EPZ and employment directly. The government invested in the development of EPZ but unfortunately the investment could not give a stronger impact on the total economy of the country than was expected. That may be caused due to the poor infrastructure of EPZ and unclear target for FDI. On the other hand, the Korean EPZ is a big scale development area that is larger than the aggregated space of the 8 EPZ. It is generally said that the development is delayed due to political reasons. The cost of development is borne by the Korean EPZ



⁹ There are two kinds of words used: Special Economic Zone (SEZ) and Economic Zone (EZ). They are basically the same and in general Special Economic Zone is used more popularly. However, in this report, Economic Zone is used instead of Special Economic Zone.

corporation but it is the opportunity loss from the viewpoint of the economic development of Bangladesh and the National economy.

According to the database of EPZ in ILO, the impact expected in SEZ is classified in the comparatively short term and mid-long term.



Figure 8.16 Classification of Special Economic Zone by industry and by size

Mitsubishi UFJ Research and Consulting Co., Ltd. (MURC) "The survey report on the Source: needs for yen credit" (Improving the investment environment) 2006

Figure 8.17 Expected Impact of SEZ

Impact in short term	Impact in mid-long term				
Secure investment	Technology transfer				
Generate employment	Deepening linkage with the domestic economy				
The accumulation of infrastructure and public services by Public Private Partnership and leveraged capital	Demonstration effect to regulatory reform				
-	Secure the position in global supply chain				
-	Development of strategic industry				

Source: ILO

EPZ in Bangladesh and Industrial Estate / Park are compared and the impact evaluation and expectation to the Economic Zone are summarized in Figure 8.18.

Ilgu	ne o.io ine Ex	pected Direction of	Economic Zone m I	pangiaucsii
Development		Establishing	Automobile,	Electric goods,
industry	△ Lack o ^{Bar}	industrial road Igladesh Imap	parts industry.	parts industry.
Impact	EPZ	RExperention of	natural resource	natural resource
	Entrang	utilizati <b>ggz</b> model	industry, food	industry
Short term	strategy	Human resource	processing	
impact ]	strategy	utilization model		
Investment	○ small size	mid- large size	Large size: cluster of automobile industry, etc.	Large size: electronic & electric industry, etc.
Job creation	• RMG mainly, labor intensive type	oin short term, labor intensive type mainly	large scale, diversification and sophistication of industry	large scale, diversification and sophistication of industry
The leverage between the accumulation of infrastructure & public service and funds	X investment by government	private developer or PPP	government, private developer	government, private developer
【 Mid-long term impact 】				
Technical transfer	Δ	o diversifying industry, technical assistance and human resource development	sophisticating industry, technical assistance and human resource development	sophisticating industry, technical assistance and human resource development
Deepening linkage with domestic economy	X bonded area, less linkage with domestic industry	o bonded area and non-bonded area within EZ	Development of supporting industry, promotion of local contents	development of supporting industry, promotion of local contents
Demonstration effect to regulatory reform	X	0	0	0
Building up position in global supply chain	• Supply chain of Import of raw materials and export of products	Necessary to attract powerful and foreign anchor industry	Assembling industry of Foreign ownership	Assembling industry of Foreign ownership

Figure 8 18 The Expected Direction of Economic Zone in Bangladesh

Source: The JICA Study Team

There are some lessons learned from the comparison with the good practice in Thailand and Malaysia. For the better development of the new Economic Zone, it is necessary to remember and

consider the following:

Government, private sector and academy in good cooperation shall clarify the future picture of strategic industry that Bangladesh directs to develop.

To classify the domestic industry to be developed and the industry to which foreign investment shall be attracted. To create a road map for developing industries taking into account clusters having linkage and synergy between foreign investment and domestic industries.

To select the location for developing the Economic Zone as soon as possible, improving the infrastructure so as to make ready to promote FDI

To plan the target of anchor industries (such as automobile, electric and electronic industries ) that generate big employment. The government and private sector jointly promotes top sales to FDI of such anchor industries in Bangladesh.

Advantageous and preferential conditions shall strategically be proposed to such anchor industries.

#### 8.5.3. The Competitiveness in International Trade

It is attempted to evaluate the competitiveness of exports from Bangladesh by utilizing an assessment index of the "World Economic Forum – Insight Report : The Global Enabling Trade Report 2012 (Reducing Supply Chain Barriers)

(1) Enabling Trade Index

There are 4 kinds of indexes of criteria assessing competitiveness in international trade: they are A. Market access, B. Border administration, C. Transport & communication infrastructure and D. Business environment, being summarized in Figure 9.19.

Index	Market access	Border administration	Transport & communication infrastructure	Business environment
Pillars	Domestic and foreign market access	<ul> <li>Efficiency of customs administration,</li> <li>Efficiency of import-export procedures</li> <li>Transparency of boarder administration</li> </ul>	<ul> <li>Availability and quality of transport infrastructure</li> <li>Availability and quality of transport service</li> <li>Availability and use of ICTs</li> </ul>	<ul> <li>Regulatory environment</li> <li>Physical security</li> </ul>

Figure 8.19Summary of Enabling Trade Index

Source: The JICA Study Team with reference to "The Global Enabling Trade Report 2012"

The Enabling Trade index 2012 shows that Bangladesh is 109th in Ranking out of 132 countries with a score of 3.5 (1-7 levels).

The breakdown is as follows: Market access Ranking (65, Score 4.0), Border administration (Ranking 100, Score 3.3), Transport & communication infrastructure (Ranking 123, Score 2.7) Business environment Ranking (Ranking 95, Score 3.8).

In particular, Border administration and Transport & communication infrastructure are the factors that reduce competitiveness

The factors of Competitive Advantages and Competitive Disadvantage are as follows: Market access

- Domestic and foreign market access:
  - Competitive Advantages are "Complexity of tariffs is low." "Tariff peaks are low." Margin of preference in destination markets is low."

Competitive Disadvantages are "Tariff rate is high.", "Share of duty free imports is less." Border administration

• Efficiency of customs:

- Competitive Disadvantages is "Burden of customs procedure is big."

• Efficiency of import-export procedure:


- Competitive Advantages are "No. of documents to export is less. Cost of export US\$ per container is less."
- Competitive Disadvantages are "No. of days to import is long. No. of days to export is long"
- Transparency of boarder administration
  - Competitive Disadvantages are "Irregular payments in exports and imports. Corruption Perceptions"

Transport & communication infrastructure

- Availability and quality of transport infrastructure
  - Competitive Disadvantages are "Airport density is high. Transshipment connectivity is bad. Paved roads rate is low. Quality of air transport is low. Quality of road is low. Quality of port infrastructure is low."
- Availability and quality of transport service
  - Competitive Disadvantages are "Logistics competence is low. Postal services efficiency is low."
- Availability and use of ICTs
  - Competitive Disadvantages are "Extent of business internet use is less. Individuals using internet is few. Mobile phone subscriptions are less. Government Online Service is less."

Business environment

- Regulatory environment
  - Competitive Advantages are "Business impact of rules on FDI is high. Availability of trade finance is high."
  - Competitive Disadvantages are "There are problems in Property rights, Ethics and corruption, Undue influence, Ease of hiring foreign labor, Prevalence of foreign ownership and Openness to multilateral trade rules"

The most problematic factors for trade

Responses to the research on the most problematic factors are as below:

- Problems for exporting : (in order of descending prevalence )
  - Identifying potential markets and buyers
  - Inappropriate production technology and skills
  - Difficulties in meeting quality/quantity requirements of buyers
  - Access to imported inputs at competitive prices

Problems for importing : (in order of descending prevalence)

- Burdensome import procedures
- Tariffs and non-tariff barriers
- Corruption at the border
- High cost or delays caused by domestic transportation
- High cost or delays caused by international transportation

#### 8.5.4. Competitiveness in global logistics and distribution

Here the International Logistics Performance Index made by World Bank is used for analysis on the competitiveness in global logistics and distribution in Bangladesh. Furthermore, the comparison of lead time in ocean transport (transport days taken) and ocean freight on export among Bangladesh and ASEAN countries are made.

(1) Evaluation on international competitiveness based on "International Logistics Performance Index (Ranking) by World Bank - Doing Business (2011)"

Comparison: Bangladesh and ASEAN 6 countries

Criteria - Customs, Infrastructure, International Shipment, Logistics competence, Tracking & Tracing, Timeliness

Outcomes : The competitiveness in Bangladesh is lower than Malaysia, Thailand and Vietnam and is at an equivalent level to Indonesia, being higher than Cambodia and Myanmar.

#### Figure 8.20 International Logistics Performance Index (Ranking)



	International Logistics Performance Index (Ranking) by World Bank - Doing Business (2011)									
Ranking	Country	I PI	Customs	Infrastruc-	International	Logistics	Tracking &	Timeliness		
Ranking			Oustonis	ture	shipments	competence	racing 3.32 3.8	Timeiiness		
29	Malaysia	3.44	3.11	3.5	3.5	3.34	3.32	3.86		
35	Thailand	3.29	3.02	3.16	3.27	3.16	3.41	3.73		
53	Vietnam	2.96	2.68	2.56	3.04	2.89	3.1	3.44		
75	Indonesia	2.76	2.43	2.54	2.82	2.47	2.77	3.46		
79	Bangladesh	2.74	2.33	2.49	2.99	2.44	2.64	3.46		
129	Cambodia	2.37	2.28	2.12	2.19	2.29	2.5	2.84		
133	Myanmar	2.33	1.94	1.92	2.37	2.01	2.36	3.29		

Source: Prepared by the JICA Study Team with reference to International Logistics Performance Index (Ranking) by World Bank - Doing Business (2011)

#### (2) The comparison of lead time in ocean transport and ocean freight on exports Transit time (Lead time)

Today, with regards to international trade, appropriate inventory control and shortening lead time from the point of receiving order to the point of delivery are the essential targets in order improve the efficiency of the global supply chain. The days taken for transporting cargo from the exporter to consignee by ocean transport may have a big impact on managing lead time.

EU is the major destination of exports from Bangladesh. In westbound trade, Bangladesh is geographically located closer to EU than to ASEAN countries, but practically, ocean transport from Bangladesh to EU takes more transit time than ocean transport from ASEAN countries to EU. This is because in the main stream of the current ocean transport large sized container vessels cannot enter the Chittagong international sea port, where the draft is shallow. Such vessels call only hub ports that are deep sea ports. The small container vessels provide feeder services mainly from the Chittagong port to the Singapore port, where the container is transshipped to large sized container vessels bound for EU ports. (In other cases, the container may be transshipped at the port of Tanjung Priok in Malaysia or at port of Colombo in Sri Lanka.)

In case of eastbound shipment to the US west coast, it takes more transit time in trade from Bangladesh to USWC than the trade from ASEAN to USWC. The transit time from Bangladesh to the US east coast is almost equal to the transit time form ASEAN to USEC.

Thailand, Malaysia, Vietnam have deep sea ports. In Cambodia, a deep sea port is under construction, while a deep sea port is under planning in Myanmar where the improvement on international transportation and lead time may be expected in the future. However, in Bangladesh, there is no concrete and fixed plan to construct a deep sea port.



rigare our comparison of fransie fine (augs)											
То			USE	EC	USV	VC					
From	EU	EU		(US East		(US West		Japan		China	
			Coa	st)	Coa	st)	-				
Bangladesh	30	Α	29	A	27	В	12	В	13	В	
Cambodia	29	В	31	В	26	В	15	В	15	В	
Myanmar	25	В	27	В	22	В	11	В	12	В	
Thailand	26	В	33	В	21	В	8	В	15	В	
Malaysia	23		27	В	21		10		11		
Singapore	22		24		19		8		9		
Vietnam	24		29		18		7		12		
Indonesia	27	В	29	В	23	В	16		15		
China	30		30		12		4				

Figure 8.21 Comparison of Transit Time (days)

Transship port : A: Singapore or Colombo, B: Singapore, Bland is direct service Sources: Prepared by the JICA Study Team with reference to Research Office of Mitsui O.S.K. Lines, Ltd.

#### **Ocean Freight**

Ocean freight from Bangladesh to EU, USEC and USWC is comparatively higher than from ASEAN to the same destination. The main reason is because the cost to the vessels is higher due to longer distances and navigational time as well as additional cost incurred by transshipment at transshipment ports like Singapore. This implies that the exporting industry in Bangladesh has less international competitiveness in Ocean transport costs, also.

Container Freight Rate (2017 Container) (Ont.								
From	То	EU	USEC	USWC	Japan	China		
Banglad	esh	2,300	3,000	3,000 2,140 1,190		880		
Cambod	ia	1,975	2,875	2,015	1,215	855		
Myanma	ır	2,150	3,050	050 2,190 1,39		1,030		
Thailand	1	1,750	2,780	1,740 940		470		
Malaysia	a	1,250	2,520	1,620		400		
Singapor	re	1,700	2,600	1,740	940	580		
Vietnam		1,730	2,590	2,590 1,650		410		
China		1,630	2,570	1,640	810			

Figure 8.22 Comparison of Ocean freight based on cargo origin

Container Freight Rate (20FT Container) (Unit: (2211

Container Freight Rate (40FT Containe							
From	То	EU	USEC	USWC	Japan	China	
Bangla	desh	4,600	3 810	2 730	1 940	1 350	
Cambo	dia	3,630	3 860	2 780	1 990	1 300	
Myanm	nar	3,980	4 210	3 130	2 340	1 650	
Thailan	nd	3,120	3 570	2 200 1 320		850	
Malays	ia	2,910	3 210	2 060		790	
Singapo	ore	3,080	3 310	2 230	1 440	750	
Vietnar	n	3,170	3 330	2 130		630	
China		2,960	3 270	2 110	1 480		

Prepared by the JICA Study Team with reference to the freight data of Source : Drewry Maritime Research Container, Freight Rate Insight (as at March, 2012)

Origin Country	Loading Port	Destination Country	Discharging Port
Bangladesh:	Chittagong	EU	Rotterdam
Thailand	Laem Chabang	USEC	New York
		(US East Coast)	
Malaysia	Tanjung Pelepas	USWC	Long Beach/LA
		(US West Coast)	
Singapore:	Singapore	Japan:	Tokyo
Vietnam	Ho Chi Minh/Cai Mep	China	Shanghai
Indonesia	Tanjung Priok		
China	Shanghai		

Notes: Loading and discharge port in each country in Figure 8.22

(3) Domestic Truck Transport for Exportation in Bangladesh

The distance and transport time of trucks from each EPZ to the Chittagong international sea port (CFS) are shown at Figure 8.28. For instance, the distance from the Dhaka EPZ to Chittagong port is 304 km. It normally takes about 15 hours from Dhaka to Chittagong. Truck transport charge on cargo volume (equivalent to the loadable capacity of 20 FT container) is about BDT 30,000 or US\$365 (US\$1=BDT 82). This cost is almost 1/3 of ocean freight of a 20 FT container from Chittagong to Japan, which is US\$1,190/20FT.

The distance, time and truck charge from the Mongla EPZ or Uttara EPZ to the Chittagong port is 664km - 650km, 48 hours and BDT 62,000, US\$756 respectively. The truck charge is almost 1/2 of ocean freight from Chittagong to Japan.

In addition, various costs and time are incurred for the period from loading cargo onto trucks at factory to shipment of cargo at the port: discharging, stocking, sorting and loading at warehouses, container depots and CFS as well as container dray at the port, documentation for customs and shipment, custom clearance. Efficient control on-time and cost for shipment are key issues in the improvement of supply chain management, which is a part of the international competitiveness of exports in Bangladesh.

EPZ to	Distance	Transport	Truck Freight (Cargo quantity		
Chittagong	(Km)	time	equivalent to 20 F	T container)	
(CFS)		(hours)	Taka/ 20 FT	Taka/40FT	
Chittagong EPZ	3.1	2.5	6,500	9,000	
Karunaphuli EPZ	5.6	3	6,500	9,000	
Comilla EPZ	167	10	22,000	25,000	
Dhaka EPZ	304	15	30,000	32,000	
Adamjee EPZ	255	12	28,000	30,000	
Mongla EPZ	664	48	62,000	67,000	
Ishwardi EPZ	484	30	50,000	55,000	
Uttara EPZ	650	48	62,000	67,000	

Figure 8.23 Distance, Time and Truck freight from EPZ to Chittagong sea port

Notes: Weight limit is 20 Tons/20' & 35 Tons/40' Container. Time required changes depending upon traffic conditions.

Source: Prepared by the JICA Study Team with reference to the data provided by Kintetsu World Express Inc. Dhaka office.

#### 8.6. The potential and common issues/bottlenecks of industry of Bangladesh (Summary)

In Bangladesh there is the potential of development in economy and industry as well as common issues/bottlenecks. However, the strengthening of the international competitiveness of industry in Bangladesh for further development will be seen, if the potential shall be well utilized and the issues/bottlenecks shall be improved and overcome. It is definitely indispensable to make concrete strategies and plans to achieve the development of industry.



#### (1) Strength and Potential in Bangladesh

Market :

- Bangladesh has a big population of 160 million people. The middle income group has expanded rapidly as the economy has grown, causing the enlargement of the consumer market. For instance, mobile phones are prevailing nationwide. The number of super market stores for the wealthy class is increasing in city. The number of cars has been increasing in recent years.
- Investor protection is strong. The legal framework for taking on challenges is efficient. Judicial independence is maintained comparatively. Foreign Direct Investment (FDI) is less strictly regulated than in ASEAN countries.
- Bangladesh is a geopolitically strategic place located between India/SAFTA and ASEAN, the latter of which will see economic integration achieved among member countries in 2015. There could be potential of economic development in Bangladesh if the economic alliances in the region are more activated and achieved well.
- Middle East countries, Malaysia and Indonesia are the same Islamic states as Bangladesh, having a common religion and culture. Those countries will become potential markets for Bangladesh.

Managerial resources in the industries:

- Human resources: Wages in Bangladesh are cheaper than in China, India, ASEAN (except Myanmar). Bangladesh has cost competitiveness in labor wages in labor-intensive industries. There is an abundant labor forces among the young population and Bangladesh can sustain a stable supply of labor. The labor has a diligent and good nature in character generally. In the field of traditional academy, eminent human resources have been provided.
- Capital and investment: Gross national savings is high. Financing through local equity market is well developed. There are dynamism and drive in investment in the private sector. Middle class income is becoming larger.
- There are 7 million Bangladesh people living overseas countries including overseas workers of Bangladesh. If the human networks of overseas Bangladesh people are well organized and utilized, trade promotion and development of industries to those countries will be more feasible.
- Agriculture is the key industry in Bangladesh. Agro processing industries have huge potential, if marketing management and technology makes more progress.
- (2) Weakness and Bottlenecks Among Bangladesh Manufacturing Industries.

The "World Economic Forum- The Global Competitiveness Report (2011-2012)" shows the following: The competitiveness in Bangladesh industry is very low, ranking 108th among 142 countries with a score of 3.7 (1-7 level). Bangladesh runs behind advanced Malaysia (Rank 21, Score 5.08) and Thailand (Rank 31, Score 4.52), following Indonesia (Rank 46, Score 4.38) and late developed Vietnam (Rank 65, Score 4.24) and Cambodia (Rank 97, Score 3.85)

The issues and bottlenecks in competitiveness in Bangladesh industry are summarized as below:

Managerial resources in major industries Human resources and technical talent

- The government has been attempting to change industrial structure from labor intensive industries such as RMG to diversified industries and sophisticated industries. However, in reality, modern manufacturing and light engineering industries such as metal processing and machinery have been under development, while there are few engineers and skilled laborers who are trained systematically in such industries. The technology, the skill and the machinery are old and deteriorated, while low quality products are produced. Modern production management systems are not popular. Quality control management systems are not implemented.
- As to human development, although there are many technological universities, academies and vocational schools in Bangladesh, the material and information



taught there are out of date, while the knowledge and ability of the graduates do not meet the practical requirements of the industries.

• In some cases, it is reported that workers who newly start working are neither well educated nor trained at the elementary school level. This requires the industry to educate new employees with regards to very basic knowledge, which inevitably brings about an invisible additional cost of education.

Quality management system

There are no established quality management systems and there is a shortage in human resources that have enough capacity and knowledge on production management and quality management. The scheme of national standard and the inspection criteria are not well established. There is a lack of testing human resources and testing devices, instruments and equipment both in private sector and institutions.

#### Corporate management & marketing

- Capacity building of the management and middle managers in the industries are also important tasks for industries.
- In particular, those who are capable of carrying out export business and overseas marketing are less than the demand of the industry. Training on overseas trade businesses, overseas marketing and sales are required for upgrading the capacity.

ICT

• Utilization of ICT/software is well prevailed. It is requested to disseminate the use of ICT in the industry, improving the ICT environment so as to meet the sophistication of industry and the development of the service industry.

Financing

- Manufacturing SMEs generally are confronted with shortage of operation funds but it is hard for SME manufacturing companies to borrow loans from the banks.
- The Issues in Infrastructure

Land and utilities

• In Bangladesh, land for industrial use is in shortage. Electric power is not supplied stably due to the shortage. They are the bottlenecks that restrict industrial development. Behind this, it likely that there is bureaucracy in the government. Each organization is separated from each other just like a chimney and there is lack of coordination among the concerned parties. There is less linkage among industrial policy, export promotion policy and National land development plans and policy and infrastructure improvement. The key elements in land development are urban development plans, local development plans, industrial park plans, cluster plans, economic zones, industrial locations, modes and network of transport, electric power supply plans, communication network and the usage & development of agricultural land. There is no official indication on a grand design and road map to a comprehensive national development plan which include all the key elements.

Domestic and international distribution

- Traffic is heavily jammed particularly in cities. Road and railways are deteriorated. The international sea port and International airport are not improved in facility and operation. In view of strengthening competitiveness in exports, there are many disadvantages in domestic distribution: (a) it takes a long time from dispatching export goods from the factory to shipment at the Chittagong sea port. (b) There often occurs cargo damage and loss during domestic transport. (c) Trains in railways from Dhaka to Chittagong often run delayed. One merit of container transport is "integrated land and sea transport" that secures the swiftness and safety. However container land transport is not often used due to bad road conditions and traffic. The merit of container transport is diminished in Bangladesh.
- In the Chittagong sea port, there used to be ship congestion and delays of cargo delivery, because of shortage of warehouses and yard facilities when the vessels and cargo began to increase sharply. Recently, however, port conditions have been improved owing to the effort to improvement by the port authority.

• The international port of Chittagong is a river port, where the draft is shallow. Only small vessels can enter the port for loading and discharging cargo. Consequently, the export containers are loaded on small feeder container vessels for transship at Singapore or Colombo on larger vessels for final destination at EU, USA and Japan & China. This transshipment service requires longer periods of transport and higher sea freight costs. The larger vessels are also required for carrying coals and/or LNG in order to carry the cargo at lower freight costs. In the mid-term, it is necessary to cope with improving road and sea port operations as well as dredging the draft at the port. In the long term, from economical viewpoints, it definitely is necessary to construct a deep sea port near the power station in case that a large thermal power station should be constructed.

#### Infrastructure and Economic Zone

• At the free port, an economic zone is designed and developed in integrated manners with the international sea port, waterfront industrial zone, access road and utility. Sometimes residential area, community facilities/amenity and even tourist facilities are constructed adjacently. There is neither vision nor plan in Bangladesh that is being indicated to the public.

#### Internet/ communication environment

• The internet/communication environment has been improved and has prevailed in Dhaka but it is still poor in local areas. This widens the gap between urban areas and rural areas. Basically the internet can be used as a tool to minimize information gap among the areas and to develop rural areas, which is not utilized at the right place in the right way. The government hoists the vision of "E-government". However, there is a discrepancy between local development policy and the vision of "E-government".

#### The issues on policies and institutions

Capacity of government administration and industrial policy

• There are a lot of small units in government organization, which are independent and separated. There is a lack of coordination and adjustment among small units due to bureaucracy and vertical hierarchy. This reduces efficiency in administration and makes it easy to cause less transparency. Key issues would be how to improve the administration function toward securing total optimization and transparency. There are opportunities in which the government and private sectors talk about industrial policy but it is said that the talks are not well reflected to the outcomes.

#### FDI policy and Economic Zone development

- FDI policy and Incentive policy in Bangladesh tend to be uniformed and conformed. It will be foreseen that keen competition in attracting FDI among other LDC starts soon. In consideration of such conditions, it becomes the key factors to win the games whether strategic decision is made flexibly: for instance, special offers for treatment are made to the potential FDI of specific anchor industries.
- There are no available lots for sale in EPZ which are preferable for FDI in export oriented factories. The development of EZ takes time and proceeds slowly. Even if foreign investors come to Bangladesh to search investment opportunities, it is not easy to find suitable land and make decision regarding investment. Under the circumstances, overseas investors may take other alternatives for FDI. If this happens, it becomes an opportunity loss for Bangladesh. It is necessary for Bangladesh to show a clear vision for developing EZ and to take necessary steps for early achievement.
- The case of the suspended development of the Korean EPZ is a conflict of controversy between the government and a foreign private developer, and the real reason is unknown. In the Economic Zone, the government expects increased development by the private sector or PPP. However, invisibility, in the case of the Korean EPZ, confidence and trust in the government will be lost, spoiling investment motivation of foreign investors.
- The speed of development of EZ is very slow. Although the Economic Zone Act was



enacted in August, 2010, the Economic Zone Authority wasn't set up until November, 2011 more than 1 year later. The Bangladesh Economic Zones Regulations 2011 (DRAFT) was made and approved by the working level of the government but it still has not been officially decided. The detailed regulations and other information are unknown. Under the circumstances, it is difficult to promote FDI to EZ development.

- The tax holiday system is similar to Malaysia and Thailand. But the corporate tax rate in Bangladesh is higher than ASEAN countries. The withholding tax rate on oversea dividends and VAT rate are also higher. In this point, the attraction of Bangladesh is small.
- The One-Stop-Service of BOI is insufficient and is not as convenient to investors as the One-Stop-Service of MIDA in Malaysia.
- In Bangladesh there is no bonded factory except some RMG industry outside EPZ. Government policy is rigid.

Export promotion and Smoothening of trade

- It is expected that the private sector together with the government will work hard on developing overseas marketing to promote exports but the function, staff and capacity of the Export Promotion Bureau are insufficient.
- Import duties are high. The tariff commission in charge of making recommendations on tariff policies as well as research and study but it is the custom office that decides on tariffs. It is not the institutional scheme by which tariffs are determined in good coordination among relevant government organizations such as the ministry of finance/revenue, authority/customs office, the ministry of industry and the ministry of commerce from the viewpoint of the national economy as a whole.
- In the process of industrial development in Malaysia and Thailand, FDI anchor industries together with the development of supporting industries have played an important role to contribute to economic development. However, in Bangladesh, such policies and plans have yet to be seen to attract FDI of the anchor industries and to develop supporting industries. Under the global competitive environment, it is indispensable that the government and private sector work together to take strategic action to attract FDI. Otherwise, it will be difficult to succeed in attracting good FDI.





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## 9. Conclusion and Recommendation

## 9.1 Proposal for Long-term Development Strategy in Exploitation of Private Sectors

In the vision and strategy for long-term development of Bangladesh (Vision 2021, Outline of Perspective Plan: OPP), Bangladesh aims to join the middle income countries and thus have set up an objective to raise the manufacturing industry's contribution rate to GDP from 18% to above 30 % by 2021 while promoting industrialization. To achieve its goal, Bangladesh needs to make good use of its biggest strength, cheap and abundant labor, improve qualities and technologies by adopting foreign capitals actively, and strengthen international competitiveness by strengthening their weak inter-industrial relationship (backward and forward linkage) and improving added value and productivity. Meanwhile a concrete strategy to shift the massive population of farmers to manufacturing industry is expected.

In this chapter, the JICA Study Team will refer to the process of the rapid industrialization in South-East Asia after 1980s and will consider the development scenario of Bangladesh by dividing strategic industries into three models; "utilizing domestic resources" model; "importing and processing raw materials" model; and "knowleged based industry" model.

## 9.1.1. Consideration from Industrial Policies of ASEAN Countries

First, as we compare per capita GDP transition of three developed countries among ASEAN (Indonesia, Malaysia, and Thailand) and that of Bangladesh from 1980 to 2011, while Bangladesh's GDP has grown 3.14 times as high, it has grown 5.35 times in Malaysia, 7.75 times in Thailand, and 6.0 times as high in Indonesia. Although the above three countries were on the decline temporary from late 1990s to early in 2000s due to the Asian economic crisis, their national income has grown greatly because of the economic growth accompanied with the rapid industrialization as we see it in long-term.





Source: IMF- World Economic Outlook Databases

	1980	1985	1990	1995	2000	2005	2008	2011
Malaysia	1,812	2,026	2,432	4,358	4,030	5,211	8,091	9,700
Thailand	696	751	1,521	2,826	1,983	2,825	4,300	5,394
Indonesia	585	563	634	1,038	800	1,291	2,212	3,509
Bangladesh	216	207	264	309	334	399	528	678

Figure 9.2 Per Capita GDP Transitions of 3 ASEAN countries and Bangladesh (1980-2011)

Source: IMF- World Economic Outlook Databases

As it is shown in Figure 9.2, the present per capita GDP of Bangladesh resembles that of Thailand in 1980. In 1980s, Thailand chose automobile, petrochemical industry, processing of agricultural products, and supporting industries (especially metal molds, jigs, and forging sections) and Malaysia chose rubber, palm oil, wood working, electrical machinery, electron, automobile, petrochemical industry, metalworking, steel, and garment manufacture as their strategic industries to strengthen competitiveness by giving them incentives. In 1990s, they aimed at strengthening competitiveness with the support for clusters and SMEs and industrial restructuring appropriate to the globalization. Meanwhile, from late 1980s, Indonesia has conducted a series of foreign capital introduction policies by relaxing regulations for foreign-owned financial institutions, settlement of bonded factories and warehouses, and establishment of FTA with Batam island to strengthen export promoting policy. Thailand and Malaysia have intended to shift to tourism and service industry while pursuing advanced added values after 2000s.

Figure 9.3 Changes	of Industrial	l Policies of Mal	laysia and Th	ailand (1980s-2000s)
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Country	1980s (Selective Industrial Policy)	1990s (Strengthening Competitiveness due to the Globalization)		2000-2010 ( Shift to Advanced Added Value and Service Industry )		
Malaysia	IMP1 (1986-95): Development of 12 IM	? strategic industries P2(1996-05): Supp	ort for clusters and S IMP3(06	MEs i-20): Developm	ent of Service Industry	
Thailand	Development of Petrochemical Industry, P Agricultural Products, and Industry (especially metal m forging sections)	Automobile, Processing of d Supporting holds, jigs and	Restructuring industries ar for clusters ar	of 6 nd support nd SMEs	Niche Strategy (automobile, fashion, food products, tourism, and software)	

Source: Prepared by the JICA Study Team based on various documents

In order to decide on a future long-term industrial development strategy for Bangladesh, the industrial policy of the above three countries especially from 1980s to 1990s could provide useful reference. In particular, selecting strategic industries, which would be the base of industrial development, and giving them incentives while attracting foreign capitals for them are very critical. In addition, improving productivity of SMEs, supporting for clusters to strengthen inter-industrial relationship, and export promoting policies such as settlement of bonded factories and warehouses will be key factors of development.

## 9.1.2. Consideration from Industrial Development Pattern of East Asia

Secondly, as we overlook the future industrial development pattern of Bangladesh, the JICA Study Team has taken a close look at the pattern of East Asia by referring to 2005 White Paper on International Trade published by METI. METI has aimed at reflecting characteristics of industrial structure of East Asia, and has conducted a versatile analysis by spreading international competitiveness in two dimensions with intermediate goods and final goods as the axis. Figure 9.3



Mitsubishi UFJ Research and Consulting

explains the way to look at "international competitiveness index chart" which is a graph that has put competitiveness index of intermediate goods on the transverse axis and final goods on the vertical axis. First, industries opening from domestic supply utilize cheap labor and gradually display its strengths among the assembling part and then shift to assembling production model by importing intermediate goods and exporting final goods. Thereafter, they obtain competitiveness not only in final goods but also in intermediate goods due to the improvement of technology level and grow into a domestic integrated production model with international export competitiveness in both intermediate and final goods. However, once they reach maturity, they lose their competitiveness in the assembling part because of the increase of wages. Then they begin to specialize in the more capital-intensive production of intermediate goods excess imports, and they will lose international competitiveness on the chart. In other words, as it is shown in Figure 9.4, they are considered to follow the clockwise process of domestic supply model; from the 3rd quadrant to the 2nd and from the 2nd quadrant to the 1st and to the 4th; as the industry ripen.

Among the present industries of Bangladesh, garment industry belongs to the second quadrant, the assembling production model, and has headed for the integrated production model. Yet most of the other industries remain in the 3rd quadrant, the domestic supply model. For instance, Japanese garment industry's competitiveness in not only final goods but also in intermediate goods has weakened and it has gotten closer to the 3rd quadrant from the 4th, since the industry is in its final stage of development. As if they are following this, final goods competitiveness of Taiwan and North Korea has decreased and Indonesia, China, and Thailand has gotten into the 1st quadrant. These flows have embossed the dynamic change of complementarity of garment industry that proceeds in the whole East Asia. In case of South Asia, while India remains in the 2nd quadrant and gradually drops its competitiveness in cost, Bangladesh has maintained the highest competitiveness among the area in final goods of middle and low-grade clothing. Nevertheless, it does not have competitiveness in intermediate goods since it relies on importation for intermediate goods like textiles. The future issue is how to call in foreign capitals to the upper stream parts like threads and textiles and to strengthen international competitiveness.

Yet again, industries other than garment and fabric industry and some exporting industries of leather and shoe industry remain in the  $3^{rd}$  quadrant, the domestic supply model. Therefore, the future issue will be how to improve productivity and quality to strengthen international competitiveness and to shift to the  $2^{nd}$  quadrant.







Source: METI, 2005 White Paper on International Trade

# 9.1.3. Positions of Major Industrial Competitiveness and Medium to Long-Term Strategy to Strengthen Competitiveness

As it has been mentioned in 6.5, the JICA Study Team has categorized the major industries of Bangladesh in to three models to analyze issues for each type of industry; 1) "utilizing domestic resources" model; 2) "importing and processing raw materials" model; and 3) "utilizing advanced human resources" model. Figure 9.5 is based on industrial SWOT of each industry, which is mentioned in chapter 6, and it demonstrates the relative image of the competitive positions for each industry. It shows international competitiveness of products on the vertical axis and share of exporting market on the transverse axis. To repeat, most of the industries except RMG, leather and show industry, and pharmaceutical industry, still belong to infant industries. Therefore, strategies and supporting measures to shift them to growth industries with combined efforts of the government and private sectors will become necessary.





Figure 9.5 Positions of Major Industries in Bangladesh

Souce: Prepared by the JICA Study Team based on various documents and interviews

In addition, the JICA Study Team has organized medium to long-term strategies for Bangladesh to strengthen its industrial competitiveness for each industries cased on various analysis in chapter6 from the following viewpoints: 1) improvement of quality and technology; 2) procurement of raw materials; 3) cost competitiveness; 4) sales expansion; 5) human resource development; and 6) improvement of financial access.

The "utilizing domestic resources" model (processing of agricultural products, leather and shoe industry, and furniture industry) is important for Bangladesh with little resources to utilize them and capture an opportunity to expand domestic market, and launch into foreign markets. In particular, mango processed products which the JICA Study Team took up in chapter7 have enough quality and price competitiveness for the international market, though they have missed the chance since their manufacturing capabilities are not sufficient. To improve their manufacturing capabilities in the future, they need to improve quality and productivity by adopting modern facilities while lowering rejection rate of raw materials through maintenance of distribution facilities such as cold storage. Moreover, since there are many intermediaries who don't directly contribute to improvement of the product's value addition, optimization of business process is also an important issue. On the other hand, for sales expansion to new foreign markets, the government needs to set up target markets for each product and support to decide entry strategy through EPB as the preliminary step to construct foreign distribution network. For human resource development, Bangladesh needs to train foreign business workers, managers, and skilled workers comprehensively. Especially for the skilled workers, it needs to conduct a job-training program with the support of BITAC so that they can acquire skills needed in industrial areas and clusters where EPZs and economic zones are located. As a long-term strategy, it needs to establish its own brand image by improving not only qualities and marketing skills but also packages and designs.

Next, improvement of productivity and quality is necessary for the rise of competitiveness in "importing and processing raw materials" model (shipbuilding, light engineering, plastics, ceramics, and home textile industry). As the JICA Study Team stated in chapter7, in the domestic market of foundry, Bangladesh has a relatively high cost competitiveness compared with foreign products including Indian products and has a strong competitiveness in its domestic market. However, because the enterprises' production items are similar, price falling pressure from



competition has been getting stronger and stronger. To look to an export expansion of foundry industry in the future, improving technologies by adopting induction furnace is needed. Induction furnace will enable the manufacturers to produce product with high quality and intensity and to correspond to automobile components, which have high added values. In addition to the above strategies, strengthening of backward linkage by development of materials industry like steel and petrochemical industry is in need as a long-term strategy. Moreover, within the sales expansion, strengthening the linkage between big enterprises and SMEs is especially important to establish a stable subcontract production system.

Finally, for the "utilizing advanced human resources" model (ICT, software, and pharmaceutical industry), the long-term issue is expansion of international communication line and communication line to the country side and new drug development through expansion of R&D. Advanced human resource training at exclusive schools and universities for pharmaceutical industry is also needed. In addition, as India has conducted, establishment of an incentive system to promote repatriation of Bangladeshis working in those fields who live outside the country would be also very crucial. For the pharmaceutical industry, Bangladesh needs to relax the restriction of offshore borrowing, which is practically restricting deployment of generic drugs to developed countries.



Industry Model	Medium-term Strategy (3-5 years)	Long-term Strategy (7-10 years)
	<quality and="" technology<="" th=""><th>ogy Improvement&gt;</th></quality>	ogy Improvement>
	Quality improvement by adopting modern machines	Creation of original brand and deign
	Strengthening quality standard certification system	
	Quality improvement of raw materials by introducing cold chain	
	Improvement of security and environmental technologies	
	(especially energy conservation and draining)	
	Procurement of F	aw Materials>
	Output expansion of agricultural products by improving productivity	Rationalization of domestic distribution system of raw materials
	Security of superior bides	strengthening cost competitiveness through promotion of
	Cost Compa	titiveness
"Utilizing Domestic Resources"	Cost reduction by improving productivity	Rationalization of domestic distribution system of raw materials
(Agro-processing , leather/shoe,	Introduction of cost managing system	
furniture)	Reduction of import tariff for raw materials	
	<sales exp<="" td=""><td>ansion&gt;</td></sales>	ansion>
	Improvement of market research ability	Establishment of foreign distribution network
	Decide strategies to launch into new markets	
	Strengthening linkage of big enterprises and SMEs	
	<human resource<="" td=""><td>Development&gt;</td></human>	Development>
	Training of foreign business workers	Deployment of training centers on a country base
	Training of managers	
	Training of skilled workers	
	<strengthening f<="" of="" td=""><td>inancial Access&gt;</td></strengthening>	inancial Access>
	Long-term and low interest financing system for investment capital	Establishment of credit guarantee program for SMEs
	Expansion of export and import financial systems	T
	<quality and="" technology<="" th=""><th>bgy improvement&gt;</th></quality>	bgy improvement>
	I echnology improvement mrough arritition with foreign firms	Creation of original brand and deign
	Quality level improvement of foundry by introducing electric furnace	
	Strengthening quality standard by establishing a classification society	
	Procurement of K	aw Materials>
	Diversification of suppliers by strengthening information gathering	Promotion of materials industry
	Diversification of suppliers by strengthening information gautering	(such as steel and petrochemical industries)
	between big enterprises and SMEs	(such as steel and performentie a maistices)
	<cost competition<="" td=""><td>titiveness&gt;</td></cost>	titiveness>
	Cost reduction by improving productivity	Rationalization of domestic distribution system of raw materials
"Importing and Processing Raw	Reduction of import tariff for raw materials	Strengthening cost competitiveness through promotion of
Materials" (Shipbuilding, Light	Introduction of cost managing system	backward industry
Engineering, Plastic, Ceramics,	Expansion of incentive system for imported raw materials tariff	
and Home Textile)	to export	
,	<sales exp<="" td=""><td>ansion&gt;</td></sales>	ansion>
	Entry strategies for new markets	Establishment of foreign distribution network
	Improvement of marketing research ability	
	Strengthening linkage of big enterprises and SMEs	
		Development>
	Training of foreign business workers	Deployment of training centers on a country base
	Training of managers	Expansion of human resource by promoting repatriation
	I raining of skilled workers	of foreign high skilled numan resource
		Establishment of endit succession many for SMEs
	Expansion of export and import financial systems	Establishment of credit guarantee program for SMEs
	Cousity and Technok	agy Improvements
	Quality security by introducing pharmaceutical managing system	Expansion of international telecommunications line
	Quality security appropriate to quality standard of OPF market	and communication lines to the country sides
	Product development appropriate to the quality level	Development of new drugs by expanding R&D
	of rising markets	
	<procurement f<="" of="" td=""><td>Raw Materials&gt;</td></procurement>	Raw Materials>
	Domestic production of bulk drugs (API)	Promotion of backward industry
	<cost compe<="" td=""><td>titiveness&gt;</td></cost>	titiveness>
	Cost reduction by improving productivity	Strengthening cost competitiveness through promotion of
	Introduction of cost managing system	backward industry
"Advanced utilizing of Human	Sales Exp.	ansion>
Resource"(IT, Software, and	Entry strategies for new markets	Foreign exportation of API
Pharmaceutical Industries)	Matching with foreign IT engineers	Developments
	<hr/>	Development>
	i raming or foreign business workers	Deproyment of training centers on a country base
	I failing of fillingers	of foreign high skilled human resource
	managing system	or foreign nigh skillen nuthan resource
	Institutional development of IT engineers	
1	<strengthening f<="" of="" td=""><td>inancial Access&gt;</td></strengthening>	inancial Access>
	Cancellation of restrictions of buying out foreign pharmaceutical	Establishment of credit guarantee program for SMEs
	enterprises	
	,	1

Figure 9.6 Medium to Long-Term Strategies to Strengthen Competitiveness (by Industrial Models)

Source: Prepared by the JICA Study Team thorugh various sources and interviews



### The Trinity Model of Industry, Investment, and Trade

As it has been mentioned in chapter8, strategic and thrust industries which receive priority are not consistent among industrial policies, export policies, and investment policies in Bangladesh. Yet, to realize the medium to long-term strategies for industrial development, industry, investment, and trade need to become a trinity and conduct a coherent policy as the chart below.



# Future Stepwise Industrial Development Strategies and Two Wheels Model of Domestic and Export Business

As mentioned earlier, industries in Bangladesh other than RMG industry and some parts of export industry of leather and shoe, are mostly the domestic supply model. Therefore, their future medium to long-term issues would be technology transfer and improvement of productivity and quality by adopting foreign capitals, improvement of marketing, and strengthening international competitiveness of final goods by training skilled workers. For longer term issues, promotion of materials industry such as steel and chemistry, expansion of industrial linkage by developing clusters, promotion of supporting industry, and strengthening competitiveness in intermediate goods by deepening financing are the issues and it needs to shift to the integrated model.





Source: JICA Study Team

The above stepwise industrial development model is a model based on time axis and international competitiveness that simplifies the shift from the labor-intensive model to labor-intensive + capital-intensive model. As we see market as the axis, domestic and foreign market need to correspond simultaneously as two wheels of the car when expecting a rapid expansion of the middle income population which is now said to have 30 millions. In that case, the most important factor for private sectors of Bangladesh to strengthen competitiveness and penetrate in the domestic market and to open up the global market, is the **effective adoption of foreign investment.** As it has been pointed out in chapter 8 and the foregoing paragraph 9.1.1, developed ASEAN countries like Thailand, Malaysia, and Indonesia have succeeded to make a virtuous cycle to improve their competitiveness and expand exportation while expanding domestic market accompanied with the improvement of GDP by adopting an invitation policy for foreign capitals after 1980s.

Therefore, as this report has shown in the value change analysis, intending improvement of distribution system for both internal and external demand and improvement of productivity and quality is expected for products like agricultural processing product and foundry products, whose inside and outside shares are expanding. At the same time, Bangladesh needs to strengthen its implementation system for hard infrastructures such as; industrial sites, electricity, gas, water, road, railways, and harbors; special economic zone, one-stop service, speed up all sorts of license procedures, and strengthen soft infrastructures like development of industrial human resource to strengthen its competitiveness.



Figure 9.9 Two Wheels Model of Domestic and Export Business

#### 9.2. Arrangement of Issues to Realize Long-term Strategies and Proposal for Action Plans

The JICA Study Team has organized issues for both private sectors and government in figure 9.10 of the following paragraph by setting big, medium and small categories. For the large category, it has been provided 4 sections; management ability of enterprises; industrial linkage; infrastructure; and policies and systems. For the medium, it shows 17 sections; development of industrial human resource; technology and quality; marketing; cost; financing (capital and financial affairs); security and environmental technology; information system; industrial linkage; land; utility; transportation; communication; industrial policy and system; investment policy and system; trade policy and system, education; and others, and it shows 40 sections for the small category. In addition, this report has divided the issues and bottlenecks into 3 levels of priority as S, A and B, and highlighted the highest the issues and bottlenecks in the highest level, S. Moreover, each issue is categorized into medium-term and long-term issues and is arranged actions that the government

Source: JICA Study Team

and donors need to work on preferentially.

Based on the past arguments and the above arrangement, strength and weakness of overall investment climate of Bangladesh can be summarized as in the followings:

#### <Strength and Potentials of Bangladesh in Investment Climate>

- The first strength is the cheap and abundant labor. Wages in Bangladesh are generally cheaper than those of China, India, and ASEAN countries, thus Bangladesh obtains cost competitiveness among labor-intensive industry. In addition, the labor population is young so they have strength of a long-term stable supply of labor.
- The second strength is the high potential domestic market. As mentioned earlier, the population of Bangladesh exceeds 160 million people, and it has become a huge market with the expansion of middle income people and their consumption due to its economic growth. In particular, accompanied with income improvement, expansion of markets will be expected in such consumer products area as processed agricultural product, automobile, motorcycle, mobile phone, and retailing.
- The third strength is the existence of **domestic resources that can be procured at low cost**. Especially for processed agricultural products, Bangladesh has superiority that they can procure raw materials abundantly inside the country. In addition, in metal processing industry such as foundry, Bangladesh has strength to procure scrap irons abundantly and cheaply from broken ships since ship breaking industry is popular in Bangladesh.
- The forth strength is the networking power of overseas workers. About 7 million overseas workers are said to be actively involved in Bangladesh, and since there are some skilled workers and entrepreneurs in the areas such as IT and automobile component industries, development of trade, investment, and business will be possible by using their network.

#### <Weakness and Problems of Bangladeshi Investment Climate>

- The first weakness is the bottleneck of infrastructure, especially the chronic lack of electricity caused by the shortage of energy, and shortage of serviced industrial lands. Difficulty of new connection to national grid has been a major barrier of stable production. Power cuts from April to October; with the highest demand of electricity; have been lowering productivity. In addition, EPZ between Dhaka and Chittagong is full and serviced industrial sited are lacking at this point. Although Bangladeshi government has decided on development of SEZ, it needs to develop as quickly as possible.
- The second problem is **the low quality and productivity of domestic industries.** Although the core of manufacturing industry is supporting industry, namely machinery and metal material and processing (moulding, machining, junction, and heat treatment, etc.), they have not been developed in Bangladesh, thus improvement of technology and productivity, which are the bases of these industries is needed. In addition, Bangladesh needs to improve its standard specification since industrial standards and quality levels have not reached the global standard. Moreover, because most of the enterprises that are involved in supporting industry are SMEs, human resource development to improve productivity and quality of SMEs is crucial.
- The third weakness is the underdevelopment of industrial cluster that is supposed to deepen industrial linkage. There are no medium-term master plans for Bangladesh to develop industrial clusters in processing of agricultural products and supporting industries (foundry industry), which need to be strategically developed. There are no concrete supporting plans as well.
- The fourth is the weakness of trade promoting systems. EPB is lacking marketing strategies (both product-based and market-based) and capacity to gather various information of export markets. In addition, there are many operational and institutional issues such as the Duty Drawback and bonded factory system for promotion of export for promising industries other than RMG.

#### <Proposal for Action Plans>

Based on strength and weakness in investment climate mentioned above, the JICA Study Team proposes action plans for Bangladeshi government to catalyze and facilitate dynamic development



of private sectors as follows:

### 1. Maintenance of Infrastructure to Improve Investment Climate

Due to the lack of industrial sites, inferior infrastructures of transportation and distribution such as roads, railways, harbors and lack of electricity and energy have impeded industrial development, immediate maintenance for these infrastructures and reduction of the bottlenecks are necessary.

## 2. Strengthen Soft Infrastructure to Improve Quality and Productivity

Bangladesh needs to improve its industrial and examination standards among BSTI, and strengthen examination system by keeping machines in repair and improving ability of the staff. In addition, it needs to strengthen the training system of industrial human resource by servicing equipments of BITAC and improving ability of the staff. Moreover, it needs to conduct training of the presidents of SMEs and capacity building of institutions to improve productivity.

## 3. Establishment of Industrial Clusters

Based on industrial policies, Bangladesh has to draw up a master plan for development of industrial clusters. Especially for industries with high priority such as agro-processed products and foundry industries, it needs to develop infrastructure such as industrial estates and human resource while formulating cluster development master plan.

## 4. Strengthening of Trade Promoting System

Improvement of incentive system and operation for export promotion other than RMG is urgently needed. In addition, while conducting capacity building of EPB to support export marketing for SMEs, it needs to decide an action plan for strategic expansion of export goods (including strategies to strengthen trade linkage with overseas workers).

## 5. Others (Environmental Technology)

Legislation to disseminate environmental technologies of enterprises such as energy conservation, effluent treatment, waste disposal, and recycling is needed. These technologies can be demonstrated and disseminated through Economic Zone.



	Large Category	Medium Category	Small Category	Issues and Bottlenecks for Industrial Promotion, Security of International Competitiveness	Priority Level	Long or Medium Term	Actions that needs to be worked on by the government and donors
		Dev'lmt of industrial	Skilled Workers	Lack of skilled workers, need of improvement of skills	S	Medium	Establishment of training schools and BITAC appropriate to the needs of industrial context
		resource	Managers	Improvement of management skills	S	Medium	Strengthening of training to improve managing skills
		Tech'gy and	Producti- vity	Low quality and productivity due to the hackneyed technology	S	Medium	Introduction of modern facilities and efforts to improve productivity
		Quality	Quality Mgmt	Weak quality managing technology	S	Medium	Development of quality managing workers
			Strategy	Lack of ability to decide marketing strategy	S	Medium	Strengthening of training to improve marketing ability
	rprises	Marketing		Lack of ability to construct foreign distribution network	Α	Long	Messaging of information about foreign markets by EPB and strengthening consulting ability
	ty of Ente		Trade	Lack of human resource, know-how, and knowledge of export marketing	S	Medium	Strengthening training ability of foreign marketing workers by EPB
ctor	nt Capaci	Cost	Procure- ment of Raw Materials	Weak backward linkage, high cost because of the lack or domestic raw materials	Α	Long	Promotion of materials industry
Private Sec	Managemer	Financing	Fund raising	Weal capital power to expand investment, difficulty of fundraising due to the high interest	В	Long	Establishment of financial institution specialized in SMEs. IMF's project is now conducted, in JICA's project will be conducted
		Security and	Work Safety	No spreads of work safety technology among SMEs	S	Medium	Strengthening of monitoring and regulations
		Environ- mental Tech'gy	Environ- mental tech.	No introduction of energy conservation, draining, and waste disposal	S	Medium	Strengthening of monitoring, Establishment of plants for reclaimed waters and renewable energy
		Info. System		No maintenance of information infrastructure inside enterprises, lack of system workers	В	Medium	Development of IT workers. JICA's plan will be implemented.
			Cluster	Weak cluster, industrial cluster	S	Long	Deciding action plans for cluster development
	ustrial ıkage	age Industrial	Linkage	Weak linkage between export and domestic industries	S	Long	Strengthening linkage by developing SEZ
	Ind Lit	Linkage	Supporting Industry	Lack of development of foundry, metal molding and molding	S	Medium	Affiliation with foreign firms, technology introduction., and capacity building of technology centers.
		Land	Industrial Site	Lack of industrial sites	S	Medium	Urgent development of SEZ
or		Utility	Electricity & Gas	Unstable supply	S	Long	Development of new gas field, establishment of thermal power plant, development of renewable energy
nt Sect	icture		Water & Waste Water	Lack of industrial water, no maintenance of effluent treatment	S	Long	Establishment and promotion of plant for reclaimed water
ernme	nfrastrı	Transpor- tation	Roads and Railways	Weak transportation, inefficiency of transportation	S	Long	Maintenance plan for railways and road expansion in Dhaka and Chittagong
Gov	In		Int'l harbors	inefficiency of loading, big ships are unable to entry due to the shallow ports	S	Long	Establishment of deep water ports.
			Int'l Airports	Lack of ability of airports and facilities.	S	Long	Expansion of Dhaka airport

Figure 9.10 Issues for Bangladesh to Realize Industrial Development and Actions that need to be worked on by the Government and Donors

Problem of operations of

			service and freight transport			
		Capital Traffic	Serious traffic jam, huge	S	Long	Maintenance plan by JICA (MRT establishment and so on)
		River Traffic	No ability to complement weak transportation of roads and railways	A	Long	Deciding expanding plans for river transportation
	Telecomm- unication	Internet	No supply of broadband and high speed internet	А	Long	Expansion of international communication lines and communication lines for the country side
			No grand design for industrial promotion, roadmap, and concrete strategies	Α	Medium	Deciding grand design for industrial promotion and roadmap
		Policy	No consistency and synergy of industrial policy and others	А	Medium	Unification of industry, investment, and trade policies
			Lack of national land development plan and plans for industrial location	А	Medium	Deciding national development plan and plans for industrial location
	Industrial policy and	Standard Specifica- tion	Industrial standards cannot correspond to global standard, insufficient examination system	S	Medium	Improvement of ability of BSTI, security of workers, maintenance of examination equipments, preparation of funds
	Systems	SME Promotion	No comprehensive policy and institution for SMEs	S	Long	Establishment of comprehensive policy deciding institution for SMEs, organizing missions and functions of SMEF and BSCIS
			No linkage program between big enterprises and SMEs	S	Long	Deciding linkage program
			Weak management ability	S	Long	Development of BDS, supports for management ability improvement
utuons		Industrial Cluster	No training policy for industrial clusters	S	Medium	Deciding training and distribution plans for agricultural products processing industry and foundry industry
id Instit		Investment Incentive	Retreating of priority measures among EPZ	А	Medium	Review of priority measures by referring to developed ASEAN countries
olicy an		Export and Processing Zone	Small linkage with domestic industries	А	Medium	Make a vision and roadmap about linkage of SEZ and domestic industry
Pc		Investment Attraction	No maintenance of attracting system for anchor industry	S	Medium	Capacity building to improve investment attracting ability of BEZABOI
	Investment Policy and System	SEZ	No efforts on foreign capital attraction to develop special words	S	Medium	Early establishment of SEZ system and work on concrete independent actions to attract foreign capital
		OSS	Insufficient operation because of the exceptions	A	Medium	Improvement of one-stop service. IMF is planning to establish an electric application system among SEZ.
		Foreign Investment	No appropriate support for industries that need to be promoted to foreign capitals	А	Medium	Review and approval of strategic FDI of important industries
	Trade Policy and System	Trade Policy	High import tariff policy	A	Medium	Review of import tariffs for raw materials among important industries
			Insufficient functioning of incentive system	S	Medium	Review and expansion of bonded factories and warehouses and import tariff returning system
		Export Promotion	Lack of detailed growth strategies foe priority industries	S	Medium	Deciding strategies for priority industries (product-based and market-based)
			Lack of information about exporting markets	S	Medium	Expansion of information gathering ability of export
				N		markets through capacity



WBA World Business Associates Co., Ltd.

						building of EPB
		Trade Facilitation	Complicated and time-consuming procedure, non-regular costs	A	Long	Simplification of export and import procedures, electronization of export and import reporting procedure, establishment of national single window
	Education	Primary and Secondary Education	Low education level of unskilled workers and lack of basic knowledge	В	Long	Improvement of school rate, enhancing educational content
		Higher Education	Lack of industrial technical schools, low education level	А	Long	Expansion of polytechnic facilities, improvement of educational curriculum

#### 9.3. **Recommendations for JICA's Future Cooperation Programs and Projects**

The JICA Study Team proposes future JICA's private sector development interventions through the following technical cooperation as well as financial cooperation programmes, aiming at solving the major problems that are explained in the previous section.

- (1) Economic Zone Development Support Program to Improve Investment Climate Master Plan and Feasibility Study (Development Plan Study Type Technical Cooperation) Infrastructure Development Project in Chittagong Economic Zone (Financial Cooperation)
- (2) Program of KAIZEN in Productivity and Quality Management for SME Manufacturing Industries Preparatory Study of KAIZEN in Productivity and Quality Management for SME Manufacturing Industries (Development Plan Study Type Technical Cooperation) Capacity Development Project for Business Development Support Institutions (Technical **Cooperation Project**) Dispatch of SME Policy Advisor (Expert Dispatch)
- (3) Industry Cluster Development Support Program Nationwide Industrial Cluster Development Master Plan and Feasibility Study (Development Plan

Study Type Technical Cooperation) Dispatch of Industry Cluster Development Experts (Expert Dispatch) Infrastructure Development Project for Foundry Cluster Development (Financial Cooperation) Technical Cooperation Project for Foundry Cluster Development (Technical Cooperation Project) Infrastructure Development Project for Agro Processing Cluster Development (Financial Cooperation) Technical Cooperation Project for Agro Processing Cluster Development (Technical Cooperation Project)

(4) Strengthening Export Competitiveness Program

Export Promotion Strategy Formulation Study (Development Plan Study Type Technical Cooperation)

Capacity Development of Trade Promotion Institutions (Expert Dispatch )

Trade Human Resource Development Centre (Technical Cooperation Project)

#### **Program Digest No.1**

#### **JICA Cooperation Program Summary**

#### (1) **Program Title:**

Economic Zone Development Support Program to Improve Investment Climate

#### (2) Background :

The Bangladesh has recently experienced the expansion of investments and exports especially in the RMG industry and the economic growth by 5-6% while developed countries have strived to deal with the economic crisis caused by the Bankruptcy of Lehman Brothers. Besides, as for the foreign investments, the investment of labor-intensive type mainly to textile/ garment industry has increased and the investment from Japan has rapidly augmented since 2008 when UNIQLO made inroads into the Bangladesh market. Foreign investors, including Japanese enterprises, however, are in the difficult situation to find factory sites with well-developed infrastructures because there is no more places to construct factories in 8 Export Processing Zones (EPZ), except for the ones placed in remote regions, throughout Bangladesh, which have been the destinations for Bangladesh export-oriented companies to construct their factories, and the government decided not to develop new areas. At this moment, infrastructures, such as access roads, out of EPZ are not well organized, which makes it difficult to receive utility service steadily, including electricity and gas.

Under this situation, the Bangladesh government enacted the special economic zone act in August 2012 in order to enforce the relationship between export industries and domestic industries as well as to solve the problem of lacking industrial sites. The government also announced the plan of constructing 20 special economic zones all over the country, which would be advanced by the style of utilizing the finance or knowledge of private companies. In May 2012, five special economic zones have been already approved by the government for the first term.

The objective of this program is to support both hard and soft sides of the special economic areas. One way to achieve this objective is to play a role of inviting foreign investments to the country by foreign and Japanese enterprises and the companies that take advantage of regional conditions, corresponding to the policy of the Bangladesh government of constructing special economic zones in order to develop the investment environment. The other way is to utilize Japanese advanced technology of environment and energy, such as recyclable water and energy.

#### (3) Objectives:

- The growth of foreign and domestic investment in Bangladesh
- The creation of employment in the special economic areas targeted by this project
- The expansion of backward and forward linkage in the special economic areas targeted by • this project
- The supply of cheap water and biogas by using recyclable water and energy

(4) Target Period:	2013 - 2021
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#### (5) Target Industry:

- The Automobile Industry
- The Electronics Industry
- The Agricultural and Construction machinery Industry
- The Pharmaceutical Industry
- The Parts Manufacturing Industry (plastic casting, metal molding, casting, forging) etc...

#### (6) Scenario for Achievement of Objectives

- Feasibility Study of the proposed sites in the specified special economic area
- Infrastructure Development in the special economic area targeted (access road, power generation facility, water and sanitation facility)



#### Application of recyclable water and energy technology

#### (7) Summary of Proposed Project: Refer to Annex

Special Economic Zone Master Plan and Commercialization Study

Infrastructure Development around Special Economic Zone Financial Cooperation Project

## (8) Linkage and Priority of Proposed Project

Special Economic Zone Master Plan and F/S will be conducted ( ). Financial cooperation for the infrastructure development around the special economic zones will be done ( ). Furthermore, it is planned to spread wastewater disposal plants which adopts the Japanese most-advanced recyclable energy technology, such as recyclable water and biogas, as the recycling-oriented industrial development model to other regions.

#### (9) Implementation System

Implementation agent's counterpart would be the Bangladesh Economic Zone Authority (BEZA). The Steering Committee composed of local governments, the Prime Minister's Office, the Board of Investment (BOI), Ministry of Industry, Ministry of Commerce, is in charge of deciding policy and monitoring activities.

(10) Others

TAPP-JICA (2012)

**Project Digest No. TC-1** 

## **Technical Cooperation Project Form**

#### (1) **Project Title:**

Master Plan and Feasibility Study (Development Plan Study Type Technical Cooperation) (2) Implementation Agency :

Bangladesh Economic Zone Authority (BEZA)

## (3) Background and Rational:

Bangladesh basically lacks industrial sites because it is a small country but has large farmland. The government constructed 8 Export Processing Zone (EPZ) in the late 1990s but today there is no space to be developed in the EPZ of five districts, Chittagong, Dhaka, Comilla, Karaphui, and Adamiee. On the other hand, the access to Mongla, Ishwardi and Uttara from Chittagong and Dhaka is inconvenient. These districts are far from Chittagong and Dhaka and they only have land rods in bad traffic condition. Therefore, there are a lot of spaces to be developed in these districts.

In order to tackle this difficulty to maintain lands for EPZ which connect to the industrial areas, Dhaka and Chittagong as well as to diversify the industry by enforcing linkage between export industries and domestic industries, the government decided not to construct new EPZ but to construct new 20 Economic Zones (EZ) throughout the country. In August 2010, the government enacted the economic zone act. Today, the construction of EPZ utilizing the finances and knowledge by private companies in the following five areas has been decided. The government intends to construct more EPZ up to 20.

Mirshrai	Around Chittagong, 15,000 Acre	
	42,000Acre to be expanded	
Gohira Anowara	Around Chittagong 700 Acre	
Serajigonji	1,000 Acre	
Mongra	400-500 Acre	
Sherpur Moulovibazar	Around Shylet, 600 Acre	

The Bangladesh government desire private companies to play a key role in developing Economic Zones and expects Japanese companies, which have rich experience of developing industrial complexes in Southeast Asia, to play a major part in the development of EZ exclusively for tenants. In addition, it is highly expected to construct EZ which takes care of recyclable water and energy because Bangladesh has problems about energy supply. The Export Processing Zone around Chittagong is concerned about the lack of water and company activities are obstructed by the instable supply of natural gas on which they depend on.

This study presupposes to use the Japanese advanced technology of environment, energy saving, and recyclable energy, and conducts the feasibility study and the master plan for the development of Economic Zones for tenants in which Japanese companies play a major role. The current proposed areas around Chittagong district are 1) Mirsha, Gohira, Anowar, 2) Maheskhali Island (near Cox's Bazar, and expected to be developed with support of JICA as a combined area of deep-water harbor and Economic Zone at the coal-fired power plant construction site).

## (4) **Objective:**

Development Planned Master Plan of the Economic Zone that host Japanese enterprises as main tenant and Feasibility Study are to be conducted.

## (5)Outcomes:

- Selection of proposed areas of Economic Zone targeted to be supported
- Settlement of Master Plan for the proposed areas mentioned above
- Feasibility Study to start commercialization is conducted according to the Master Plan

#### (6) Activities:

- Comparative examination of several proposed areas
- Settlement of Master Plan of Economic Zone concerning about environmental conservation/ recyclable water and energy
- Settlement of Feasibility of Economic Zone concerning about environmental conservation/ recyclable water and energy

#### (7) Schedule:

August 2013- December 2014

## (8) Composition of Experts

- Summarv
- Location Plan
- Demand Analysis
- Building Plan
- Facility Plan 1 (Electricity / Gas)
- Facility Plan 2 (Water / Sewerage / Recyclable Energy)
- Environmental Effect Analysis
- Resettlement of Residents
- Economic and Financial Analysis
- (9) Others

TAPP-JICA (2012)



## **Project Digest No. FC-1**

### **Financial Cooperation Project Form**

#### (1) Project Title:

Infrastructure Development Project in Chittagong Economic Zone (Yen Loan)

#### (2) Implementation Agency :

Bangladesh Economic Zone Authority (BEZA)

## (3) Background and Rationale:

Bangladesh basically lacks industrial sites because it is a small country but has large farmland. The government constructed 8 Export Processing Zone (EPZ) in the late 1990s but today there is no space to be developed in the EPZ of five districts, Chittagong, Dhaka, Comilla, Karaphui, and Adamjee. On the other hand, the access to Mongla, Ishwardi and Uttara from Chittagong and Dhaka is inconvenient. These districts are far from Chittagong and Dhaka and they only have land rods in bad traffic condition. Therefore, there are a lot of spaces to be developed in these districts

In order to tackle this difficulty to maintain lands for EPZ which connect to the industrial areas, Dhaka and Chittagong as well as to diversify the industry by enforcing linkage between export industries and domestic industries, the government decided not to construct new EPZ but to construct new 20 Economic Zones (EZ) throughout the country. In August 2010, the government enacted the economic zone act. Today, the construction of EPZ utilizing the finances and knowledge by private companies in the following five areas has been decided. The government intends to construct more EPZ up to 20.

Mirshrai	Around Chittagong, 15,000 Acre		
	42,000Acre to be expanded		
Gohira Anowara	Around Chittagong 700 Acre		
Serajigonji	1,000 Acre		
Mongra	400-500 Acre		
Sherpur Moulovibazar	Around Shylet, 600 Acre		

The Bangladesh government desire private companies to play a key role in developing Economic Zones and expects Japanese companies, which have rich experience of developing industrial complexes in Southeast Asia, to play a major part in the development of EZ exclusively for tenants. In addition, it is highly expected to construct EZ which takes care of recyclable water and energy because Bangladesh has problems about energy supply. The Export Processing Zone around Chittagong is concerned about the lack of water and company activities are obstructed by the instable supply of natural gas on which they depend on. The industrial complex of the pharmaceutical industry that is already decided to be constructed, for example, there has a concrete plan of using recyclable water with RO technology.

This financial cooperation project presupposes to use the Japanese advanced technology of environment, energy saving, and recyclable energy, and conducts the infrastructure maintenance project in order to develop the Economic Zones for tenants in which Japanese companies play a major role. The current proposed areas for this project are Mirsha, Gohira, Anowar, and Maheskhali Island (near Cox's Bazar, and expected to be developed with support of JICA as a combined area of deep-water harbor and Economic Zone at the coal-fired power plant construction site) around Chittagong district, according to thee result of the Master Plan's study.

#### (4) **Objective:**

The objective of this project is to increase investments in the Economic Zones, which host Japanese enterprises as main tenant, from foreign enterprises, Japanese enterprises, and companies which take advantage of regional conditions by developing the infrastructures in the



zones. The targeted areas of the project will be decided according to the result of the Master Plan and Feasibility Study.

#### (5) Scope:

This project conducts construction operations on the spot with all sorts of procedures, including detailed designing, assembling of building companies and transporting companies of machine parts, and supervising of implementation, in order to put into practice the project framework that is decided by the commercialization study. The subjects of Yen loan is limited to the development of infrastructure facilities, such as access roads to the Economic Zones, lifelines of electricity and gas, water and sewerage, industrial waste disposal facilities, and communication.

### (6) Schedule: 2016-2021

#### (7) Cost:

5 billion-10 billion yen is estimated. The project cost is decided according to the Master Plan and F/S explained in the previous.

#### (8) Management System of Implementation and Maintenance

The main borrowing actor of this project are Japanese enterprises that play a main role in developing the Economic Zones and the Economic Zone running companies of JV, which are established by the Japanese enterprises and the regional companies, are implementation agents that manage construction, implementation and maintenance.

#### (9) Environmental Society Consideration

The study regarding the Environmental Society Consideration is conducted through the basic plan or the commercialization study explained above but, as for the technologies of waste water disposal and recyclable energy, the following model of the Japanese local government is supposed. As mentioned before, the supply of natural gas in the country is not sufficient. If biogas (methane gas) can be extracted in the process of concentrated water disposal, which would be greatly contributed to maintain energy resource for industrial complexes as clean energy.



#### TAPP-JICA (2012)

**Program Digest No.2** 

## JICA Cooperation Program Summary

#### (1) **Program Title:**

Program of KAIZEN in Productivity and Quality Management for SME Manufacturing Industries

#### (2) Background :

The growth strategy for manufacturing industries requires diversification of industries and products, making high value-added, advancement of manufacturing industries and opening up new markets for exports. The center of manufacturing industries is machinery industry and metal processing industry. In Bangladesh, however, its machinery industry and metal processing industry (molding, cutting, joining, heat treatment, etc...) have not well developed and it is indispensable to improve product quality as well as productivity, technology, and skill that are the base of these industries. In addition, it is SME that are concerned with these industries. SME need to settle management strategies of industry and enterprises themselves, and to introduce the modern management system.

#### (3) **Objectives:**

Training human resources who acquire the technologies and skills required in machinery industry and metal processing industry.

Producing products of high quality with low cost by improving the management of production and quality in SME manufacturing industries.

Establishing the check system that follows the standards and the quality criteria with completing them in Bangladesh.

Modernizing and advancing the business management of SME with training managers of SME.

Enhancing and effectively implementing SME policies in manufacturing industries.

## (4) Target Period:

2013-2016 (4 years)

## (5) Target Industries:

Light Engineering industry, Shipbuilding industry, Plastic industry, Furniture manufacturing industry

#### (6) Scenario for Achievement of Objectives

- 1. Since light engineering industries are large, the check of the targeted industries and companies (including sub-sectors), and the study about strategies and plans to solve the problems (training of human resources, improvement of productivity and quality, standards and quality criteria, and modernization of management) are conducted.
- 2. The supports are offered for establishing the service system with capacity building of support agents for manufacturing industry technologies and BDS providers.
  - Training of human resources who possess technology and skill
  - Bangladesh Industrial Technical Assistance Center (BITAC)

Small & Cottage Industries Training Institute (SCITI)

Improvement of productivity and quality of SME manufacturing industries

- Small and Medium Enterprise Foundation (SMEF)
- National Production Organization (NPO)

Maintenance of industrial standards and quality criteria and establishment of the check system

Bangladesh Standards and Testing Institution (BSTI)

#### 3. Training of SME managers and modernization / advancement of business management

- Bangladesh Institute of Management (BIM)
- 4. Dispatch of SME advisors to Industrial Ministry

#### (7) **Summary of Proposed Projects:** Refer to appendix

Preparative study for KAIZEN in Productivity and Quality Management for SME Manufacturing Industries

Project of capacity improvement of support agents for manufacturing industries and BDS

#### providers

#### Dispatch of SME policy advisors

#### (8) Linkage and Priority of Proposed Project

Settling the national strategy for the improvement of productivity and quality ( 1.), offering advice for implementation of the strategy (4.), and realization of training human resources and improvement of productivity and quality. Proposed projects (1.~4.) are mutually associated.

#### (9) Implementation System

The counterpart agent of the program is supposed to be Ministry of Industry. SME foundation, Business Promotion Committee (BPC), Federation of Bangladesh Chambers of Commerce and Industry (FBCCI), and the Steering Committee that is composed of industrial groups of the targeted industries, are supposed to be in charge of deciding implementation policy and monitoring.

#### (10) Others

In Bangladesh, various organizations and agents make and implement SME policies separately, which is ineffective. Therefore, it is necessary to establish the PDCA mechanism that allows policy agents, implementation agents, BDS providers and other agents to work cooperatively and systematically, and enable the monitor evaluation of the progress and results. TAPP-JICA (2012)

#### ProjectDigestNo.TC-2

## **Technical Cooperation Project Form**

#### (1) Project Title:

Preparatory Study of KAIZEN in Productivity and Ouality Management for SME Manufacturing Industries (Development Plan Study Type Technical Cooperation)

#### (2) Implementation Agency

Ministry of Industry, National Productivity Organization(NPO)

#### (3)Background:

The growth strategy for manufacturing industries requires diversification of industries and products, making high value-added, advancement of manufacturing industries and opening up new markets for exports. The center of manufacturing industries is machinery industry and metal processing industry. In Bangladesh, however, its machinery industry and metal processing industry (molding, cutting, joining, heat treatment, etc...) have not well developed and it is indispensable to improve product quality as well as productivity, technology, and skill that are the base of these industries. In addition, it is SME that are concerned with these industries. SME need to settle management strategies of industry and enterprises themselves, and to introduce the modern management system.

#### (4) Rationale:

The necessity of improving productivity as well as technology and technique, the base of industries

## (5) Objective:

Study and Proposal of Program of KAIZEN in Productivity and Quality Management for SME Manufacturing Industries

#### (6) Outcomes:

Selection of the targeted industries and clarification of the current situation and problems Study and proposal of the strategy and plan for training human resources with technical skills

Study and proposal of the strategy and plan for product and quality management

#### (7) Activities:

Selection of the targeted industries and clarification of the current situation and problems

- a. Drafting the manuals for checking industries and business managements.
- b. Forming the team composed of the local consultants and the consultants dispatched with training of the local consultants.
- c. Doing feedback to the following after the selection of the targets, and checking industries and business managements, especially those concerned with technology/ techniques and production/ quality management.

Study and proposal of the strategy and plan for training human resources with technical skills

- Studying about the actual situation of every manufacturing industry support agents' and a. BDS providers' activities and estimating their activities.
- b. Selecting and planning of every manufacturing industry support agents' and BDS providers' activities.

Study and proposal of the strategy and plan for product and quality management

- Selecting the industries and companies that support to establish the system to manage a. production and quality.
- b. Assessing the ways and schemes for the support to establish the system to manage production and quality.

#### (8) Schedule:

August 2014 – March 2014 (8 months)

## (9) Composition of Experts

Supervision (1), Check of the industries and managements (3), Training of human resources with technical skill (1), Production and quality management (1), Adjustment of operations (1)

Registered Management Consultants or Registered Management Consulting Engineers are desirable.

#### (10) Others

Enhancing the efficiency of operations with appointing and consigning to local consultants with short-period training.

TAPP-JICA (2012)

## ProjectDigestNo.TC-3

## **Technical Cooperation Project Form**

### (1) **Project Title:**

Capacity Development Project for Business Development Support Institutions (Technical Cooperation Project)

#### (2) Implementation Agency

The counterpart agents of this project is supposed to be Ministry of Industry and the SME support agents, and BDS providers, which are selected in Preparative Study for Program of KAIZEN in Productivity and Quality Management for SME Manufacturing Industries, are added to the counterpart agents.

#### (3) Background:

The growth strategy for manufacturing industries requires diversification of industries and products, making high value-added, advancement of manufacturing industries and opening up new markets for exports. The center of manufacturing industries is machinery industry and metal processing industry. In Bangladesh, however, its machinery industry and metal processing industry (molding, cutting, joining, heat treatment, etc...) have not well developed and it is indispensable to improve product quality as well as productivity, technology, and skill that are the base of these industries. In addition, it is SME that are concerned with these industries. SME need to settle management strategies of industry and enterprises themselves, and to introduce the



Mitsubishi UFJ Research and Consulting



modern management system.

#### (4) Rationale:

The necessity of improving productivity and quality as well as technology and technique, the base of the industries.

#### (5) Objective:

Improving capacities of BDS providers as well as support agents for technology/ technique, productivity and quality, and offering necessary service to manufacturing industries.

#### (6) Outcomes:

Enhancing the capacities of BDS providers as well as support agents for training human resources with technical skills and offering necessary service to manufacturing industries. Offering management support for the productivity and quality improvement of SME manufacturing industries.

Supporting for training managers who target to modernize and advance business management.

### (7) Activities:

Enhancing the capacities of BDS providers as well as support agents for training human resources with technical skills (Proposed Project)

- a. Training them in Japan in order to enhance the capacities of the staffs in Bangladesh Industrial Technical Assistance Center (BITAC).
- b. Enhancing the capacities of the staffs in Small & Cottage Industries Training Institute (SCITI) and supporting the establishment of lacking facilities.

Management support for the productivity and quality improvement of SME manufacturing industries

- a. Enhancing the capacities of the staffs in Small and Medium Enterprise Foundation (SMEF)
- b. Enhancing the capacities of the staffs in National Production Organization (NPO) and supporting the establishment of lacking facilities.
- c. Maintaining of the industrial standards and the check criteria at Bangladesh Standards and Testing Institution (BSTI), enhancing the capacities of the staffs and maintaining the organization system.

Training managers of SME

Enhancing the capacities of the staffs in Bangladesh Institute of Management (BIM) and supporting to stabilize the financial foundation.

#### (8)Schedule:

October 2013- September 2016

#### (9) Composition of Experts

Supervisor (1), Supporting for training industrial human resources (2), Supporting for improvement of productivity and quality (2), Training of SME managers (1), Adjustment (1)

#### (10) Others

Several agents are committed to similar activities. This situation is overall optimized and the investment rate is improved. If there is a chance, reorganization, cooperation, joint-up, shared use of buildings and facilities of each agent are promoted.

TAPP-JICA (2012)

## **Technical Cooperation Project Form**

(1) Project Title: Dispatch of SME Policy Advisor (Expert Dispatch)
(2) Implementation Agency:
(2) Implementation Agency. Ministry of Industry
(2) Declement
(5) <b>Dackground:</b> The growth strategy for manufacturing industries requires diversification of industries and
products making high value-added advancement of manufacturing industries and opening up
new markets for exports. The center of manufacturing industries is machinery industry and metal
processing industry In Bangladesh however its machinery industry and metal processing
industry (molding, cutting, joining, heat treatment, etc) have not well developed and it is
indispensable to improve product quality as well as productivity, technology, and skill that are
the base of these industries. In addition, it is SME that are concerned with these industries. SME
need to settle management strategies of industry and enterprises themselves, and to introduce the
modern management system.
(4) Rationale:
In Bangladesh, various organizations and agents make and implement SME policies
separately and the policy and the operation are overall not systematically organized, which is
ineffective. It is beneficial to give advice to Ministry of Industry, which supervises
manufacturing industries, regarding the policy of promoting SME.
(5) Objective:
Enforcing the SME policy which contribute to promote SME
(6) Outcomes:
Assessing the SME policy and proposing the alternative plan that is consistent and well
Integrated
Assessing the SME activity and proposing the alternative plan.
Assessing the organizational system of the SME support and proposing the alternative plan.
(7) Activities:
Assessing the SME policy Monitoring the implementation of the SME policy
a. Monitoring the impact of the SME policy
c. Researching the settlement process of the SME policy
d Proposing the alternative plan
Assessing the SMF support agents' activity
a Monitoring the implementation of the activities of the SMF support agents and
Ministry of Industry
b. Estimating the outcomes of the SME support activities of the SME support agents and
Ministry of Industry
c. Proposing the alternative plan
Assessing the organizational system of the SME support
a. Monitoring the functions and the actual situation of the SME support organizations and
Ministry of Industry
b. Estimating the validity and rationality of the SME support organizations and Ministry of
Industry.
C. Proposing the alternative plan
August $2013 = \text{July } 2015 (2 \text{ years})$
(9) Composition of Experts
SME policy advisors (1)
(10) Others

It is made sure that the SME policy advisors share information and to communicate regarding the integrity and consistency of the policy with the JICA local office, the team of Program of KAIZEN in Productivity and Quality Management for SME Manufacturing Industries.



## TAPP-JICA (2012)

#### **Program Digest No.3**

#### **JICA Cooperation Program Summary**

(1) Program Title: Industry Cluster Davalopment Support Program
(2) Packground :
(2) Dackground . The long term development goal of Pangladash proclaims that the country becomes a
middle income country by 2021. It is necessary to increase the share of the secondary sector of
industry to 35% of GDP and promote to produce employments in order to achieve this goal. The
traditional industrial cluster areas play a certain role as the core of the regional economy and
they are also expected to play an important part in the future industrialization program as a
partner of the foreign direct investment that supplies the basic technology, human resources, and
parts. However, the country does not yet have any basic policy or plan to develop these industrial
clusters to modern industrial clusters. Drafting the systematical basic plan and the
implementation plan is needed.
(3) Objectives:
• Promoting the national prioritized industries and improving their competitiveness.
• Reforming the existing industrial clusters to modern industrial clusters.
• Achieving technical innovation in the prioritized industries with the cooperation of the
industry, the government, and the academics.
• Training human resources who can independently run the modern industrial clusters.
• Developing the success model regarding the formation of the industrial clusters achieved in
this project in other regions.
(4) Target Period: 2013-2021
(5) Target Industry:
Forming of Light Engineering Industry (Casting Industrial Cluster)
Forming of Agricultural Processing Industry (Agricultural Processing Cluster)
(6) Scenario for Achievement of Objectives
( Short-Term Project )
• Implementation of the basic plan and study of forming the national industrial cluster
(Development Study)
• Operation of dispatching experts for forming the industrial cluster (Expert Dispatch)
( Middle-Term Project )
Casting cluster forming plan / Operation of maintaining infrastructure (Yen Loan)
Casting cluster technical support cooperation project
Agricultural processing cluster forming plan / Operation of maintaining infrastructure (Yen
Loan)
Agricultural processing technical support cooperation project
(7) Summary of Proposed Project:
• Basic plan for forming of national industrial cluster and commercialization study of the
prioritized clusters
• Maintenance of the infrastructure concerning the prioritized clusters
• Dispatch of the experts to Ministry of Industry to promote the projects explained above
• Pilot project to promote the cooperation between companies and the technology innovation in
the prioritized clusters (Refer to the summary table of each project for the details)
(8) Linkage and Priority of Proposed Project
At first, the study about the actual situation of the industrial clusters in Bangladesh by the
short-term project, and then, for the selected prioritized industrial clusters, every support from both sides of hard and soft, combining Van Loan and technical cooperation is offered to allow
both sides of nard and soft, combining ten Loan and technical cooperation, is offered to allow

them to function as the modern industrial clusters.



## (9) Implementation System and Agents

This program is conducted mainly by Bangladesh Ministry of Industry and BITAC, BSTI, NPO, BIM, BSCIC, SCITI, which are directly, associated with Ministry of Industry, as well as Ministry of Agriculture, BPC, Local Government, private financial institutions, and industrial groups, participate into this project.

#### (10) Others

TAPP-JICA (2012)

#### ProjectDigestNo.TC-5

### **Technical Cooperation Project Form**

#### (1) **Project Title:**

Nationwide Industrial Cluster Development Master Plan and Feasibility Study (Development Plan Study Type Technical Cooperation)

#### (2) Implementation Agency :

Ministry of Industry

#### (3) Background and Necessity:

The long-term development goal of Bangladesh proclaims that the country becomes a middle-income country by 2021. It is necessary to increase the share of the secondary sector of industry to 35% of GDP and promote to produce employments in order to achieve this goal. The second five-year plan aims at increasing the average growth rate of GDP up to 7.3% and the share of the manufacturing sector up to 21% during the target period (2011-2015). Previously, the country had set the goal to promote industry with the export-oriented policy concentrating on developing export processing areas, but recently, the country has promoted Economic Zone that enable to sale products in the domestic market with introducing the policy which put an emphasis on the linkage with the domestic promoted industries. On the other hand, the traditional industrial cluster areas, where SME that are working on the traditional industries are accumulated, play a certain role as the core of the regional economy and they are also expected to play an important part, in the future industrialization program, as a partner of the foreign direct investment that supplies the basic technology, human resources, and parts. However, since these industrial clusters have formed rather naturally than intentionally, the country does not clearly mention them in its industrial policy. The country does not yet have any basic policy or plan to develop these industrial clusters to modern industrial clusters. Drafting the systematical basic plan and the implementation plan is needed.

#### (4) Objective:

This project conducts the study about the potential of the industrial clusters in Bangladesh and selects some of them that are prioritized in the relation with the governmental industrial policy. Then, the project offers the proposal to the most prioritized industrial clusters (1 or 2) among them to build the network with the related support agents in order to construct the modern industrial clusters. Finally, the project assesses the feasibility of the proposal and settles the implementation plan.

#### (5) Outcomes:

Comprehending the actual situation of the industrial clusters in Bangladesh.

Clarifying the significance of the industrial clusters in the industrial promotion policy in Bangladesh.

Selecting the important industrial clusters in the relation with the industrialization policy.

Proposing the establishment of the system and the mechanism of supporting activities that enable the selected prioritized industrial clusters to develop independently as the modern industrial clusters.

Conducting the commercialization study about the feasibility of the plan mentioned above and



drafting the implementation plan.			
(6) Activities :			
The content of this project is planned as the following: settlement of the Master Plan of			
the industrial clusters in Bangladesh, selection of the prioritized industrial cluster and			
clarification of their objectives / ranges / composition of the members, conduct of the			
commercialization study and drafting of the implementation plan.			
(7) Schedule:			
2013- (for 2 years)			
(8) Composition of Experts			
Supervisor, Industrial Policy, Regional Economy, Analysis of the industrial			
linkage, Analysis of the production factors, Infrastructure Development, Economic			
Analysis, Organization Development			
(9) Others			

TAPP-JICA (2012)

#### **Project Digest No. TC-6**

## **Technical Cooperation Project Form**

#### (1) Project Title:

Dispatch of Industry Cluster Development Experts (Expert Dispatch)

#### (2) Implementation Agency :

Ministry of Industry

## (3) Background and Necessity:

The long-term development goal of Bangladesh proclaims that the country becomes a middle-income country by 2021. It is necessary to increase the share of the secondary sector of industry to 35% of GDP and promote to produce employments in order to achieve this goal. The second five-year plan aims at increasing the average growth rate of GDP up to 7.3% and the share of the manufacturing sector up to 21% during the target period (2011-2015). Previously, the country had set the goal to promote industry with the export-oriented policy concentrating on developing export processing areas, but recently, the country has promoted Economic Zone that enable to sale products in the domestic market with introducing the policy which put an emphasis on the linkage with the domestic promoted industries. On the other hand, the traditional industrial cluster areas, where SME that are working on the traditional industries are accumulated, play a certain role as the core of the regional economy and they are also expected to play an important part, in the future industrialization program, as a partner of the foreign direct investment that supplies the basic technology, human resources, and parts. However, since these industrial clusters have formed rather naturally than intentionally, the country does not clearly mention them in its industrial policy. The country does not yet have any basic policy or plan to develop these industrial clusters to modern industrial clusters. Drafting the systematical basic plan and the implementation plan is needed. In order to meet these demands, the Master Plan and the commercialization study by the development study scheme is planned. This project is needed to support those studies.

#### (4) Objective:

This project is aimed at, with the cooperation of Nationwide Industrial Cluster Development Master Plan and Feasibility Study, assisting the settlement of the industry promotion plan in Bangladesh, building the supporting system for the conduct of the study by dispatching experts of supporting the formation of industrial clusters to Ministry of Industry. After starting the studies, this project is supposed to act as an intermediary between the Study Team and the governmental organizations in Bangladesh.

## (5) Outcomes:

Supporting the settlement of the industry promotion plan in Bangladesh.



Accepting and building the supporting system for National Industrial Cluster Formation Basic Plan and Commercialization Study.

Realizing the smooth implementation of the study by working as an intermediary between the Study Team and the governmental organizations.

#### (6) Activity:

In order to achieve the goal mentioned in the section , the expert of the industrial policy is dispatched to Ministry of Industry.

#### (7) Schedule:

2013- (for 2 years)

## (8) Composition of Experts

One expert of the industrial policy

## (9) Others

TAPP-JICA (2012)

## **Project Digest No. FC-2**

## **Financial Cooperation Project Form**

#### (1) Project Title:

Infrastructure Development Project for Foundry Cluster Development (Yen Loan)

## (2) Implementation Agency :

Ministry of Industry and Bangladesh Small and Cottage Industries Corporation (BSCIC)

#### (3) Background and Rationale:

The long-term development goal of Bangladesh proclaims that the country becomes a middle-income country by 2021. It is necessary to increase the share of the secondary sector of industry to 35% of GDP and promote to produce employments in order to achieve this goal. The second five-year plan aims at increasing the average growth rate of GDP up to 7.3% and the share of the manufacturing sector up to 21% during the target period (2011-2015). Previously, the country had set the goal to promote industry with the export-oriented policy concentrating on developing export processing areas, but recently, the country has promoted Economic Zone that enable to sale products in the domestic market with introducing the policy which put an emphasis on the linkage with the domestic promoted industries. On the other hand, the traditional industrial cluster areas, where SME that are working on the traditional industries are accumulated, play a certain role as the core of the regional economy and they are also expected to play an important part, in the future industrialization program, as a partner of the foreign direct investment that supplies the basic technology, human resources, and parts. The casting industry cluster in Bogra district is one of these potential industrial clusters. However, since these industrial clusters have formed rather naturally than intentionally, the country does not clearly mention them in its industrial policy. The country does not yet have any basic policy or plan to develop these industrial clusters to modern industrial clusters. Drafting the systematical basic plan and the implementation plan is needed. In order to meet these demands, the Master Plan and the commercialization study by the development study scheme is planned. This project aims at realizing the proposal by the study of maintaining infrastructure regarding the formation of the industrial clusters with Yen Loan.

## (4) Objective:

This project is targeted to maintain every kind of infrastructures needed to enhance the casting industrial clusters in Bogra with Yen Loan, based on the result of Nationwide Industrial Cluster Development Master Plan and Feasibility Study that is conducted by the development study scheme. Bogra district has the industrial complex which was developed in 1980s by BSCIC, but it is desirable, taking into account the expected expansion of the business of every company and modernization of facilities, to move to another industrial complex since it is difficult to expand the business in the existing industrial complexes.


### (5) Scope:

This project conducts various procedures, such as drafting the detailed plan to put into practice the project framework that is settled by the commercialization study, gathering construction companies and parts transportation companies, supervising the implementation, and finally, implements the construction operation at the spot. The subject of Yen Loan is limited to the maintenance of infrastructure facilities, including access roads inside and outside of the industrial complexes, supply networks of electricity and gas, water and sewerage, industrial waste disposal facilities, and communication system.

(6) Schedule: 2016-2021

## (7) Cost:

The cost of this project is decided through the basic plan and the commercialization study explained above.

## (8) Management System of Implementation and Maintenance

In this project, the main borrowing actor of this project is Ministry of Industry and the main implementation actor that is responsible for the construction, administration, maintenance and management is BSCIC.

## (9) Environmental Society Consideration

The environmental society consideration of this project is implemented based on the basic plan and the commercialization study explained above.

## (10) Qualitative and Quantitative Estimation

The qualitative and quantitative estimation of this project is implemented based on the basic plan and the commercialization study explained above.

### (11) Others

TAPP-JICA (2012)

## ProjectDigestNo.TC-7

## **Technical Cooperation Project Form**

#### (1) Project Title:

Technical Cooperation Project for Foundry Cluster Development (Technical Cooperation Project)

#### (2) Implementation Agency :

Ministry of Industry

## (3) Background and Rationale:

The long-term development goal of Bangladesh proclaims that the country becomes a middle-income country by 2021. It is necessary to increase the share of the secondary sector of industry to 35% of GDP and promote to produce employments in order to achieve this goal. The second five-year plan aims at increasing the average growth rate of GDP up to 7.3% and the share of the manufacturing sector up to 21% during the target period (2011-2015). Previously, the country had set the goal to promote industry with the export-oriented policy concentrating on developing export processing areas, but recently, the country has promoted Economic Zone that enable to sale products in the domestic market with introducing the policy which put an emphasis on the linkage with the domestic promoted industries. On the other hand, the traditional industrial cluster areas, where SME that are working on the traditional industries are accumulated, play a certain role as the core of the regional economy and they are also expected to play an important part, in the future industrialization program, as a partner of the foreign direct investment that supplies the basic technology, human resources, and parts. The casting industry cluster in Bogra district is one of these potential industrial clusters. However, since



these industrial clusters have formed rather naturally than intentionally, the country does not clearly mention them in its industrial policy. The country does not yet have any basic policy or plan to develop these industrial clusters to modern industrial clusters. Drafting the systematical basic plan and the implementation plan is needed. In order to meet these demands, the Master Plan and the commercialization study by the development study scheme is planned. After the commercialization study confirms the profit of the project, it is planned to maintain the infrastructure facilities regarding the formation of the proposed industrial clusters with Yen Loan. On the other hand, the casting industry has a number of SME and they use the old type technology of cupola. The SME have the problems about product quality because of the old type technology they use but the lack of financial resource prevents them to introduce high-tech machine, such as an electric furnace. Therefore, this project aims at supporting for the hardware and software of the Common Service Facility required to develop the casting clusters and dispatching experts in order to help the cooperation of private and governmental agents concerned with this cluster and the creation of the synergy effects.

### (4) **Objective:**

Bogra district has the industrial complex which was developed in 1980s by BSCIC, but it is desirable, taking into account the expected expansion of the business of every company and modernization of facilities, to move to another industrial complex since it is difficult to expand the business in the existing industrial complexes. It is expected that financial resources from Yen Loan is used to maintain every infrastructure needed to enhance the casting industrial clusters in Bogra district, the prioritized industrial cluster, by National Industrial Cluster Formation Basic Plan and Commercialization Study, which is conducted by the development study scheme of ODA. This project aims at supporting for the hardware and software of the Common Service Facility, including the modern metal processing machines, required to develop the casting clusters. This project also dispatches experts in order to help the cooperation of private and governmental agents concerned with this cluster and the creation of the synergy effects.

## (5) Outcomes:

Providing the machineries required for the Common Service Facility (metal processing machine, electric furnace, metal mold, etc...).

Producing the casting products of high quality by the Common service Facility.

Spreading the technology learned from the Common Service Facility to the companies of other clusters.

Promoting the cooperation between companies in the cluster.

Promoting the cooperation between cluster supporting agents.

### (6) Activities:

Researching and providing the machineries required for the Common Service Facility

Dispatching experts needed to run the Common Service Facility

Administrative training of operational human resources and cluster companies of the Common Service Facility

Dispatching experts to promote the business cooperation of cluster

Dispatching experts to promote the cooperation between cluster supporting agents

#### (7) Schedule: 2016-2021

# (8) Composition of Experts

The Common Service Facility running expert

Cluster business cooperation expert

Cluster supporting cooperation expert

# (9) Others

TAPP-JICA (2012)

ProjectDigestNo.FC-3

## **Financial Cooperation Project Form**

## (1) **Project Title:**

Infrastructure Development Project for Agro Processing Cluster Development (Yen Loan)

## (2) Implementation Agency :

Ministry of Industry and Bangladesh Small and Cottage Industries Corporation (BSCIC)

## (3) Background and Rationale:

The long-term development goal of Bangladesh proclaims that the country becomes a middle-income country by 2021. It is necessary to increase the share of the secondary sector of industry to 35% of GDP and promote to produce employments in order to achieve this goal. The second five-year plan aims at increasing the average growth rate of GDP up to 7.3% and the share of the manufacturing sector up to 21% during the target period (2011-2015). On the other hand, the traditional industrial cluster areas, where SME that are working on the traditional industries are accumulated, play a certain role as the core of the regional economy and they are also expected to play an important part, in the future industrialization program, as a partner of the foreign direct investment that supplies the basic technology, human resources, and parts. In Mymensingh district and Rajshahi district, agriculture has been prospered since the ancient time. These districts are the producing areas and cluster areas of vegetables and fruits, especially pineapples and mangos, and they have geometrical advantages to develop agricultural processing industries. The country does not have any basic policy or plan to develop these agricultural areas and these traditional agricultural processing industrial clusters to the modern industrial clusters. Drafting the systematical basic plan and the implementation plan is needed. In order to meet these demands, it is planned to conduct the Master Plan and the commercialization study of the development study scheme. This project provides Yen Loan to realize the maintenance of infrastructure facilities regarding the formation of the industrial clusters proposed by these studies

## (4) **Objective:**

This project is targeted to utilize Yen Loan to maintain every kind of infrastructures needed to maintain and enhance the agricultural processing clusters in Mymensingh district and Rajshahi district, based on the result of Nationwide Industrial Cluster Development Master Plan and Feasibility Study. This project also assesses the development of new industrial complexes to form clusters with agricultural processing companies.

## (5) Scope:

This project conducts various procedures, such as drafting the detailed plan to put into practice the project framework that is settled by the commercialization study, gathering construction companies and parts transportation companies, supervising the implementation, and finally, implements the construction operation at the spot. The subject of Yen Loan is limited to the maintenance of infrastructure facilities, including access roads inside and outside of the industrial complexes, supply networks of electricity and gas, water and sewerage, industrial waste disposal facilities, and communication system.

# (6) Schedule: 2016-2021

## (7) Cost:

The cost of this project is decided through the basic plan and the commercialization study explained above.

## (8) Management System of Implementation and Maintenance

In this project, the main borrowing actor of this project is Ministry of Industry and the main implementation actor that is responsible for the construction, administration, maintenance and management is BSCIC.

## (9) Environmental Society Consideration

The environmental society consideration of this project is implemented based on the basic plan and the commercialization study explained above.

## (10) Qualitative and Quantitative Estimation

The qualitative and quantitative estimation of this project is implemented based on the basic plan and the commercialization study explained above.

(11) Others



## TAPP-JICA (2012)

**Project Digest No. TC-8** 

## **Technical Cooperation Project Form**

#### (1) Project Title:

Technical Cooperation Project for Agro Processing Cluster Development (Technical Cooperation Project)

#### (2) Implementation Agency :

Ministry of Industry

#### (3) Background and Rationale:

The long-term development goal of Bangladesh proclaims that the country becomes a middle-income country by 2021. It is necessary to increase the share of the secondary sector of industry to 35% of GDP and promote to produce employments in order to achieve this goal. The second five-year plan aims at increasing the average growth rate of GDP up to 7.3% and the share of the manufacturing sector up to 21% during the target period (2011-2015). The traditional industrial cluster areas, where SME that are working on the traditional industries are accumulated, play a certain role as the core of the regional economy and they are also expected to play an important part, in the future industrialization program, as a partner of the foreign direct investment that supplies the basic technology, human resources, and parts. In Mymensingh district and Rajshahi district, agriculture has been prospered since the ancient time. These districts are the producing areas and cluster areas of vegetables and fruits, especially pineapples and mangos, and they have geometrical advantages to develop agricultural processing industries. The country does not have any basic policy or plan to develop these agricultural areas and these traditional agricultural processing industrial clusters to the modern industrial clusters. Drafting the systematical basic plan and the implementation plan is needed. In order to meet these demands, it is planned to conduct the Master Plan and the commercialization study of the development study scheme. After the commercialization study confirms the profit of the project, it is planned to provide Yen Loan to maintain infrastructures regarding formation of the industrial clusters proposed by the study. On the other hand, agricultural industry cluster has a number of SME and these companies use the traditional and inefficient technology. Because of the use of these traditional technologies, they have problems about the quality of products but the lack of financial resource hinders them to introduce modern machines. Besides, they do not possess any warehouses equipped with refrigerators, which makes the large amount of loss during post-harvest. Therefore, this project aims at supporting for the hardware and software of the Common Service Facility required to develop the agricultural industry clusters in maintaining infrastructure facilities and dispatching experts in order to help the cooperation of private and governmental agents concerned with this cluster and the creation of the synergy effects.

## (4) Objective:

This project is targeted to utilize Yen Loan to maintain every kind of infrastructures needed to maintain and enhance the agricultural processing clusters in Mymensingh district and Rajshahi district, based on the result of Nationwide Industrial Cluster Development Master Plan and Feasibility Study. Mymensingh district is placed in the North part of Dhaka, the capital, and the center part of Bangladesh, which enable this district to get supply of agricultural products from all over the country. This project also assesses the development of new industrial complexes to form clusters with agricultural processing companies. The objective of this project is supporting for the hardware and software of the Common Service Facility required to develop the agricultural industry clusters in maintaining infrastructure facilities and dispatching experts in order to help the cooperation of private and governmental agents concerned with this cluster and the creation of the synergy effects.

(5) Outcomes:



Providing the machineries required for the Common Service Facility (refrigerators, stirrers,			
etc).			
Producing the agricultural processed products of high quality by the Common service Facility			
Spreading the technology learned from the Common Service Facility to the companies of			
other clusters.			
Promoting the cooperation between companies in the cluster.			
Promoting the cooperation between cluster supporting agents.			
(6) Activities:			
Researching and providing the machineries required for the Common Service Facility			
Dispatching experts needed to run the Common Service Facility			
Administrative training of operational human resources and cluster companies of the Common			
Service Facility			
Dispatching experts to promote the business cooperation of cluster			
Dispatching experts to promote the cooperation between cluster supporting agents			
( <b>7</b> ) Schedule: 2016-2021			
(8) Composition of Experts			
The Common Service Facility running expert			
Cluster business cooperation expert			
Cluster supporting cooperation expert			
(9) Others			

TAPP-JICA (2012)

## **Program DigestNo.4**

#### JICA Cooperation Program Summary

#### (1) Program Title:

Strengthening Export Competitiveness Program

#### (2) Background :

In Bangladesh, there are several SME that can develop products with competitiveness in quality and price but they do not have enough human resources, information, and knowledge to do business using English, which prevents them from opening up export markets. As for the Export Promotion Bureau (EPB) that support to promote exports of SME, they are inferior in the capacity to settle strategies to enter the export market based on systematic data analyses about the targeted articles and markets because they lack financial resources and cannot employ experts of international network and export marketing. In addition, the country have many problems about the maintenance and administration of systems, such as the insufficient administration of bonded factory system and Duty Drawback system (the system refunding export tax) for the industries expected to become considerably growing export industries, even though the country has adequate incentives for RMG industry that has already export the vast amount of products to the international market. This program aims at supporting the improvement of the export promotion system, developing the capacity of settling marketing strategy, training export business talents of private companies, especially of SME, in order for growth of the competitiveness in Bangladesh.

#### (3) Objective:

- · Improvement of export competitiveness in Bangladesh
- Expansion of exports of non-RMG products in Bangladesh
- Improvement of the export promotion system in Bangladesh
- Training the capacity of settlement of export marketing strategy in Bangladesh (Ministry of Commerce and EPB)



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• Trai	ning the export business talents of SME
(4) Targ	get Period: 2010
(5) Targ	get Industries:
• Agr	o-processed product industry
• Pha	rmaceutical product industry
• Lea	ther / Shoe industry
• Furi	niture industry
• Cera	amic industry
• Plas	tic product industry
Soft	ware industry etc
(6)Scen	ario for Achievement of Objectives
• Sele	ection of the strategic promising products
• Sele	ection of the targeted market and the customer segment
• Ana	lysis of information about the trend of the targeted market, design, quality standard,
pref	erence, rival products
• Buil	lding international market information network of EPB
• Buil	lding international market database of EPB
• Trai	ning experts of international market analysis of EPB
• Esta	blishment of trade training center (new institution)
• Crea	ation of training curriculum of trading business, contract negotiation, and international
mar	keting
• Trai	ning trainers who offer the training programs above
(7) Sum	mary of Proposed Project: Refer to Appendix
	Supporting study of settlement of export marketing strategy of strategic products
	Organizational development / Training talents support project of export promotion
supporti	ng agent (Expert Dispatch)
r.	Fechnical support project of training center for trading talents
(8) Link	kage and Priority of Proposed Project
Settl	ement of export marketing strategy of the country ( ), capacity building of organization
and tale	nts of trade promotion support agents ( ), and training marketing talents in the private
sector (	). Every project is closely related to each other and each of them has high priority.
(9) Imp	lementation System
The r	nain counterpart agent in this program is EPB and Bangladesh Foreign Trade Institute
(BFTI).	Ministry of Commerce, SME foundation, Business Promotion Committee (BPC), the
Federati	on of Bangladesh Chambers of Commerce and Industry (FBCCI), and the steering
committee the internet	the composed of industrial groups of the targeted industry, are responsible for deciding
the impl	ementation policy and monitoring.
(10)Oth	lers

TAPP-JICA (2012)

# ProjectDigestNo.TC-9

# **Technical Cooperation Project Form**

# (1) Project Title:

Export Promotion Strategy Formulation Study (Development Plan Study Type Technical Cooperation

## (2) Implementation Agency : Export Promotion Bureau (EPB)



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### (3) Background and Rationale:

Bangladesh has frequently settled new export promotion policies and the export promotion policy of 2009-20012 proclaims to diversify export commodity baskets of non-RMG and export markets of developing countries other than those of Europe and America. The country also has selected eight industries as prioritized industries (agro-processed product, light engineering, leather/ shoes, shipbuilding, pharmaceutical product, ICT/ software, home textile, toiletry) and tried to promote exports with incentives, such as cash incentive. However, the country does not have enough experts in EPB who analyze data of promising products of each sector, trend of targeted markets, competition states, demanded design and quality standards, and preference, which prohibits from settling detailed market strategies according to promising products and targeted markets. In addition, the country have many problems about the maintenance and administration of systems, such as the insufficient administration of bonded factory system and Duty Drawback system (the system refunding export tax) for the industries expected to become considerably growing export industries, even though the country has adequate incentives for RMG industry that has already export the vast amount of products to the international market.

Therefore, it is urgently required to create specific marketing strategies according to every product and to reconstruct the export promotion system for the industries in order to realize the export promotion policy of Bangladesh to diversify export industries and the countries of export destinations. This study includes the study for the settlement of export marketing strategy and the reconstruction of the export incentives system.

#### (4) Objectives:

- Improvement of the export promotion system in Bangladesh
- Improvement of the capability of settling export marketing of EPB

#### (5) Outcomes:

- Assessing the export promotion system and proposing the alternative plan
- Building of database needed for export marketing
- Selection of strategic promising products and settlement of marketing strategy to expand exports according to products
- Improvement of capacity of marketing analysis and marketing strategy of EPB

#### (6) Activities:

- Analysis the macro environment of the Bangladesh exports
- Analysis of the situation and the actual state of the export promotion system in Bangladesh
- Analysis of the trend of Bangladesh export goods
- Selection of the strategic promising export goods of Bangladesh
- Settlement of the strategy to enter the markets of the goods mentioned above
- Training to the market analysis department of EPB for the settlement of the marketing strategy
- Building the database needed to the export marketing mentioned above
- Proposal to expand the exports of the strategic goods

## (7) Schedule:

## August 2013- July 2014

### (8) Composition of Experts

- Supervisor / Strategy for export markets
- Export promotion system
- Analysis of export markets
- Database of export markets
- Training of human resources

# (9) Others

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## ProjectDigestNo.TC-10

# **Technical Cooperation Project Form**

(1) Project Title:			
Capacity Development of Trade Promotion Institutions (Expert Dispatch)			
(2) Implementation Agency :			
Ministry of Commerce, Export Promotion Bureau (EPB), Business Promotion Council (BPC)			
(3) Background and Rationale:			
Bangladesh has frequently settled new export promotion policies and the export promotion policy of 2009-20012 proclaims to diversify export commodity baskets of non-RMG and export markets of developing countries other than those of Europe and America. The country also has selected eight industries as prioritized industries (agro-processed product, light engineering, leather/ shoes, shipbuilding, pharmaceutical product, ICT/ software, home textile, toiletry) and tried to promote exports with incentives, such as cash incentive. Bangladesh, however, has put an emphasis on the limited kinds of goods and markets and it is urgently needed to diversify the export industries and the countries of export destinations. The country does not have enough experts in EPB who analyze data of promising products of each sector, trend of targeted markets, competition states, demanded design and quality standards, and preference, which prohibits from settling detailed market strategies according to promising products and targeted markets. On the other hand, the Business Promotion Council that is affiliated with Ministry of Industry is established by the cooperation with the private sector. The council, however, has not produced a			
sufficient result. Therefore, it is required to improve the organization capacity as well as to train			
talents of EPB and BPC.			
(4) Objectives:			
• Improvement of the capacity of EPB to settle export marketing strategy.			
• Improvement of the capacity of BPC to research markets and to develop products.			
• Improvement of the capacity of BPC to train talents and to manage information			
• Improvement of the capacity of BPC to expand markets and to advertise products			
• Improvement of the capacity of BPC to innovate the technology of Light Engineering and			
Agricultural Processed products industry			
(5) Outcome:			
• Improving the export marketing capacity of EPB			
• Improving the capacity of BPC to research markets, to develop products, to expand markets,			
to advertise products, to train talents, to manage information.			
• Improving the capacity of BPC to innovate the technology of Light Engineering and			
Agricultural Processed products industry			
(6) Activities:			
In order to achieve the objectives mentioned above, this project conducts the training of			
On-the-Job style by dispatching experts (mentioned in ).			
(7) Schedule:			
2013 (2 years)			
(8) Composition of Experts			
metal processing industry			
2 Expert of information processing and information analysis			
3 Expert of competitiveness analysis			
4.Expert of market research and product development			
5.Expert of market expansion and advertisement			
6.Talent training expert			
7.Expert of industrial linkage (macro economic analysis)			
(9) Others			

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# ProjectDigestNo.TC-11

Technical Cooperation Project Form			
(1) Project Title: Trada Human Descurse Development Centre (Technical Cooperation Project)			
(2) Implementation A gent :			
(2) Implementation Agent :			
Export Promotion Bureau (EPB), Bangladesh Foreign Trade Institute (BFTI)			
Bangladesh has some SME that has export competitiveness in cost and quality but they overwhelmingly lack the talents, with regard to both quality and quantity, who can deal with a series of trading operation that begins with receiving inquiries about products from foreign clients, submitting estimations, shipping samples, negotiating the contract conditions, making contracts, in taking care of clients' needs. In fact, Ministry of Commerce and EPB have realized the necessity of training talents for trading operation, which means that today they do not have any capacity to perform training. Agents which can offer broad service related to trading, such as offering the international market information, holding exhibitions of products, and offering consulting about operation, standardization and approval of quality standards, even though there are some agents of BFTI or the private sector that provide trainings.			
establish a training center that can train trading talents, offer consulting service for company's			
export business, in order to expand exports of SME.			
(4) Objective: Establishing a training center for trading, that offers the training program to educate local SME about necessary knowledge and experience for trading, and enabling to run and plan the center.			
(5) Objective:			
• Establishing the training center for trading by the Bangladesh act and equipping the buildings and machineries needed for the activity			
• Ensuring the staff needed for the activity of the training center			
Creating the of the training curriculum of the training center			
• Improving the capacity of the trainees by the trading operation training of the training center			
• Improving the capacity of the trainers by the training of the training center			
• Study of the actual situation about the trading operation training in Bangladesh			
• Providing the buildings and machineries for the training center for trading			
in Japan or the third countries (ASEAN)			
• Creating the training curriculum of the training conter for trading			
Offering the trading operation training of the training center for trading			
• Offering the training for the training at the training center			
(7) Schedule:			
August 2013 – July 2017			
(8) Composition of Experts			
• Supervisor			
Operation adjustment			
Trading Finance			
Trading operation			
Analysis of trading data			
(9) Others			
At first, establishing the training center for trading in Dhaka, and estimating the result of the			

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center. Then, developing the same project of training center in the main regional cities (Chittagong, Sylhet Khulna, Mymensingh, and so on.). TAPP-JICA (2012)

