

'Data Universe' of Bangladesh's RMG Enterprises *Key Features and Limitations*

Khondaker Golam Moazzem Marzuka Ahmad Radia





'DATA UNIVERSE' OF BANGLADESH'S RMG ENTERPRISES Key Features and Limitations

CPD Working Paper 123

Khondaker Golam Moazzem Marzuka Ahmad Radia



CPD-RMG Study Partners









Kingdom of the Netherlands



Publisher

Centre for Policy Dialogue (CPD)

House - 6/2 (7th & 8th floors), Block - F Kazi Nazrul Islam Road, Lalmatia Housing Estate Dhaka - 1207, Bangladesh Telephone: (+88 02) 58152779, 9141734, 9141703, 9126402 Fax: (+88 02) 48110414 E-mail: info@cpd.org.bd Website: www.cpd.org.bd

First Published December 2018 © Centre for Policy Dialogue (CPD)

Disclaimer: The views expressed in this paper are those of the authors alone and do not necessarily reflect the views of the CPD.

Tk. 65 USD 6

ISSN 2225-8175 (Online) ISSN 2225-8035 (Print)

Citation: Moazzem, K. G. and Radia, M. A. (2018). *'Data Universe' of Bangladesh's RMG Enterprises: Key Features and Limitations*. CPD Working Paper 123. Dhaka: Centre for Policy Dialogue (CPD).

Cover design Avra Bhattacharjee

C42018_10WP123_TRC

Centre for Policy Dialogue (CPD) was established in 1993 as a civil society initiative to promote an ongoing dialogue between the principle partners in the decision-making and implementing process. Over the past 25 years, the Centre has emerged as a globally reputed independent think tank, with local roots and global reach. A key area of CPD's activism is to organise dialogues to address developmental policy issues that are critical to national, regional and global interests, with a view to seeking constructive solutions from major stakeholders. The other key area of CPD's activities is to undertake research programmes on current and strategic issues.

CPD's dialogues are designed to address important policy issues and to seek constructive solutions to these problems. In doing so, CPD involves all important cross-sections of the society, including public representatives, government officials, business leaders, activists of grassroots organisations, academics, development partners and other relevant interest groups. CPD focuses on frontier issues which are critical to the development process of Bangladesh, South Asia and LDCs in the present context, and those that are expected to shape and influence the country's development prospects from the mid-term perspectives. CPD seeks to provide voice to the interests and concerns of the low-income economies in the global development discourse. With a view to influencing policies, CPD deploys both research and dialogue which draw synergy from one another.

CPD's research programmes are both serviced by and intended to serve, as inputs for particular dialogues organised by the Centre throughout the year. Major research themes are: Macroeconomic Performance Analysis; Resource Mobilisation and Fiscal Policies; Inclusive Growth and Labour Issues; Trade, Regional Cooperation and Global Integration; Investment Promotion, Infrastructure and Enterprise Development; Agriculture, Climate Change and Environment; Gender, Human Development and Social Protection; Sustainable Development Goals (SDGs); and Governance and Institution.

CPD also conducts periodic public perception surveys on policy issues and issues of developmental concerns. With a view to promoting vision and policy awareness amongst the young people of the country, CPD is also implementing a *Youth Leadership Programme*. CPD serves as the Secretariat of two global initiatives. *LDC IV Monitor* is an independent global partnership for monitoring the outcome of the Fourth UN Conference on the LDCs. *Southern Voice on Post-MDGs* is a network of 50 think tanks, which seeks to contribute to the ongoing global discourse on the SDGs. At the national level, CPD hosts the Secretariat of the *Citizen's Platform for SDGs, Bangladesh*—a civil society initiative that include about 90 Partner organisations, founded with an objective to contribute to the delivery of the SDGs and enhance accountability in its implementation process. In recognition of its track record in research, dialogue and policy influencing, CPD has been selected as one of the awardees of the Think Tank Initiative (TTI) through a globally competitive selection process for two consecutive times.

Dissemination of information and knowledge on critical developmental issues continues to remain an important component of CPD's activities. Pursuant to this, CPD maintains an active publication programme, both in Bangla and in English. As part of its dissemination programme, CPD has been bringing out CPD Occasional Paper Series on a regular basis. It may be noted in this connection that since November 2011, the Series has been re-introduced as **CPD Working Paper Series**. Research work in progress, background papers of dialogues, investigative reports and results of perception surveys which relate to issues of high public interest are published under this series.

The present paper titled **'Data Universe' of Bangladesh's RMG Enterprises: Key Features and Limitations** has been prepared under the CPD-RMG Study on 'New Dynamics in Bangladesh's Apparels Enterprises: Perspectives on Restructuring, Upgradation and Compliance Assurance.' The study was conducted in collaboration with the Friedrich-Ebert-Stiftung (FES), Bangladesh Office, the GIZ Bangladesh, the Embassy of the Kingdom of Netherlands, Dhaka, and the Embassy of Sweden, Dhaka. The paper is authored by *Dr Khondaker Golam Moazzem*, Research Director, CPD <moazzem@cpd.org.bd> and *Ms Marzuka Ahmad Radia*, former Research Associate (Project), CPD-RMG Study <marzuka1500@gmail.com>

Executive Editor: *Ms Anisatul Fatema Yousuf*, Director, Dialogue and Communication, CPD **Series Editor:** *Dr Fahmida Khatun*, Executive Director, CPD

In the backdrop of limited data on the key manufacturing sectors of Bangladesh, this paper reviews the data situation of the readymade garments (RMG) sector. Under the CPD-RMG Study, a database called 'data universe' of the RMG enterprises in Bangladesh has been prepared. While compiling data from available nine datasets of public and private organisations, a number of weaknesses were found which include incomprehensiveness, incompleteness and inconsistencies of the datasets. The study devised a unique analytical tool to identify the information of factories which are operational. It identified a total of 3,856 factories are in operation, with almost 3.6 million workers, of which about 53 per cent is female and 47 per cent is male workers. About 98 per cent of these enterprises are located in four districts: Dhaka (38 per cent), Gazipur (28.9 per cent), Chittagong (16.1 per cent) and Narayanganj (14.7 per cent). The study proposes to develop a comprehensive database for the RMG enterprises by including information on production, products, machineries, export markets, management professionals, foreign professionals, workers, workers' organisations and compliance-related issues.

Contents

Abs Acro	tract onyms	v ix
1.	Introduction	1
2.	Available Information on Bangladesh's Garments Sector: A Brief Review	1
3.	Datasets Used to Prepare the Harmonised Database	3
4.	Observations on Collected Datasets	5
5.	Creation of a Harmonised or Consolidated Dataset	6
6.	Description of the Newly Created Dataset	9
7.	Non-Operational Enterprises in the Harmonised Dataset	16
6.	Recommendations for Creating a Proper Dataset	17

List of Tables, Figures and Diagram

Information Available in Each Dataset	3
Information Missing in Each Dataset	5
Location of RMG Enterprises	8
Membership of RMG Enterprises	8
Data Universe of the RMG Sector of Bangladesh	9
Locational Distribution of Enterprises with Mostly Male Workers	11
Locational Distribution of Enterprises with Mostly Female Workers	11
Location of Operational Enterprises	12
Locational Distribution of Top 5 per cent, 10 per cent and 20 per cent of Operational	13
Enterprises	
Size Distribution of Operational Enterprises	14
Enterprises with Trade Unions	16
Comparison of Data Universe and Trade Union Enterprises by Membership	16
Comparison of Data Universe and Trade Union Enterprises by Location	16
Location of RMG Enterprises	12
Locational Distribution of RMG Factories	
Distribution of Factories and Workers under Different Categories	14
Distribution of RMG Enterprises	15
	15
: Creation of Operational Database	10
	Information Available in Each Dataset Information Missing in Each Dataset Location of RMG Enterprises Membership of RMG Enterprises Data Universe of the RMG Sector of Bangladesh Locational Distribution of Enterprises with Mostly Male Workers Locational Distribution of Enterprises with Mostly Female Workers Location of Operational Enterprises Location of Operational Enterprises Locational Distribution of Top 5 per cent, 10 per cent and 20 per cent of Operational Enterprises Size Distribution of Operational Enterprises Enterprises with Trade Unions Comparison of Data Universe and Trade Union Enterprises by Membership Comparison of Data Universe and Trade Union Enterprises by Location Location of RMG Enterprises Locational Distribution of RMG Factories Distribution of Factories and Workers under Different Categories Distribution of RMG Enterprises

Alliance	Alliance for Bangladesh Worker Safety
Accord	Accord on Fire and Building Safety in Bangladesh
BBS	Bangladesh Bureau of Statistics
BEPZA	Bangladesh Export Processing Zones Authority
BGMEA	Bangladesh Garment Manufacturers and Exporters Association
BIDS	Bangladesh Institute of Development Studies
BKMEA	Bangladesh Knitwear Manufacturers & Exporters Association
CAP	Corrective Action Plan
CMI	Census of Manufacturing Industries
CPD	Centre for Policy Dialogue
DIFE	Department of Inspection for Factories and Establishments
DTA	Domestic Tariff Area
DoL	Department of Labour
EPZ	Export Processing Zone
ETP	Effluent Treatment Plant
FDI	Foreign Direct Investment
GIS	Geographic Information System
GoB	Government of Bangladesh
ILO	International Labour Organization
LFS	Labour Force Survey
MFA	Multi-Fibre Arrangement
Mole	Ministry of Labour and Employment
NI	National Tripartite Plan of Action on Fire Safety and Structural Integrity
RMG	Readymade Garments
SMI	Survey of Manufacturing Industries
WDI	World Development Indicators
WITS	World Integrated Trade Solutions
WPC	Workers' Participatory Committee

1. INTRODUCTION

In Bangladesh, the dearth of updated and reliable data causes significant difficulty in tracking the progress of key economic indicators; the readymade garments (RMG) sector is no exception. The poor availability of data at the level of individual enterprises does not commensurate with its robust industrial growth. Public and private databases do have data on several indicators related to the RMG sector; however, most of these are not comprehensive, not regularly updated, and do not provide information that meets the requirements of the sector. It is generally acknowledged that, the RMG sector needs a comprehensive database because of its prime importance to the national economy in terms of industrial production, employment and export, as well as for the increasing demand to ensure accountability and transparency in the production process. While initiatives have been taken to address the need for updated data, these are purpose-made, and may not form a comprehensive database for this most important manufacturing sector of the country.

This study, first of its kind in Bangladesh, is an attempt to create a 'data universe' for the RMG sector. Based on the available data, the study has tried to create a master database of the RMG enterprises currently in operation. In the process of data mining, the study has explored weaknesses of the available datasets that need to be bridged to address the reliability of RMG-related data.

1.1 Objective

The objective of the study is to create a data universe of the RMG sector of Bangladesh based on the discrete databases available to various public and private entities. Such a database will highlight the gaps in data and information when creating the required comprehensive database. Furthermore, the study critically analyses the existing data universe to appreciate the characteristics of the country's RMG enterprises. Finally, the study puts forward a set of recommendations on how to develop a comprehensive database for the RMG sector of Bangladesh.

1.2 Methods and Limitations

Data, in this study, have been compiled from various available sources including the internal databases of public and private organisations. To create a harmonised database, the variables used in different datasets usually need to be standardised. This study harmonises data on different variables, as defined in different datasets. Besides, the reporting period of different datasets are also disparate. Most datasets provide information only about enterprises which are members of different manufacturers' and exporters' associations. Therefore, the data of non-member enterprises are reported only partially in this data universe.

2. AVAILABLE INFORMATION ON BANGLADESH'S GARMENTS SECTOR: A BRIEF REVIEW

A number of public and private organisations maintain data and information on the RMG sector of Bangladesh. Public organisations that collate and process relevant data are – the Bangladesh Bureau of Statistics (BBS), Department of Inspection for Factories and Establishments (DIFE) and Department of Labour (DoL) under the Ministry of Labour and Employment (MoLE) of the Government of Bangladesh (GoB). Private organisations that record data on the RMG enterprises include Bangladesh Garment Manufacturers and Exporters Association (BGMEA), Bangladesh Knitwear Manufacturers & Exporters Association (BKMEA), Accord on Fire and Building Safety in Bangladesh (Accord), Alliance for Bangladesh Worker Safety (Alliance), and the National Tripartite Plan of Action on Fire Safety and Structural Integrity (hereafter NI). These databases are mostly purpose-made and are not very regularly updated; hence, their uses are limited in many ways. As a result, there remains a serious need for a comprehensive dataset that the stakeholders will be able to use to meet their requirements.

2.1 National Database: Survey of Manufacturing Industries and Others

Among the public organisations that are the most important sources of data for manufacturing enterprises such as those in the RMG sector, is the BBS. BBS has two flagship publications, which are – the Census of Manufacturing Industries (CMI) and the Survey of Manufacturing Enterprises (SMI). Both of these reports are published with specific time intervals. The CMI was published in 1986, 1991, 1995 and 2000; and the SMI was published in 2005, 2010 and 2012.¹

Information related to enterprises is also found in the Economic Census. Bangladesh Labour Force Survey (LFS) contains information on industrial workers. Production-related information is reported monthly in the Industrial Production Statistics. Industry-wise aggregate information is available in a number of national documents, such as the Statistical Yearbook of Bangladesh, Bangladesh Economic Review, Import Payments, Export Receipts and the Major Economic Indicators, published by the Bangladesh Bank. Some global databases such as World Development Indicators (WDI), World Integrated Trade Solutions (WITS) and United Nations Comtrade (UN Comtrade) also report on macroeconomic indicators related to enterprises and workers. These, however, mostly report aggregate-level information of macroeconomic indicators.

The published data portrays aggregated-level information/data of manufacturing enterprises including for RMG sector, but enterprise-level information is not available in public domain. Since the national survey reports listed above are published in wide time intervals, stakeholders are able to use them only to a limited extent. Thus, a gap remains in comprehensive and real-time data for manufacturing enterprises of the RMG sector in the public domain.

2.2 Data on the Garments Sector in Other Public and Private Organisations

At present, RMG-related data at the level of individual enterprises is available with some public organisations such as the DIFE, the DoL; private organisations such as the BGMEA, BKMEA, the Accord, and the Alliance; and international organisations such as the International Labour Organization (ILO). However, most of this data is available only for internal use. Only two organisations, namely the Accord and the Alliance, have publicised detailed data of individual enterprises on their respective websites. BGMEA and BKMEA have uploaded only limited information of their members and enterprises on their websites.

2.3 Survey-based Data on the RMG Sector

Various research reports and academic papers have been written using primary surveys conducted on the RMG sector in Bangladesh. Since the early 1990s, various organisations have conducted these surveys with different objectives. Data obtained from these primary surveys could be a good source of information. Unfortunately, most of these databases are not available publicly. In 1990 and 1991, the Bangladesh Institute of Development Studies (BIDS) conducted a survey on economic and social condition of RMG workers at the individual level in RMG enterprises. In 2006, Centre for Policy Dialogue (CPD) surveyed over 200 RMG enterprises on the changes and challenges for the RMG sector of Bangladesh in view of the post-Multi-Fibre Arrangement (MFA) period. In 2014, Bangladesh Mahila Parishad surveyed on 1,013 female garment workers. In 2015, the Asian Centre for Development surveyed 1,204 RMG workers to examine the social impact of the garment industry on its workers.

¹Major indicators covered under these reports include – number of establishments, ownership of establishments, legal status of enterprises, fixed assets, total people engaged, number of employees, employment cost, value of gross output, industrial cost, gross value added, tax payments by enterprise, value added at factor cost, and fixed assets and outputs by ownership. These reports also rank establishments by employment size and value of fixed assets.

Another survey was conducted in 2014 by the University of Dhaka on 120 female workers in sweater, knitwear and weaving factories, with a view to appreciate the level of vulnerabilities of employment in the garments sector of Bangladesh.

3. DATASETS USED TO PREPARE THE HARMONISED DATABASE

Under the present study, datasets were collected from seven different public and private organisations which include the DIFE, DoL, ILO, BGMEA, BKMEA, the Accord and the Alliance. However, as mentioned earlier, these datasets were created with different objectives in mind. As a result, information collated under each of these also varies. Table 1 compares indicators available in different organisational datasets. The following sub-sections discuss the focus of each of these datasets.

Indicator	Datasets									
	BGMEA	BKMEA	Accord I	Accord II	Alliance I	Alliance II	ILO	DIFE	DoL	
Information available on number of factories	4,329	2,085	1,608	1,466	862	649	1,549	4,808	501	
	Information Available on Following Indicators									
Size (employees)	v	v	v		v			v		
EPZ location								v		
Products	v	v						V		
Production capacity	v	v								
Operational status	v	v								
Inspection			v	V	v	v	٧	V		
Trade union/WPC									v	
BGMEA/BKMEA reference ID	V	V					V	V		

Table 1: Information Available in Each Dataset

Source: CPD-RMG Study, 2018.

Note: Collection time of datasets was between October-November, 2016.

EPZ: Export processing zone; WPC: Workers' participatory committee.

3.1 Public Organisations

3.1.1 Department of Inspection for Factories and Establishments

The DIFE, a department under the MoLE of the GoB, is entrusted with the responsibility of ensuring better workplace safety and security of workers in different sectors. DIFE maintains two types of datasets for their own requirements – a master dataset and a dataset related to compliance. The master dataset contains general information on 4,808 factories and establishments in the RMG sector. This includes information on the identity of the enterprise's authority, whether the enterprise is a member of a manufacturers' and exporters' association, reference ID of the said association, product type, enterprise category, number of enterprise workers by gender, and whether the enterprise is na export processing zone (EPZ) or not. On the other hand, the dataset related to compliance is based on the routine inspection reports prepared by the DIFE's inspectors. It includes information on product type, whether the enterprise is a member of a manufacturers' and exporters' and exporters' and exporters' and exporters' and exporters' and exporters, and exporters' and exporters, and whether the enterprise is based on the routine inspection reports prepared by the DIFE's inspectors. It includes information on product type, whether the enterprise is a member of a manufacturers' and exporters' association, number of enterprise workers by gender, compliance issues – appointment letter, service book, attendance, minimum wage, regular payment of wage, overtime, leave, toilet, child labour, daycare, first aid, safe drinking water, trade union and workers' participatory committee (WPC), safety committee, insurance, ventilation, fire security, structural security and electrical security.

3.1.2 Department of Labour

The DoL works on ensuring effective relations between the labourers and the management side, in the garment industry. Datasets collected from the DoL include data of 501 trade unions active in RMG factories related to workers' representation in trade unions.

3.1.3 National Initiative

The National Initiative is a tri-partite initiative of the government, employers and workers to monitor and inspect the workplace safety of the garment factories of Bangladesh, mainly of factories that do not fall under the purview of the Accord or the Alliance. The data collected through this initiative is preserved in the DIFE database, and contains information on the reference ID of manufacturers' and exporters' association membership and the survey authorities that inspected the factories.

3.2 Business Bodies

3.2.1 Bangladesh Garment Manufacturers and Exporters Association

The BGMEA, one of the largest trade associations in the country, representing mainly the woven garments and sweater sub-sectors, maintains a dataset of 4,329 factories. The dataset contains information on the enterprise's authority or contact person, BGMEA reference ID, office address, contact information, year of establishment, number of employees, number of machines, annual production and product types. However, data on several other indicators is missing.

3.2.2 Bangladesh Knitwear Manufacturers & Exporters Association

The BKMEA, a trade organisation for manufacturers and exporters in the Bangladesh knitted apparel and fashion industry, maintains a dataset of 2,085 factories. The dataset contains information on BKMEA reference ID, category, year of establishment, authority or contact person, renewal status, number of workers by gender, number of each type of product and production capacity. In this database, too, data on several other indicators is not available.

3.3 Private Monitoring and Inspection Agencies

3.3.1 Accord on Fire and Building Safety in Bangladesh

The Accord is an independent, legally binding agreement between brands and trade unions to ensure workers' health and safety by monitoring the working conditions of the apparel enterprises of Bangladesh through regular inspections as well as suggesting corrective actions. Accord maintains two datasets: one contains general information on factories (hereafter referred to as Accord 1); and the other compiles Corrective Action Plans (CAPs) suggested by the Accord for each inspected enterprise (hereafter referred to as Accord 2). Both the datasets are available on Accord's website. The Accord 1 database contains information on how many buildings comprise each enterprise, how many stories are there in each of the buildings, whether the factories are housed in buildings that are house of other factories or other kinds of institutions, how many floors are there in the building the factory occupies, number of workers, tier of the factory, and number of active members. On the other hand, the Accord 2 database shows problems related to fire, electrical and building structure safety. The follow-up inspection reports of the Accord 2 database is also available on its website.

3.3.2 Alliance for Bangladesh Worker Safety

The Alliance, another group of major global retailers working to improve workers' safety in the garments sector of Bangladesh through constant monitoring and inspection, also maintains two datasets. One contains general information on the factories inspected (hereafter referred to as Alliance 1), and the other (hereafter referred to as Alliance 2) is a collection of CAPs suggested by Alliance for each enterprise inspected. Alliance 1 and Alliance 2 contain information like the Accord 1 and Accord 2 databases.

4. OBSERVATIONS ON COLLECTED DATASETS

The observations presented in this section point out to the weaknesses in existing data on RMG enterprises that need to be improved if it is to be used better.

4.1 Incomprehensive Data

The available data sources do not contain comprehensive datasets. There is no single dataset that contains data on all the required variables. For example, the datasets of BGMEA and BKMEA only contain data on their members, while Accord and Alliance contain data on only those factories that they monitor and inspect. There is no comprehensive dataset on the garments sector available that can provide basic insights on total employment, total number of operational factories, volume and capacity of exports, etc.

4.2 Incompleteness

Many of the datasets are incomplete, i.e. a wide range of data are missing. For example, in the DIFE master dataset, out of 4,808 factories, the name of authority is missing for 259 factories; designation is missing for 118 factories; and membership information is missing for 29 factories. Most importantly, there is no information on the workers for 1,338 factories, which constitutes around one-fourth of the total factories listed in the dataset. Also, the DIFE dataset related to compliance contains information on firms of only four districts. In the BGMEA dataset, data on total workers is missing for 78 factories, while in case of the BKMEA dataset, this information is missing for 1,739 factories. The DoL database on trade unions has data on factories in only Dhaka and Chittagong, but even that is incomplete; there are many anomalies present in the data. For example, some operational factories are listed as non-operational, and vice-versa. Many databases contain conflicting information about the same enterprise, as well as duplicate information about the same enterprise, while there exists practically no information at all about certain factories. Table 2 compares the information missing under each indicator for the datasets of each organisation.

Indicator	BGMEA	BKMEA	Accord I	Accord II	Alliance I	Alliance II	ILO	DIFE	DoL
Number of factories	4,329	2,085	1,608	1,466	862	649	1,549	4,808	501
Size (employee) (%)	0.00	83.60	21.21	N/A	24.94	N/A	N/A	27.83	N/A
EPZ location (%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.10	N/A
Products (%)	0.79	89.36	N/A	N/A	N/A	N/A	N/A	0.49	N/A
Production capacity (%)	4.41	90.70	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Operational status (%)	42.07	59.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A

 Table 2: Information Missing in Each Dataset

(Table 2 contd.)

Indicator	BGMEA	BKMEA	Accord I	Accord II	Alliance I	Alliance II	ILO	DIFE	DoL
Inspection (%)	N/A	N/A	0.00	0.00	0.00	0.00	0.00	44.95	N/A
Trade union/WPC (%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00
BGMEA/BKMEA reference ID (%)	0.00	0.00	N/A	N/A	N/A	N/A	0.00	32.50	N/A

(Table 2 contd.)

Source: CPD-RMG Study, 2018.

4.3 Inconsistencies

There are inconsistencies in most of the data reported. For example, in the DIFE master dataset, there are 131 entries in the 'designation' field with no indication as to which factories these designations belong. The Accord 2 dataset is not a proper sub-set of the Accord 1 dataset – there are factories listed in Accord 2 which are not listed in Accord 1. Also, there are number of factories among the datasets of Accord and Alliance that are not members of either BGMEA or BKMEA. Data collected from the different databases cannot be taken at face value and needs to be rechecked before it can be utilised further. Fictitious and erroneous data should be eliminated from different datasets to avoid confusion. These large datasets need to be regularly updated by deleting and archiving redundant data. It is necessary to recognise and fix the data anomalies. Poor data quality may lead to poor decision making in the organisations using the databases for research.

4.4 Other Limitations

The datasets of BGMEA, BKMEA and DIFE are not updated regularly. In fact, it is hard to discern from the datasets when they were last updated. BGMEA and BKMEA datasets do not provide information on whether the factories listed are still in operation or not. For factories that are members of both BGMEA and BKMEA, one organisation's database does not list the enterprise's reference ID number in the other database. Data on the progress in the remediation process of the factories listed in the Alliance database is not available. Although the NI dataset provides data on the reference IDs of BGMEA and BKMEA, it does not provide data on the number of workers. Data is only provided on the addresses of the trade union offices, but the addresses of the factories in which the trade unions are active, are not given. A real-time database containing full information on all the factories is essential. The database should also be regularly reorganised in order to remove out-of-date and deleted data. Archiving the deleted files would help the database to respond faster.

5. CREATION OF A HARMONISED OR CONSOLIDATED DATASET

Since data on the RMG enterprises is fragmented, purpose-made and not updated, it is difficult to draw conclusions about the overall sectorial profile of the RMG industry. Therefore, it is important to prepare a 'data universe' based on the available data and information to initiate the process of developing a comprehensive database of the RMG industry.² The CPD-RMG Study has followed a systematic approach in preparing this comprehensive dataset.

5.1 Process of Data Compilation from Different Sources

A total of nine datasets have been collected by CPD from different organisations and each of these has been defined separately. The initial objective is to assign a unique identification number to each

²A 'data universe' is primarily a dataset that encompasses the entirety of collectable data. A data universe is a semantic model which helps to connect users to different databases to design modules for further analysis. The sets of data in a universe are usually broken down into easily discernible groups that are logical for the users.

RMG enterprise to avoid duplication. This process will help to develop a harmonised dataset of RMG enterprises. It starts with assigning a name to each dataset, according to their originating institutions: i.e. BGMEA, BKMEA, Accord 1, Accord 2, Alliance 1, Alliance 2, NI, DIFE and DoL. A major challenge was to clean up each of the datasets by correcting the spellings of enterprises' names, inconsistencies of information at the enterprise level³, duplication of information, filling in missing information in each databases, etc. The following process was followed in compiling the dataset:

At first, the two major datasets of BGMEA and BKMEA were merged. In the BGMEA dataset, each of the 4,329 enterprises has its own reference ID. This is also the case for each of BKMEA's 2,085 enterprises. The CPD team first merged these two datasets and named it BG+BK. Since BGMEA and BKMEA have 378 enterprises in common, the resulting dataset consists of 6,036 factories.

Secondly, another dataset was manually created by merging Accord 1 (consisting of general information of enterprises) and Accord 2 (consisting of data related to compliance). This merged dataset is named ACCORD and consists of 1,640 enterprises.

Thirdly, two merged datasets – BG+BK dataset and the ACCORD dataset were remerged to create a new dataset named BG+BK+AC sub-dataset consisting of 6,177 factories. In this merge, there were 1,499 enterprises that BGMEA, BKMEA and ACCORD had in common.

Fourthly, another sub-dataset was created separately by manually merging Alliance 1 (consisting of general information on factories) and Alliance 2 (consisting of data related to compliance). This is named ALLIANCE, and consists of 862 enterprises.

Fifthly, this ALLIANCE sub-dataset was then merged with the sub-dataset BG+BK+AC, and the new master dataset was called BG+BK+AC+AL. This lists 6,346 enterprises (693 enterprises were common among the datasets).

Sixthly, the dataset of the NI was then merged with the BG+BK+AC+AL sub-dataset, creating the BG+BK+AC+AL+NI database consisting of 6,383 factories (3,162 enterprises were common among the datasets).

Finally, the DIFE dataset was merged with the BG+BK+AC+AL+NI database to create the unique ID database of 6,894 factories.⁴

5.2 Basic Information of the Harmonised Data

The harmonised dataset prepared by the CPD-RMG Study provides information of 6,821 factories (73 factories have been removed from the master dataset because these were duplicate records) which have been assigned a unique identification number. Since most of the databases used for preparing the harmonised dataset are not updated on a regular basis and do not use proper data entry methods, the dataset prepared may easily contain records of enterprises that have gone out of operation. However, the harmonised dataset can provide an overview of the enterprises in the Bangladesh garments sector. Building on this dataset, a master dataset has been developed that includes information only on enterprises that are in operation. This dataset has been called a 'data universe'.

³The databases contained inconsistent information on several variables. For example, the number of workers in the same enterprise was wrongly noted in each database compared. The enterprise named 'ABC Apparels' (pseudo name) was included in BGMEA, Accord and DIFE databases. However, the BGMEA database listed that it employed 400 workers, the Accord database listed that there were 2,000 workers, and the DIFE database listed that there were 425 workers. This is the nature of incongruity that prevails for many of the variables in a majority of the datasets.

⁴A total of 174 factories were listed in the DIFE database that did not match the factories listed in the other databases.

The harmonised dataset includes information on a number of key indicators related to the apparel sector, such as the location of RMG enterprises disaggregated by EPZs or Domestic Tariff Areas (DTAs), membership in associations and size of these enterprises.⁵ Harmonised datasets indicate that RMG enterprises are located in as many as 31 different districts, of which, four are most significant (Table 3). These are Dhaka, Chittagong, Gazipur and Narayanganj. The highest number of factories are in Dhaka. Of the 6,821 factories, about 1,113 factories (16.3 per cent) have no information on size, and 394 factories have no information on location, while 33 factories have information on neither size nor location. Thus, a total of 1,146 factories were omitted.

Location	Number of Factories	Number of Workers	Missing Information on Number of Workers
Dhaka	2530	1500227	287
Chittagong	878	648593	52
Narayanganj	1351	424236	624
Gazipur	1510	1343697	132
Others	158	184873	18
Location missing	394	182513	33
Total	6821	4284139	1146

Table 3: Location of RMG Enterprises

Source: CPD-RMG Study, 2018.

All enterprises are found to be member of either of the two major bodies – BGMEA or the BKMEA (Table 4). Majority of the enterprises are members of BGMEA, which account for over 60 per cent of the factories, followed by those of BKMEA, which comprises over 20 per cent of all enterprises. Besides, another 6 per cent of the enterprises are members of both BGMEA and BKMEA. The rest (6 per cent) does not have information about their membership. Being the organisation of the majority of enterprises, BGMEA covers the majority of small, medium and large enterprises.⁶ In case of individual BKMEA and BGMEA factories, small factories tend to dominate in the RMG sector.

Association	Number of Factories	Number of Workers	Missing Information on Number of Workers
BGMEA	3951	3093374	36
BKMEA	1707	248969	963
Both	378	456234	0
Non-defined	785	485562	147
Total	6821	4284139	1146

Table 4: Membership of RMG Enterprises

Source: CPD-RMG Study, 2018.

5.3 Observations on the Harmonised Dataset

5.3.1 Compilation Difficulties

Compilation remains difficult for all the datasets, since common identifiers are missing. For example, DIFE's dataset related to compliance is a compilation of monthly inspection reports sent by DIFE's district office to the DIFE head office. Moreover, the dataset related to compliance contains enterprises

⁵In a number of cases, information at the level of individual enterprises for indicators is not available.

⁶Data on size is missing for over 15 per cent of all factories.

missing in the general dataset, and there is no common identification number. The only information that can be used to match an enterprise between the two datasets are name and address. BGMEA and BKMEA reference IDs are not available in Accord and Alliance datasets. Here too, the Accord and Alliance databases had to be merged using only name and address.

5.3.2 Missing Information

Since datasets were harmonised based on the minimal information available, a number of indicators are still missing information such as location, contact, number of workers and membership to enterprises in the harmonised datasets.

6. DESCRIPTION OF THE NEWLY CREATED DATASET

6.1 From Harmonised Dataset to 'Data Universe' of the RMG Enterprises

The harmonised dataset includes enterprises which are reported by the entrepreneurs to be either 'operational' or 'non-operational'. According to Table 5, out of 6,821 enterprises, 3,648 enterprises are reported as 'operational'. This is only 53 per cent of total harmonised data. Anecdotal evidence has demonstrated that because the data is outdated, some of the factories noted as 'operational' may no longer be so. This is because there is no proper mechanism to monitor the operational matters of RMG enterprises. Moreover, a good number of BGMEA and BKMEA members renew membership registration every year, only to keep their voting rights for their organisational elections, even though their enterprises are no longer in operation.⁷

The CPD-RMG Study team had telephonic discussions with all the enterprises in the harmonised dataset. Of the 6,821 enterprises, the CPD team found telephone numbers for 6,036 enterprises. This exercise underscored the need to recheck which enterprises in the database are still operational. According to Table 5, among the enterprises reported 'operational', 121 enterprises are currently 'not in operation'. Similarly, among the enterprises reported 'non-operational', 329 enterprises were found to be 'in operation'. Eventually, the CPD-RMG Study identified 3,856 enterprises to be functionally 'in operation', and these enterprises constitute the data universe of the RMG sector of Bangladesh.

Criteria	Number of Enterprises	Share (%)
A. Harmonised Enterprises	6821	100
A1. Reported as 'Operational' Enterprises	3648	53
A2. Reported as 'Non-Operational' Enterprises	3173	47
A1. Reported as 'Operational' Enterprises	3648	100
A1.1. Enterprises found 'in Operation'	1202	33
A1.2. Enterprises found 'Not in Operation'	121	3
A1.3. Enterprises found with 'Insufficient Information'	2325	64
A2. Reported as 'Non-Operational' Enterprises	3173	100
A2.1. Enterprises found 'Not in Operation'	236	7
A2.2. Enterprises found 'in Operation'	329	10
A2.3. Enterprises found 'with Insufficient Information'	2608	83
B. Total Enterprises in Operation (A1.1+A1.3+A2.2)	3856	

Table 5: Data Universe of th	e RMG Sector of Bangladesh
------------------------------	----------------------------

Source: CPD-RMG Study, 2018.

⁷Based on anecdotal information from conversation with BGMEA officials.





Source: CPD-RMG Study, 2018.

The rest of the enterprises are functionally non-operational. Diagram 1 shows the flow chart of how operational enterprises have been identified from the harmonised dataset.

The 'data universe' includes those enterprises which are currently in operation and have formal registration with public and private organisations. It should be noted here that, there are reports of over 1,000 enterprises which are not registered with any public and private organisation, but have been involved in export-oriented apparel manufacturing, either partially or fully, in most cases under sub-contracting arrangements. Unfortunately, information of these enterprises is not publicly available.⁸

6.2 Observations regarding the Data Universe

6.2.1 Incomplete Data

The data universe need not necessarily contain all types of information related to the listed enterprises (3,856). Within the data universe, information on production capacity tends to be missing most often – 19.1 per cent of the time, while 10.5 per cent of the information on items produced is also missing. Only inspection data of all the factories is available in the data universe. About 1.3 per cent data on production, 8.5 per cent data on EPZ affiliation, and 6.4 per cent data on BKMEA and BGMEA reference numbers are missing.

6.2.2 No Information about Enterprises Outside the Data Universe

As many as 1,000 enterprises may be in operation, producing export-oriented apparels, using their partial or full production capacity. These enterprises are mostly small in size and operate as Tier 3 enterprises or 'sub-contracting' suppliers. These enterprises should ideally be included in the data universe, but the required information was not available.

⁸DIFE lists a total of 4,808 enterprises, of which 1,565 enterprises do not match with the harmonised dataset and do not have any membership information of BGMEA and BKMEA. A proportion of these enterprises are likely to be involved in export-oriented manufacturing operation.

6.3 Features of RMG Enterprises under the Data Universe

The data universe provides key information of RMG enterprises. However, the information is insufficient to properly assess the enterprises, their production, products, market exposure, linkages with market agents and more. Key information available in the data universe includes the enterprise's location, including whether it is located inside the EPZ or outside, who owns the enterprise, type of products, number of people employed by gender, and manufacturers' and exporters' association membership.

6.3.1 Total Population

A total of 3,856 factories have been identified as operational with reporting of around 3.6 million workers employed there.⁹ According to the data available on workers, 53 per cent of them are female and 47 per cent are male. If the factories that employ the most male workers or the most female workers are categorised according to location, the distribution differs slightly, as demonstrated in Tables 6 and 7.

A total of 501 factories of the 3,856 factories were discovered to employ mostly males. Most of them were in Dhaka, followed by Gazipur.

Paradoxically, the top 5 per cent of enterprises that employed mostly females, were predominantly in Chittagong. This complements the fact that none of the top 5 per cent of factories that employed mostly males were in Chittagong. Dhaka led among the top 10 per cent and the top 20 per cent of factories that employed mostly females, followed by Chittagong (top 10 per cent) and Gazipur (top 20 per cent).

Number of Factories	Total Number			Location		
(Male Prioritised)	of Factories	Dhaka	Chittagong	Gazipur	Narayanganj	Others
Тор 5%	26	12 (46.2%)	0 (0.0%)	9 (34.6%)	4 (15.4%)	1 (3.8%)
Top 10%	51	24 (47.1%)	2 (3.9%)	14 (27.5%)	10 (19.6%)	1 (2.0%)
Тор 20%	101	46 (45.5%)	9 (8.9%)	27 (26.7%)	18 (17.8%)	1 (1.0%)

Table 6: Locational Distribution of Enterprises with Mostly Male Workers

Source: CPD-RMG Study, 2018.

Number of Factories	Total Number			Location		
(Female Prioritised)	of Factories	Dhaka	Chittagong	Gazipur	Narayanganj	Others
Top 5%	26	6 (23.1%)	9 (34.6%)	4 (15.4%)	7 (26.9%)	0 (0.0%)
Top 10%	51	15 (29.4%)	14 (27.5%)	10 (19.6%)	11 (21.6%)	1 (2.0%)
Тор 20%	101	31 (30.7%)	20 (19.8%)	30 (29.7%)	19 (18.8%)	1 (1.0%)

Table 7: Locational Distribution of Enterprises with Mostly Female Workers

Source: CPD-RMG Study, 2018.

6.3.2 Location of Enterprises

Over 98 per cent of the total number of RMG enterprises are in four districts: Dhaka (38 per cent), Gazipur (28.9 per cent), Chittagong (16.1 per cent) and Narayanganj (14.7 per cent) (Figure 1). Most of the factories are in various industrial clusters in these four districts, particularly because there are better infrastructural facilities, access to major trade routes for import and export, and logistic and

⁹The CPD-RMG Study took a 10 per cent sample from the data universe (386 enterprises) to conduct a primary survey. Of these, 16 per cent were found to not be in operation at present. This suggests that the number of enterprises operational in the data universe may be lower.

Figure 1: Location of RMG Enterprises



Source: CPD-RMG Study, 2018.

banking facilities. Workers are easier to find in these regions. A few other factories are located in other districts such as Mymensingh, Narsingdi, Tangail, Manikganj and Munshiganj with head offices in Dhaka city and nearby areas, so that commercial and business work can be based there.

Table 8 shows how employment varies with location. Of the 3.6 million workers, the highest number of workers (1.27 million or 35 per cent) are employed in factories located in Gazipur district, followed by Dhaka (1.26 million or 34.8 per cent), Chittagong (0.57 million or 15.9 per cent) and Narayanganj districts (0.37 million or 10.3 per cent). The remaining 0.14 million workers work in 91 factories dispersed in various districts. Gazipur is not only the region with the highest employment, but also the highest employment per enterprise (1,143 workers per enterprise) of any single location. Average employment per enterprise is relatively low in case of factories located in Narayanganj district.

Location	Number of Factories	Number of Factories with Information on Size	Number of Workers	Average Number of Workers per Enterprise
Dhaka	1465	1456	1257516	864
Chittagong	620	615	572233	930
Narayanganj	565	534	373764	700
Gazipur	1115	1110	1268724	1143
Others	91	91	138845	1526
Total	3856	3806	3611082	949

Source: CPD-RMG Study, 2018.

Table 9 shows that when the enterprises are categorised based on size and location, the top 5 per cent and top 10 per cent are in Dhaka. However, the top 20 per cent are in Gazipur.

The enterprises can be categorised into two types, based on whether they are located in EPZs or DTAs (Figure 2A). Over 98.5 per cent of RMG enterprises are in DTAs, the remaining 1.5 per cent are in EPZs

		Location									
tion	Dhaka		Chitta	Chittagong		Gazipur		Narayanganj		Others	
Size Distribu	Number of Factories	Number of Workers									
Top 5%	56	281517 (7.8%)	28	156104 (4.3%)	72	392446 (10.9%)	19	98235 (2.7%)	18	75297 (2.1%)	
Top 10%	114	427612 (11.8%)	64	250382 (6.9%)	147	584703 (16.2%)	35	138677 (3.8%)	26	97316 (2.7%)	
Top 20%	258	668605 (18.5%)	118	336898 (9.3%)	291	817096 (22.6%)	73	201666 (5.6%)	32	106922 (3.0%)	

 Table 9: Locational Distribution of Top 5 per cent, 10 per cent and 20 per cent of Operational Enterprises

Source: CPD-RMG Study, 2018.

(Figure 2B). Due to various limitations, RMG factories are very rare in the Ishwardi, Uttara, Mongla and Pabna EPZs. However, the data universe could not identify the country of origin of foreign investment in the RMG enterprises.¹⁰ Until 2010, foreign direct investment (FDI) in the RMG sector was allowed only in the EPZ areas, so a proportion of the enterprises located in EPZs were established under FDI. In recent times, however, the Government has allowed FDI outside EPZ. As a result, the ratio of FDI-led factories, both within the EPZs and in the DTAs, is likely to change in the coming years.

Figure 2: Locational Distribution of RMG Factories



Source: CPD-RMG Study, 2018. Note: CEPZ: Chittagong EPZ; KEPZ: Karnaphuli EPZ.

6.3.3 Size of the Enterprises

Factories employing less than 500 workers are classified as 'small', while 'medium' factories employ 500-2,500 workers. 'Large' factories were classified as having more than 2,500 workers.¹¹ The majority of the enterprises – 48.9 per cent – are small. 42.5 per cent of the enterprises are medium (Figure 3). Only 285 enterprises are large, accounting for 7.4 per cent of the total. Medium-sized enterprises employ the highest number of workers. The average workforce size in RMG enterprises is different

¹⁰Information of enterprises located in EPZs including those of foreign-owned is available at the Bangladesh Export Processing Zones Authority (BEPZA).

¹¹The Industrial Policy 2015 categorises enterprises by employment differently. The criteria have been revised upwards for RMG enterprises, because it is a highly labour-intensive sector.



Figure 3: Distribution of Factories and Workers under Different Categories

Source: CPD-RMG Study, 2018.

compared to what is observed in other major industries. The average employment in small, medium and large enterprises are 296, 1,091 and 4,443 workers respectively.¹²

This scenario almost repeats itself when the sizes of the enterprises are considered, as demonstrated in Table 10. As the size distribution of factories increases, the percentage of total workers increases at a slower rate.

Size Distribution	Number of Factories	Number of Workers	Percentage of Total Workers
Top 1%	39	370676	10.3
Тор 5%	193	1003599	27.8
Top 10%	386	1498690	41.5

Table 10: Size Distribution of Operational Enterprises

Source: CPD-RMG Study, 2018.

6.3.4 Membership of Enterprises

BGMEA factories comprise the major share of RMG enterprises (69.2 per cent), while BKMEA factories comprise a comparatively smaller share (14.9 per cent). There is another 8.9 per cent of enterprises which are members of both BGMEA and BKMEA (Figure 4). BGMEA encompasses most small, medium and large enterprises. Among the members of BKMEA, there are more small enterprises, some medium enterprises and no large enterprises.

The worker-enterprise ratio is highest in Gazipur – these are mostly weaving factories, and are members of BGMEA. The worker-enterprise ratio is lowest in Narayanganj, which houses mainly knit factories, so are mainly members of BKMEA.

¹²According to the Survey of Manufacturing Industries 2012, average employment in all three categories of other export-oriented industries are much lower compared to that in RMG. For example, average employment in the food processing industry is as follows: 10-19 workers in 53.5 per cent enterprises, 20-49 workers in 35.1 per cent of enterprises, and 50-99 workers in 7.9 per cent of enterprises.



Figure 4: Distribution of RMG Enterprises

Source: CPD-RMG Study, 2018.

6.3.5 Trade Union Enterprises

The DoL database lists a total of 501 enterprises with trade unions, but not all of them are operational; nor are they listed under the main associations and inspection agencies. It was possible to collect additional information of only 181 of these enterprises.¹³ Among these factories that match the harmonised dataset, mismatches were found only for medium factories. This is reflected in the fact that 4.8 per cent of medium factories have trade unions, more than small (3.1 per cent) and large factories (2.8 per cent). The mean number of workers is larger in trade union factories, meaning that larger factories tend to have trade unions.

BGMEA factories are more likely to have trade unions – 3.5 per cent compared to 1.2 per cent of BKMEA. Dhaka contains the most enterprises associated with trade unions – 3.9 per cent of all enterprises in Dhaka have trade unions, while only 1.04 per cent of factories in Narayanganj have trade unions. These figures match membership patterns, since most BKMEA factories are in Narayanganj.

Of the 181 factories, 145 factories with trade unions are included in the harmonised dataset. This reflects that 36 of the factories with trade unions are presently non-operational, although they are included in the trade union database.

From Table 11, it can be seen that medium factories have a higher percentage of trade unions (4.8 per cent). The standard deviation of workers' size is also much lower in case of the trade union factories, signifying lower diversity in terms of workers' size.

BKMEA factories show a much lower percentage of trade unions, when compared to their actual share in the data universe. Likewise, BGMEA factories demonstrate a much higher percentage, as shown in Table 12. Only 2.4 per cent of BKMEA factories are associated with trade unions, compared to 4.2 per cent of BGMEA factories.

Table 13 shows that, like the trade union enterprises of the harmonised dataset, enterprises in Narayanganj comprise a much lower percentage (7.6 per cent); and those in Dhaka comprise a much higher percentage (51.7 per cent) of enterprises with trade unions. Only 1.9 per cent of factories in

¹³It was not possible to match 320 factories that have trade unions to the harmonised dataset since these factories do not belong to BGMEA or BKMEA, nor were they inspected by Accord, Alliance, NI or DIFE. Therefore, these factories have not been included in the present harmonised dataset.

Size	Data Universe Enterprises		Data Univers with Trac	Percentage of Enterprises with		
	Frequency	Per cent	Frequency	Per cent	Trade Unions	
Small	1883	48.83	59	40.69	3.10	
Medium	1638	42.48	78	53.79	4.80	
Large	285	7.39	8	5.52	2.80	
Size missing	50	1.30	0	0.00	0.00	
Total	3856	100.00	145	100.00	3.80	

Table 11: Enterprises with Trade Unions

Source: CPD-RMG Study, 2018.

Table 12: Comparison of Data Universe and Trade Union Enterprises by Membership

Association	Data Universe Enterprises		Data Univers with Trac	Percentage of Enterprises with	
	Frequency	Per cent	Frequency	Per cent	Trade Unions
BGMEA	2671	69.27	113	77.93	4.20
BKMEA	575	14.91	14	9.66	2.40
Both	345	8.95	13	8.97	3.80
Not defined	265	6.87	5	3.45	1.90
Total	3856	100.00	145	100.00	3.80

Source: CPD-RMG Study, 2018.

District	Data Universe Enterprises		Data Univers with Trac	Percentage of Enterprises with		
	Frequency	Per cent	Frequency	Per cent	Trade Unions	
Dhaka	1465	37.99	75	51.72	5.10	
Chittagong	619	16.05	25	17.24	4.00	
Gazipur	1115	28.92	34	23.45	3.00	
Narayanganj	565	14.65	11	7.59	1.90	
Others	92	2.39	0	0.00	0.00	
Total	3856	100.00	145	100.00	3.80	

Table 13: Comparison of Data Universe and Trade Union Enterprises by Location

Source: CPD-RMG Study, 2018.

Narayanganj are associated with trade unions, compared to the 5.1 per cent of enterprises based in Dhaka. Here, too, is a correlation between fewer enterprises having trade unions and these enterprises being mostly members of BKMEA.

7. NON-OPERATIONAL ENTERPRISES IN THE HARMONISED DATASET

A total of 2,965 enterprises have been identified to be functionally non-operational. The number of non-operational factories are a cumulative figure. These factories are still included in the databases, as the databases have not been updated. Moazzem and Rayan (2016)¹⁴ have explored the reasons behind closing down of 159 RMG enterprises. Of these, they were able to find information on 95 enterprises that had been shut down due to loss in businesses, mismanagement and buyers no longer placing orders.

¹⁴Moazzem, K. G. and Rayan, K. (2016). 'Shut-down rule' vs. 'closure': Which one is relevant on closed garment factories of Bangladesh? Bangladesh Journal of Political Economy, 31 (3): 371–384.

In the harmonised dataset, 51 per cent of the enterprises that closed down were small-scale enterprises, 14 per cent were medium, and 0.6 per cent were large-scale enterprises. However, information of number of workers for 34 per cent of enterprises is not available. The highest number of closed enterprises are in Dhaka district (35 per cent), followed by Narayanganj (26 per cent), Gazipur (13 per cent), and Chittagong (8.7 per cent). About 98 per cent of these enterprises that have been closed are in DTAs; while only 1.6 per cent of the factories are in EPZ areas. Since most enterprises were members of BGMEA, about 70 per cent of the closed enterprises were found to be members of BGMEA; 15 per cent were the members of BKMEA; and 9 per cent were members of both associations.

8. RECOMMENDATIONS FOR CREATING A PROPER DATASET

The CPD-RMG Study has attempted to develop a data universe based on the available datasets. Given the absence of any such dataset, this data universe could partially fulfil the stakeholders' needs. However, the datasets have a number of limitations, not the least of which is the availability of information on only a limited number of variables.

At present, several initiatives are underway to prepare a database on different aspects of RMG enterprises. This includes BGMEA and BKMEA's initiative to prepare biometric databases for workers and a buyer-led Geographic Information System (GIS) database of RMG enterprises. However, these attempts are also likely be 'purpose-made' to serve the target group such as employers, associations and buyers. The CPD-RMG Study plans to regularly update the existing database with information collected from the survey.

A comprehensive dataset of enterprises should target the needs of major stakeholders including the government, workers, rights-based groups and trade unions along with those of the employers and buyers. The comprehensive datasets need to include information on distribution of workers under different grades, distribution of professionals, employment of foreign professionals and workers, extent of participation in backward and forward linkages of the value chain, types of products, types of machineries used, level of social compliance including workplace safety and security, level of physical compliance including fire, electrical and building safety, workers' associations including trade union and level of participation of workers in the trade union, training of mid-level management and workers, and compliance to environmental issues including the use of effluent treatment plants (ETPs) and industrial waste management.

It is expected that the government, manufacturers' and exporters' associations and workers' organisations will join forces to prepare such a comprehensive database on the RMG sector of Bangladesh.

Recent CPD Working Papers

Paper 122 Livelihood Challenges of RMG Workers: Exploring Scopes within the Structure of Minimum Wages and Beyond Paper 121 BREXIT and Bangladesh: An Exploratory Study on Likely Economic Implications Paper 120 Fiscal Implications of Rohingya Crisis for Bangladesh Paper 119 Exploring the State of Youth in the SDG Context: How is Bangladesh Doing? Paper 118 Growth of Employment in the Manufacturing Sector: Impact of Trade and Trade-related Policies* Towards a Social Protection Strategy for Bangladesh* Paper 117 Paper 116 Alternative Approaches to Full Employment in Bangladesh: Role of the Non-farm Sector* Paper 115 Macroeconomic Policy, Price Stability and Inclusive Growth in Bangladesh* Paper 114 Bangladesh's Formal and Informal Agricultural Trade with SAARC Countries: Emerging Trends and Policy Challenges* Paper 113 SAARC Food Bank (SFB): Institutional Architecture and Issues of Operationalisation Paper 112 Advancing the Interests of Bangladesh's Migrant Workers: Issues of Financial Inclusion and **Social Protection** Bali Ministerial of the WTO and the Way Forward: Safeguarding LDC Interests Paper 111 Trade and Transport Facilitation in Bangladesh: An Audit of the State of Play Paper 110 Paper 109 Recent Developments in Myanmar and New Opportunities for Sub-Regional Cooperation: A **Bangladesh Perspective**

*Available on web only







CPDBangladesh



House - 6/2 (7th & 8th floors), Block - F Kazi Nazrul Islam Road, Lalmatia Housing Estate Dhaka - 1207, Bangladesh Telephone: (+88 02) 58152779, 9141734, 9141703, 9126402 Fax: (+88 02) 48110414 E-mail: info@cpd.org.bd Website: www.cpd.org.bd