



<u>Civil Society Monitoring Initiative</u>

Industrial Safety of Non-RMG Enterprises and Workers Monitoring Transparency, Accountability and Efficiency of Public Actions

Presentation by

Dr Khondaker Golam Moazzem

Centre for Policy Dialogue (CPD)

13 January 2022

Centre for Policy Dialogue (CPD)

Study Team

Dr Khondaker Golam Moazzem Research Director, CPD Mr Salay Mostafa Programme Associate, CPD and

Dr Shah Md. Ahsan Habib

Professor, BIBM

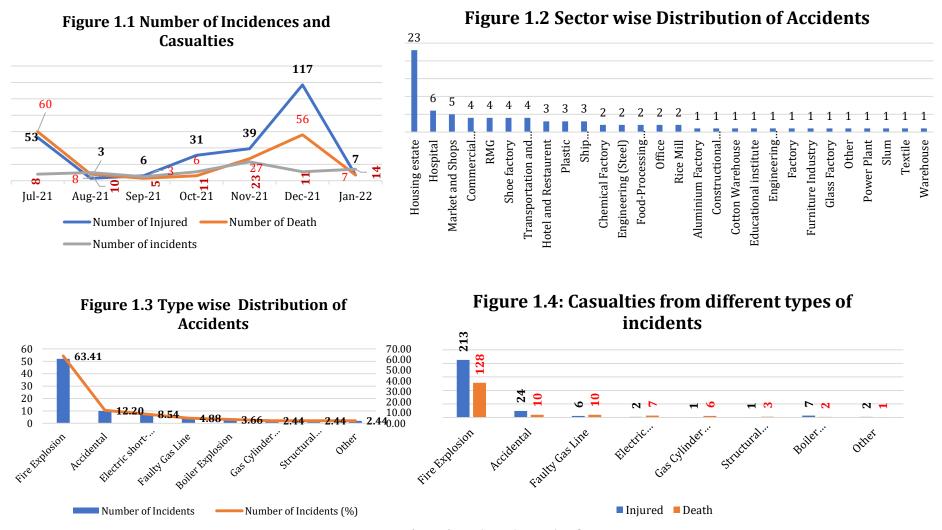
Contents

- 1. Introduction
- 2. Civil Society Monitoring Initiative
- 3. Objectives of the Civil Society Initiative
- 4. Analytical Framework of the Study
- 5. Methodology of the Study
- 6. Non-RMG Enterprises and Establishments and their State of Compliance
- 7. Industrial Accidents in Non-RMG Enterprises: A Review
- 8. Labour related Concerns: A Review
- 9. BIDA-led Initiative: A Review
- 10. Conclusion and Way Forward

K G Moazzem (2022) et al.: Industrial Safety in Non-RMG Enterprises

- Industrial safety in non-RMG enterprises is almost an unaddressed issue, and rapid rise of industrial accidents in recent years has further deteriorating situation
 - Tragedy at a food-processing factory in Narayanganj, which killed over 52 workers and injured more than 50 workers, has pointed the safety concerns in non-RMG enterprises
- Since the fire incident occurred in Narayangonj on 8 July, 2021, a total of 82 different types of accidents has been reported in the national dailies (see Figure 1 in next slide): almost one incidence in every two days
 - Majority of these accidents are related to fire (52 accidents); other accidents include electrical, boiler explosion and related issues
 - These accidents caused deaths of 167 workers/people and injury of 256 workers/people. The majority of deaths and injury caused due to fire related accidents
 - Housing, hospitals and market places, commercial and factories are the main places of accidents
 - Major industrial zones are the areas of accidents (53): Dhaka and related areas (29), Narayangonj (10), Gazipur (8) and Chittagong (8)

Figure 1: Status of post-Hashem Group accidents (9 Jul'21- 9 Jan'22)



Source: Author's illustration from Newspaper report

K G Moazzem (2022) et al.: Industrial Safety in Non-RMG Enterprises

- Rigorous industrial safety measures are of critical importance now in order to reduce the accidents and casualties
 - The required measures would be similar to those had been done in the RMG sector after the Rana Plaza tragedy
- Undertaking remedial measures in non-RMG factories is a complex issue
 - Unlike the RMG sector operated in the global value chain, most non-RMG sectors operate within the domestic supply chain
 - These domestic supply chains often **do not follow** code of conduct on workplace safety and workers' rights properly
- Enforcement of industrial safety in developing countries is a challenging task. This is because of number of reasons:
 - Lack of willingness of enterprises in making an investment for safety measures;
 - Weak governance structure in public monitoring agencies;
 - Limited capacity of monitoring and enforcement of public agencies; and
 - Lack of pressure from the buyers and consumers about industrial safety in the workplace (Khan, 2013; Arastoo et al., 2015)

- An initiative for industrial safety measures under the overall coordination of the BIDA has been announced immediately (16 July 2021) after the Hashem Food tragedy in N'gonj
- A 24-member committee has been formed to detect safety risks and to issue required directions to responsible agencies for taking appropriate actions
 - The committee is chaired by the private sector advisor of the Prime Minister
 - The members of the committee include representatives of different government offices such as DIFE, FSCD, RAJUK and representatives of different private sector associations including FBCCI and BGMEA
- The main objectives of the committee are
 - to extend necessary suggestions to concerned offices after reviewing the observations and recommendations received from field level observations;
 - to review the activities related safety issues in factories, mills and industrial and commercial establishments;
 - to put forward suggestions for taking necessary steps after reviewing the laws, rules and policies guidelines and instructions, and
 - to take necessary steps to bring the management and workers in mills and factories under training industrial safety issues

2. Civil Society Monitoring Initiative

K G Moazzem (2022) et al.: Industrial Safety in Non-RMG Enterprises

2. Civil Society Monitoring Initiative

- Civil society organisations (CSOs) plays an important role in monitoring the activities of different public and private agencies
 - To maintain industrial safety and worker related issues
- Ensuring transparency and accountability is one of the major aspects of proper industrial safety enforcement in industrial and commercial enterprises
- The civil society initiative called 'Monitoring the Post-Rana Plaza Developments' was initiated in 2013
 - The Centre for Policy Dialogue (CPD) has extended the secretarial support
- A civil society-led monitoring initiative on industrial safety in non-RMG enterprises and establishments will highlight transparency, accountability, and efficiency in implementing safety measures over time
- More specifically, this monitoring initiative will-

(a) Assess safety-related weaknesses in factories and establishments

(b) **Review** adequacy and clarity of policies, laws and rules with regard to industrial safety, and

(c) Examine preparedness of public institutions in undertaking the inspection, monitoring and ensuring remedial measures according to the plan

• The initiative will work as a complementary initiative along with those have been undertaken by the public and private sectors for remedial measures

3. Objectives of the Civil Society Initiative

K G Moazzem (2022) et al.: Industrial Safety in Non-RMG Enterprises

3. Objectives of the Civil Society Initiative

- The main objective of this launching initiative is to monitor
 - The state of progress of industrial safety measures in non-RMG factories and establishments that are being undertaken by different public authorities
- The specific objectives of the study are:
 - To review the industrial accidents in non-RMG enterprises in recent years with a view to appreciate their nature, extent and level of public actions;
 - To review BIDA-led initiative on industrial safety in non-RMG enterprises;
 - To identify the weaknesses and challenges in BIDA-led initiative;
 - To put forward necessary suggestions on improvement of BIDA-led initiative with a view to ensure workplace safety and labour related issues in major non-RMG sectors.

4. Analytical Framework of the Study

K G Moazzem (2022) et al.: Industrial Safety in Non-RMG Enterprises

4. Analytical Framework of the Study

- The proposed initiative will follow the analytical lens of 'impact monitoring' in undertaking the initiative (Figure 2)
- The impact monitoring highlights how specific activities undertaken by the public agencies make changes to the target groups
- In this context, the proposed monitoring initiative will mainly target the impact monitoring in three core areas
 - **Policy and institutional change:** Improved enforcement of policies; policy adoption and amendment; and better institutional progress
 - **Behavior change:** Addressing lack of transparency, addressing lack of accountability and addressing lack of efficiency
 - **Outreach and awareness:** Outreach activities among the stakeholders; awareness related activities among employers, management and workers
- The above-mentioned framework will help to appreciate the gaps in key areas and how those gaps have been addressed through public and private sector led measures in terms of policies, laws, rules and institutional involvement.

4. Analytical Framework of the Study

- The framework will guide whether the measures are appropriate and adequate to address the gaps and weaknesses
 - How transparently, accountably and efficiently those measures have been taken by public and private institutions?
- Finally, whether outreach and awareness raising measures have been undertaken targeting the concerned stakeholders
 - Including employers, management and workers in factories

Figure 2: Framework for Monitoring



Source: Prepared based on https://www.transparency.org/en/the-K G Moazzem (2022) et drganisation/inspact-monitoring Non-RMG Enterprises 15

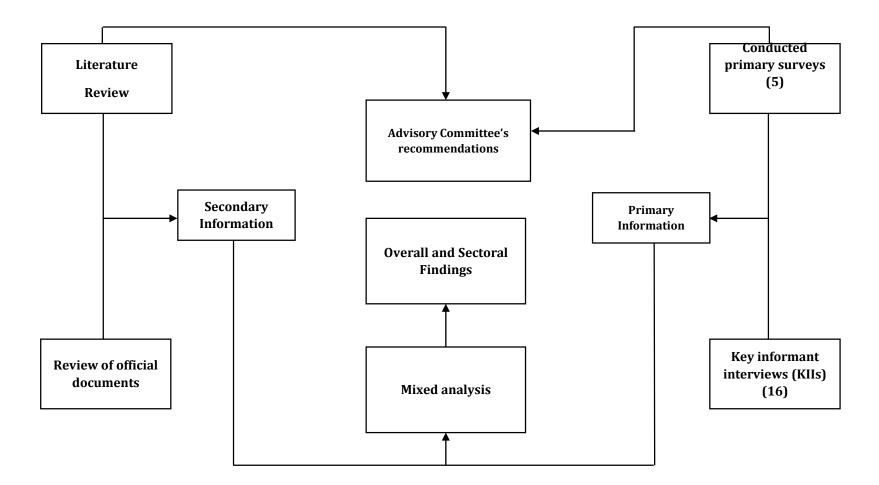
5. Methodology of the Study

5. Methodology of the Study

- The study team has used both primary and secondary sources to undertake an evidence-based study on occupational safety and health (OSH) in non-RMG enterprises
 - See Figure 3
- Secondary data was collected from the newspapers, annual reports of the relevant departments, press releases, and websites to analyse
 - Trends in accidents that occurred in the last five years at the non-RMG factories
 - Trends in inspection in non-RMG enterprises
- To collect the primary information, the study team has pursued a survey over phone calls to 18 officials of BFSCD and 28 officials of DoE
 - The survey helped identifying the current status, progress and challenges in the inspection process
- The study team conducted four key informant interviews (KIIs) with the government officials of the different departments and international organisation

5. Methodology of the Study

Figure 3: Methods for Collecting Data and Information from Different Sources



Source: Authors' illustrationazzem (2022) et al.: Industrial Safety in Non-RMG Enterprises

6. Non-RMG Enterprises & Establishments and Their State of Compliances

K G Moazzem (2022) et al.: Industrial Safety in Non-RMG Enterprises

6. Non-RMG Enterprises & Establishments and Their State of Compliances

- Over the last two decades, Bangladesh has experienced with rise of a considerable number of industrial enterprises other than export-oriented textiles and garments (T&G) enterprises
 - These enterprises are related to agriculture, manufacturing, and service sectors
 - These are related to finished goods industries (e.g., food processing, plastic products), intermediate product industries (e.g., textiles, processed leather), and capital machinery and raw materials (e.g., basic metal products and non-metallic mineral products)
- The number of manufacturing establishments has **doubled** over the last two decades
 - In the early 2000, the number of SMIs (including RMG and non-RMG) was 24,752 (SMI, 2006), which has currently become almost doubled and reached 46,110 establishments (SMI, 2019)
 - FBCCI identified 42,000 factories/establishments under 32 priority sectors
- The highest share of establishments in non-RMG enterprises/establishments are present in the food processing (10,782; 32%), brickfield (5611; 14.2%), and textile industries (4323: 10.9%)
 - There are about 12000 commercial establishments, including offices, hospitals and clinics, hotels and motels, educational intuitions, and so on (FBCCI, 2021)

6. Non-RMG Enterprises and Establishments and their State of Compliance

- The share of the registered factory is almost 100% in the export-oriented factories compared to local or sub-contracted factories (84%) (Table 1)
- A number of non-RMG sectors such as leather, jute, agro-processing are emerging as export-oriented sectors
 - These include leather and leather related goods, agricultural products, • and jute and related products
 - During 2021, these sectors have exported about \$942million, \$1,028 ٠ million and \$1,161million respectively (EPB, 2021)

Sector/ Factory Group	Number of Fa			Export Oriented ctories	Total Factories
	Registered	Unregistered	Registered	Unregistered	
Food Production	10782	1813	83	0	12678
Brick field	4729	882	0	0	5611
Textile	3801	245	277	0	4323
Wood and Construction	2210	585	3	0	2798
Engineering	1918	786	17	0	2721
Filling Station	1244	127	0	0	1371
Chemical	826	347	36	0	1209
Plastic	709	437	20	0	1166
Hosiery	104	769	0	0	873
Others	K G 6%a zem	n (2022) et <mark>37.7</mark> Industr	ial Safet 31 6	2	6807
Grand Total Source: Website of Federation		Ion-RMG 6268 prises	752	2	39557

Table 1: State of the non-RMG enterprises in Bangladesh (up to FY21)

Source: website of Federation of Bangladesh Chambers of Commerce and Industry (FBCCI).

6. Non-RMG Enterprises and Establishments and their State of Compliance

- Most factories have labour related non-compliance issues
 - About 42% of factories and 62% of establishments have non-compliances during 2020 (DIFE, 2021)
 - According to a BILS report, a total of 115 workers died, and 134 workers were injured in their workplaces in the last six months of 2021 in the non-RMG sectors
- Non-RMG factories do not seem to be very active in setting up safety committees as per the BLA
 - As of July 2021, 75.2% RMG factories have safety committees whereas only 6.7% non-RMG factories have safety committees
- This is an indication that the working conditions in non-RMG factories are not at a satisfactory level
 - Workers working in different factories confront safety and labour-related problems

K G Moazzem (2022) et al.: Industrial Safety in Non-RMG Enterprises

- Industrial accidents which are reported by FSCD and DIFE during 2015-2020 are used here for analysis (Table 2)
- Over the years, industrial accidents caused by fire have been increasing mainly because of rise in accidents at home/kitchen, cowhouse and shops
 - Some of the important sectors have observed less incidence in 2020 compared to 2015 perhaps because of closed down of economic activities due to covid (shops, factories, offices, hospitals)

Sectors and Places		ľ	Number of F	ire Incidents		
Sectors and Flaces	2015	2016	2017	2018	2019	2020
Home and Kitchen	6316	6451	7005	7216	8466	8776
Home and Kitchen	(36.9)	(38.8)	(39.4)	(37.2)	(35.4)	(42)
Cowhouse and Haystacks	2666	2480	2436	2741	4714	3091
Cownouse and naystacks	(15.6)	(14.9)	(13.7)	(14.1)	(19.7)	(14.8)
Shops and All Bazaars	2829	2855	3012	3312	4057	2984
Shops and An Dazaars	(16.5)	(17.2)	(16.9)	(17.1)	(17.0)	(14.3)
Factories and Warehouse	1099	934	1157	1281	1245	401
Factories and warehouse	(6.4)	(5.6)	(6.5)	(6.6)	(5.2)	(2.4)
Offices, Hospitals, Schools,	533	656	654	819	738	495
Boardings, and Hotels	(3.1)	(3.9)	(3.7)	(4.2)	(3.1)	(2.4)
Jute related warehouse,	145	198	249	155	207	80
Mills, Shops and Transports	(0.8)	(1.2)	(1.4)	(0.8)	(0.9)	(0.4)
Ships, Automobile, Cars, and	991	397	359	505	364	307
Normal Transports	(5.8)	(2.4)	(2.0)	(2.6)	(1.5)	(1.5)
Othors	2532	2644	2905	3359	4134	4666
Others	(14.8)	(15.9)	(16.3)	(17.3)	(17.3)	(22.3)
	17111	16615	17777	. 19388	23925	20896
Total K G Moa	azzem (202 (100.0)	^{2) et al : Indu (100.0)}	17777 strial Safety (100.0)	^{IN} (100.0)	(100.0)	(100.0)

Table 2: Fire incidents Occurred in Different Establishments (Year wise)

Source: Author's illustration from FSCD yearly statistics 2015-20.

- No major compositional change is observed in case of fire incidences in different establishments
- Most of the fire-related accidents took place due to gas leakage, technical errors, shortcircuit, boiler blasts, and so forth
- The amount of loss incurred in different sectors/establishments is not necessarily in line with the number of accidents took place in those sectors (Table 3)
- The highest amount of loss reported in shops/bazars, factories/warehouses and home because of large extent of accidents and loss of valuable assets
- Over the years the total loss has a mixed trend from Tk.829 crore in 2015 to 326.7 crore in 2019; shops and bazars have experienced rising trend in loss of fire incidents

Table 3: Loss incurred for fire incidents in different establishments/sectors

Sectors and Places	A	Amount of loss from fire incidents (in crore BDT)					
Sectors and Fraces	2015	2016	2017	2018	2019	2020	
At Home and Cooking Blace	68.4	49.1	69.8	71.2	82.4	91.4	
At Home and Cooking Place	(8.2)	(22)	(28.4)	(15.9)	(25.2)	(43.7)	
At Cowhouse and Haystacks	10.1	11.5	17.0	12.7	15.6	15.8	
At cownouse and naystacks	(1.2)	(5.1)	(6.9)	(5.7)	(4.8)	(7.6)	
At Shops and All Bazars	63.8	62.2	59.1	78.8	158.2	47.8	
At Shops and All Dazai S	(7.7)	(27.8)	(24.1)	(22.8)	(48.4)	(22.8)	
At Factories and Warehouse	618.6	47.3	45.6	107.8	29.5	11.6	
At ractories and warehouse	(75.5)	(21.2)	(18.6)	(31.3)	(9)	(5.6)	
Offices, Hospitals, Schools, Boardings, and Hotels	6.2	6.0	10.7	6.5	5.4	3.4	
Unices, nospitais, schools, boar unigs, and noters	(0.7)	(2.7)	(4.3)	(1.9)	(1.7)	(1.6)	
At Jute related warehouse, Mills, Shops and	13.7	7.9	6.7	6.1	4.0	6.5	
Transports	(1.7)	(3.5)	(2.7)	(1.8)	(1.2)	(3.1)	
Ships, Automobile, Cars, and Normal Transports	23.4	11.0	18.8	8.9	5.7	4.7	
	(2.8)	(4.9)	(7.7)	(2.6)	(1.7)	(2.3)	
Others K G Moazzem (202	25.6	28.6	18	53	26	28.1	
Vincis K G Wiodzzelli (202	$(3.1)^{(1)}$	(12.8)	(7.3)	(15.4)	(7.9)	(13.4)	
Grand Total ource: Author's illustration from FSCD yearly statistic	s 2015-20.	223.5 223.5	245.7	345.1	326.7	209.4	

- FSCD made an estimate regarding the amount of loss of assets and other properties and amount saved from each fire incident
- Based on those data, a lossrecovery ratio has been estimated for each sector/establishment over the period of 2015-2020 (Table 4)
- Highest level of loss-recovery ratio is found in case of shops, bazars, home, jute warehouses indicating higher amount of losses against the recovered amount
- No major change is observed in loss-recovery ratio which indicates lack improvement in recovery management over time
 Normal Others
 Overall m (2022)

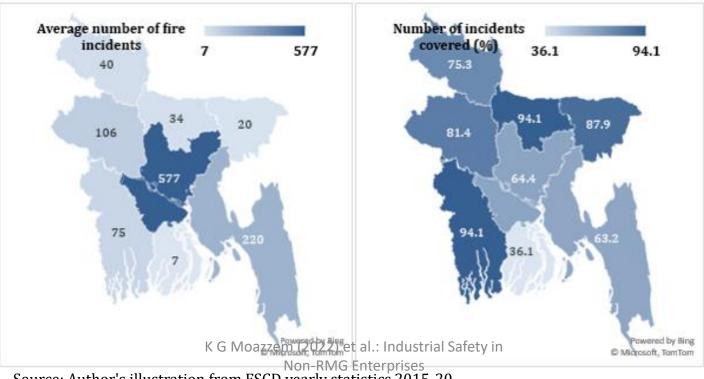
Table 4: Loss-recovery ratio (value in crore)

	<u> </u>	<u> </u>				
	Loss	-recove	ry ratio	(Value	in cro	re)
Sector and Places	2015	2016	2017	2018	2019	2020
		0.00	0.40	0.05	0.00	0.40
At Home and Cooking Place	0.28	0.33	0.19	0.25	0.32	0.18
At Cowhouse and Haystacks	0.24	0.15	0.23	0.13	0.17	0.30
At Shops and All Bazars	0.20	0.24	0.20	0.14	0.37	0.19
At Factories and Warehouse	1.13	0.18	0.21	0.21	0.13	0.21
Offices, Hospitals, Schools,	0.09	0.12	0.21	0.15	0.11	0.07
Boardings, and Hotels						
At Jute related warehouse,	0.20	0.25	0.11	0.06	0.26	0.28
Mills, Shops and Transports						
Ships, Automobile, Cars, and	0.27	0.10	0.23	0.23	0.12	0.05
Normal Transports						
Others	0.06	0.20	0.13	0.44	0.09	0.09
Overall em (2022) et al : Industrial Safety in						

Source Authors infistration from FSCD yearly statistics 2015-20.

- There is locational concentration of different types of fire accidents (Figure 4)
 - In case of accidents in industrial factories, majority of the incidents happened in Dhaka and Chattogram, on an average of 577 and 220 per year, respectively
 - Dhaka and Chattogram are considered as the major industrial hubs which are increasingly becoming unsafe owing to rising number of accidents

Figure 4: Average number of fire incidents and share of incidents covered at industrial factories (Division wise)



- FSCD could not take measures all the reported fire incidents- a part of the incidents remain outside necessary measures (Figure 4 in previous slide)
 - Although Dhaka and Chittagong are reported to be the places of the highest number of fire accidents, about 1/3rd of the incidences are remain unaddressed by the public authority (FSCD)
 - The incident coverage in Dhaka and Chittagong is only 64.4% and 63.2% respectively perhaps due to lack of adequate logistic facilities against the number of incidences
 - Accidents are relatively better addressed in Mymensingh and Khulna divisions – about 94% in both divisions

- FSCD has made an assessment in terms of level of fire related risks of different establishments (Table 5)
 - There is wide variation in risk assessment between 2018 and 2019
 - Majority of service-related establishments are found either at 'very high' risk or 'high risk' situation
 - The highest level of risks observed in case of shopping mall/market (42.3%) followed by educational institutions (22%) and health care services (19.2%)

Multi-storeyed		2017-18			2018-19	
Building Category	Very Risky	Risky	Satisfactory	Very Risky	Risky	Satisfactory
Shopping Mall/ Market	674 (42.3)	897 (56.2)	24 (1.5)	541 (42.4)	687 (53.9)	47 (3.7)
Educational Institute	336 (22)	1072 (70.2)	119 (7.8)	94 (9.1)	924 (89.3)	17 (1.6)
Bank	11 (1.4)	593 (73.7)	201 (25)	173 (25)	474 (68.5)	45 (6.5)
Health Care	134 (19.2)	502 (71.8)	63 (9)	173 (40)	249 (57.5)	11 (2.5)
Residential Hotel	29 (5.4)	433 (81.2)	71 (13.3)	70 (21.5)	248 (76.3)	7 (2.2)
Media Centre	3 (6.3)	21 (43.8)	24 (50)	18 (69.2)	6 (23.1)	2 (7.7)

Table 5: Assessment of the fire safety and risk at the multi-storeyed buildings

Source: Author's illustration from FSCD annual report. (The information of FY20 could not be considered as the information was similar to FY18) K G Moazzem (2022) et al.: Industrial Safety in Non-RMG Enterprises

K G Moazzem (2022) et al.: Industrial Safety in Non-RMG Enterprises

- DIFE reports labour related accidents/injuries a total of 763 accidents were reported in the last five years (Table 6)
 - A total of 1345 injuries were reported; out of that, 806 (60%) injuries were reported as 'fatal', and 539 (40%) caused death
- Even though the number of incidents shows a diminishing trend, the share of death is still high at (103) 19.1% in FY20 vis-à-vis 91 (16.9%) in FY16
 - The highest 401 (53.7%) number of accidents reported in FY17

Table 6: Number of casualties reported from different accidents and incidents (Year wise)

Fiscal Year	No. of Accidents	No. of Injured	No. of Death
2015-16	152 (19.9)	193 (23.9)	91 (16.9)
2016-17	410 (53.7)	435 (54)	170 (31.5)
2018-19	88 (11.5)	103 (12.8)	121 (22.4)
2019-20	59 (7.7)	42 (5.2)	103 (19.1)
2020-21	54 (7.1)	33 (4.1)	54 (10)
Grand Total	763	806	539

Source: Author's illustration from DIFE annual and Labour Inspection Reports.

- DIFE conducts regular inspection to factories/establishments (Table 7)
 - Most of the labour inspection was carried out in the non-RMG factories (considering 'other factory'), but it shows a downward trend - drops to 40% in FY21 from 61% in FY17
- DIFE conducts their inspection at three phases (Table 8)
 - 'Proactive inspection' (inspected before any accident had taken place)
 - 'Reactive inspection' (inspected after any incident or occurrence happened)
 - **'Follow-up inspection'** (inspected for review the previous status) in all types of factories across the country
- Level of inspection is diverged for different categories of non-RMG establishments
 - Highest level of inspection observed in case of jute mills, filling station, tobacco, hatchery, electrical/electronics, cold storage etc.
 - A sizable share of enterprises in different sectors is still outside inspection steel rerolling, printing press, packaging
 - No follow-up inspections were conducted in many of the sectors Table 7: Labour inspection carried out at different sectors (Year Wise)

Fiscal Year	RMG	Shops	Establishments	Others Factory
2015-16	4667		22286	
	(17)		(83)	
2016-17	2177	7200	3598	19949
	(7)	(22)	(11)	(61)
2018-19	4098	14890 (35)	8020	16092
	(9)		(19)	(37)
2019-20	3887	11558 (31)	7050	14832
	(10)		(19)	(40)
2020-21	6227 Maar	zem (2 6929 (14/7:) Industr	ial Safaty in 6611	27544
	(13.1)	Non-RMG Enterprises	(14)	(58.2)

Source: Author's illustration from DIFE annual and labour inspection reports.

Table 8: Labour Inspection Status of Non-RMG Sectors (as of November 2021)

Sector/ Factory Group	-		Reactive Inspection	
Jute	422	196 (46.4)	63 (14.9)	10 (2.4)
Food Production	12678	2934 (23.1)	1227 (9.7)	124 (1)
Ship Building/ Breaking	305	32 (10.5)	10 (3.3)	0 (0.0)
Steel and Re-Rolling	613	76 (12.4)	34 (5.5)	0 (0.0)
Textile	4323	878 (20.3)	196 (4.5)	3 (0.1)
Stone lifting and crushing	36	N/A	N/A	N/A
Engineering	2721	542 (19.9)	472 (17.3)	6 (0.2)
Paper and Board Mill	199	67 (33.7)	20 (10.1)	3 (1.5)
Brick Field	5611	884 (15.8)	491 (8.8)	3 (0.1)
Теа	166	99 (59.6)	0 (0.0)	2 (1.2)
Chemical	1209	235 (19.4)	52 (4.3)	3 (0.2)
Wood and Construction	2798	791 (28.3)	147 (5.3)	3 (0.1)
Filling Station	1371	418 (30.5)	226 (16.5)	8 (0.6)
Electricity	152	N/A	N/A	N/A
Leather	435	36 (8.3)	7 (1.6)	0 (0.0)
Electrical and Electronics	351	305 (89.6)	111 (31.6)	4 (1.1)
Plastic	1166	295 (25.3)	129 (11.1)	3 (0.3)
Glass Ceramic and Melamine	157	48 (30.6)	14 (8.9)	0 (0.0)
Medicine	593	125 (21.1)	63 (10.6)	0 (0.0)
Aluminium	306	94 (30.7)	7 (2.3)	1 (0.3)
Mineral	63	21 (33.3)	12 (19)	0 (0.0)
Agriculture (Hatchery)	210	73 (34.8)	57 (27.1)	0 (0.0)
Packaging	562	106 (18.9)	53 (9.4)	0 (0.0)
Printing Press	672	104 (15.5)	26 (3.9)	2 (0.3)
Hosiery	873	N/A	N/A	N/A
Cold Storage	428	257 (60)	104 (24.3)	8 (1.9)
Tobacco	310	101 (32.6)	37 (11.9)	0 (0.0)
Weave	823	139 (16.9)	43 (5.2)	9 (1.1)
Fishing Hatchery	98	N/A	N/A	N/A
Handicrafts Industry	76	N/A	N/A	N/A
Rice mill	163 ^{K G MC}	azzem (20224) et al.: Indust	rial Safety 28 (17.2)	0 (0.0)

Source: Website of Federation of Bangladesh Chambers of Commerce and Industry (FBCCI); LIMA, DIFE.

- DIFE file cases against factories due to different level of non-compliances (Table 9)
 - Highest number of cases filed against non-RMG factories and establishments
 - The number of cases were highest in 2020 mainly due to complain against different types non-compliances including irregularities in wage payment, lay-off and retrenchment during the time of covid pandemic
 - Child labour related cases indicate that child labour is a concern for many factories/establishments

	2016-17	2018-19	2019-20	2020-21
RMG	124 (9.74)	72 (5.26)	132 (7.92)	75 (5.28)
Shops	77 (6.05)	410 (29.93)	386 (23.16)	239 (16.82)
Establishments	188 (14.77)	212 (15.47)	332 (19.92)	291 (20.48)
Others Factory	822 (64.57)	635 (46.35)	777 (46.61)	718 (50.53)
Child Labour Case	62 (4.87)	41 (2.99)	40 (2.40)	98 (6.90)
Total	1273 (100.0)	1370 (100.0)	1667 (100.0)	1421 (100.0)
Cases Settled	273 (21.45)	844 (61.61)	260 (15.60)	490 (34.48)

Table 9: Filing cases against factories in different sectors

Source: Author's illustration from DIFE annual and Labour Inspection Reports. K G Wloazzem (2022) et al.: Industrial Safety in

Non-RMG Enterprises

- A number of observation can be made with regard to labour related concerns and factory inspections in non-RMG sector
 - The number of incidents declined but the share of death and injuries is still high
 - The share of labour inspection is still insignificant in case of non-RMG factories
 - There is a significant drawback in case of reactive and follow-up inspections in factories
 - The labour rights violation is relatively high in non-RMG enterprises; and child labour still exists in the workplace
- Safety related and worker related institutional governance are largely absent in a large section of non-RMG enterprises/establishments

9. BIDA-led Initiative: A Review

K G Moazzem (2022) et al.: Industrial Safety in Non-RMG Enterprises

- On 16 July, 2021, the government has announced a 24 member committee led by BIDA
 - To identify the safety concerns and to provide necessary directives to concerned agencies for undertaking measures
 - Several sub-committees were formed to undertake necessary measures
- The main objectives of the committee are
 - to extend necessary suggestions to concerned offices after reviewing the observations and recommendations received from field level observations;
 - to review the activities related safety issues in factories, mills and industrial and commercial establishments;
 - to put forward suggestions for taking necessary steps after reviewing the laws, rules and policies guidelines and instructions, and
 - to take necessary steps to bring the management and workers in mills and factories under training industrial safety issues
- The committee will be chaired by the private sector advisor of the Prime Minister
 - The members of the committee include representatives of different government offices such as DIFE, FSCD, RAJUK and representatives of different private sector associations including FBCCI and BGMEA

- BIDA formed another 9-member sub-committee to develop a standard operating procedure (SOP) for a 'combined inspection'
 - The sub-committee presided by Director, FSCD and the other members from DIFE, MoLE, DoE, DoA, Office of the Chief Inspector of Boilers, FBCCI, BKMEA and BIDA
- The combined inspection aims to inspect around 42000 non-RMG factories across the country
 - Through 108 inspection teams which were constructed with officials of different public and private entities (FBCCI, 2021)

- To conduct the inspection, an inspection checklist has been developed
 - That includes- (a) building installation/construction information, (b) information of safety issues such as structural, fire, and electrical safety, (c) environmental pollution control, (d) combustible materials used as raw materials for industrial production, (e) explosives controlled by the directorate of explosives and fire prevention, and (f) license, and certification from respective departments
 - Checklist followed different national rules, acts such as BNBC code, BLA 2006, BLR 2015, Fire Protection Act 2003, Electricity rules 2020, Boiler Act 1923, Explosives Act, 1884, Bangladesh Environment Conservation Act, 1995 and so on
- BIDA officials also informed that labour-related concerns are excluded from the inspection process
- Initially, the inspection team will go for a formal inspection visit and will not take any action against employers
 - A formal inspection notice will be sent to the factories three days before the inspection

- A total of 5000 factories are to be inspected by 108 teams in three months October-December, 2021
 - Each inspection team comprises 11 members with representative from DIFE, PWD, DoE, Department of Explosive, FSCD, Chief Inspector of Boilers, Office of the Chief Electrical Inspector, and a member of private entities
- A total of 1900 factories in four main clusters (i.e., Dhaka, Chattogram, Gazipur, Narayanganj) are identified for inspection at first
 - Dhaka: 750 factories; Narayangonj: 450 factories; Gazipur: 150 factories and Chittagong: 550 factories
- The targeted factories are only a small fraction of total factories located in four main clusters (Figure 5)
 - Considering the high level of safety concerns, the highest share of factories targeted for inspection are related to food processing, engineering, plastic and chemical related factories
- According to the officials of BIDA, the factory inspection has started from the first week of October, 2021

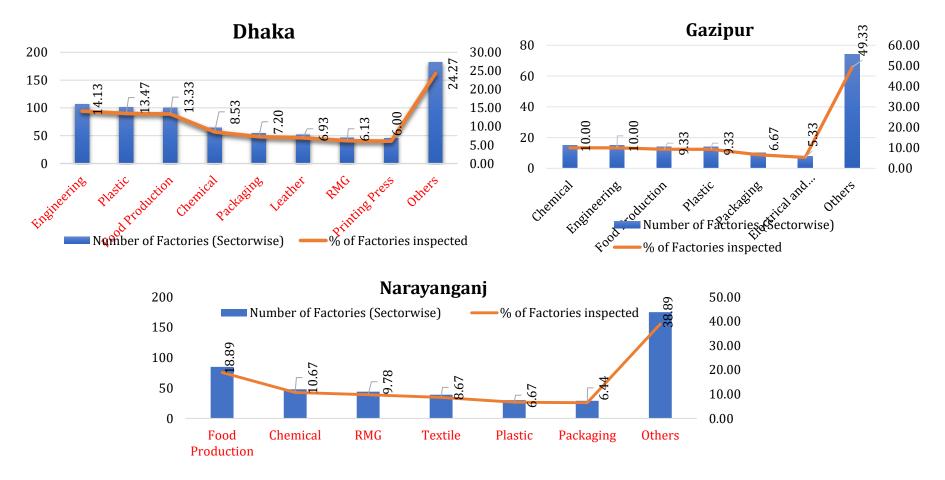


Figure 5: Number and share of factories to be covered at the initial phase (Region wise)

Source: Author's illustration based on DIFE document.

- Till 10 January, 2022, the progress of inspection is not satisfactory though the inspection was supposed to be completed by December, 2021
 - 108 team received training by 9 January, 2022
 - Only 875 factories have been inspected as of 10 January, 2022 which is only 17.5% of total targeted factories
- Out of 1900 factories in Dhaka and three industrial clusters, a total of 766 factories have been inspected (only 40.3% of total targeted factories)
 - Chittagong: 450 factories (81.8%); Dhaka: 120 factories (16%); Gazipur: 99 factories (66%); Narayangonj: 97 factories (21.6%)
 - The progress of inspection in Chittagong and Gazipur is relatively good while the progress in Dhaka and Narayangonj is highly unsatisfactory
 - It is important to explore the reasons for lack of progress of inspection in main clusters
- Among the other 3100 factories, 109 factories of other regions/districts have been inspected (3.5%) – the performance is very poor
 - Moulavibazar: 10 factories; Barishal: 21 factories; Sylhet: 20 factories; Mymensigh; 7 factories; Pabna: 4 Factories and Others: 47 factories

- A detailed checklist (80 issues) is prepared for inspection of factories including fire, electrical, boiler and environmental safety issues and for collecting data
 - Structural (6), fire safety (28), electrical (14), machine safety (5), boiler safety (14), explosive related safety (8), environmental safety (5)
 - The issues incorporated in the checklist considered different acts/rules/codes such as the BLA 2018, BNBC 2016, FSCD Rules 2007, Electricity Rule 2001, Boiler Act 1923, Explosive Act 1884, Bangladesh Environment Conservation Act 1995, BLR 2015, Gas Marketing rules 2014, explosive act 2004, gas cylinder rules 1991, petroleum rule 2018, Natural Gas Safety Rule 1991, Carbide Rule 2003, Environment Conservation Rule 1997, Hazardous Waste Management 2011, Sound Pollution Control Rule 2006
 - It is important to note that labour related issues are not included in the inspection which is a major gap in the inspection process
- The collected data is being processed and preserved by DIFE under a special database
 - The 80 point database is supposed to provide a large database with regard to the state of safety related compliances of the inspected factories
- Managing such a large dataset requires skilled professionals who could provide required support in terms of listing challenges, identifying level of risks and time-based planning
 - It is still unclear who will provide the technical support in data management and data analysis and operational guidance

- The study team conducted a phone call survey to the officials of the FSCD and DoE who are listed for inspection
 - The phone call survey was conducted during November-December, 2021
 - A total of **39 officials (fire** inspector; environmental officers, inspectors) have been surveyed of which 16 officials are from FSCD and 23 officials from DoE
 - These officials work in Dhaka (17), Gazipur (2), Narayangonj (11) and Chittagong (9)
 - A total of 4 KIIs have been undertaken with officials from different government and international organisations
- The survey was conducted at a time when two months of official-time for inspection (November-December, 2021) has ended
 - It was expected that inspection teams would well-prepared for the inspection by that time and were supposed to complete conducting a sizable number of inspection by that time
 - These survey covers four issues: (a) whether they know about their engagement in the inspection process?; (b) whether they receive any training for conducting this special inspection?; (c) How many factories have been inspected by them till that time?; and (d) How many factories to be inspected by each.
 - KIIs were conducted at FSCD and DOE on following issues: (a) what type of weaknesses/ challenges faced most by factories; and (b) challenges confronted in conducting inspection.

- The survey found different level of findings from the responses of officials of two organisations FSCD and DoE
- During the time of interview (November-December, 2021) FSCD officials are less informed and engaged in the inspection process compared to that of DoE (Figure 6)
 - 81.25% of surveyed FSCD inspectors aware that they are part of the inspection process led by the BIDA
 - 50% of surveyed inspectors got the initial training for the inspection. However, about 75% of surveyed inspectors do not have any further information about the inspection
 - About 25% of surveyed inspectors completed inspection in 13 factories which are related with textile, plastic, and food production sectors
 - About 37.5% inspectors reported that each team pursued inspections 50 factories, and some inspectors were responsible to inspect over 200 factories for being listed as inspection team member in 2-4 teams
- According to the KIIs with FSCD officials
 - Majority of factories were unable to fully ensure fire, electrical, structural, boiler and environmental compliances
 - Setting up fire detectors and emergency alarm systems were partially implemented
 - Factories did not have enough fire resistance systems (e.g., decoration, false ceiling) to prevent fire accidents
- Due to a lack of logistic support facilities (especially vehicles), completing the inspection process on time iss rather difficult for FSGD officials despite having necessary human resources

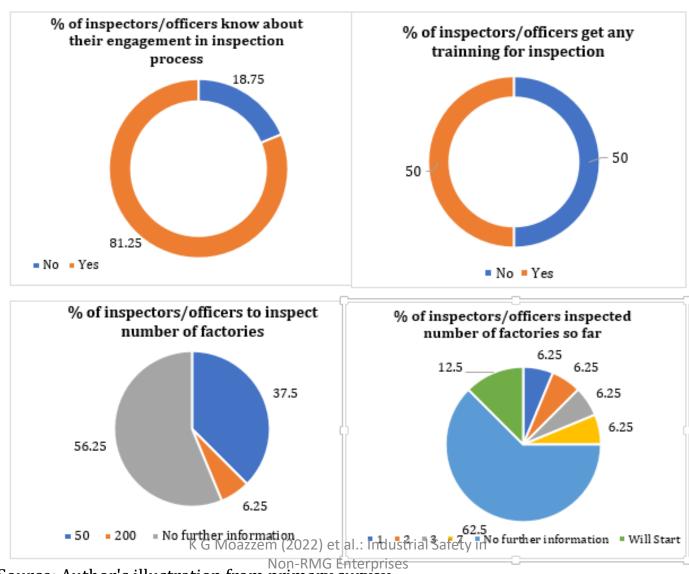
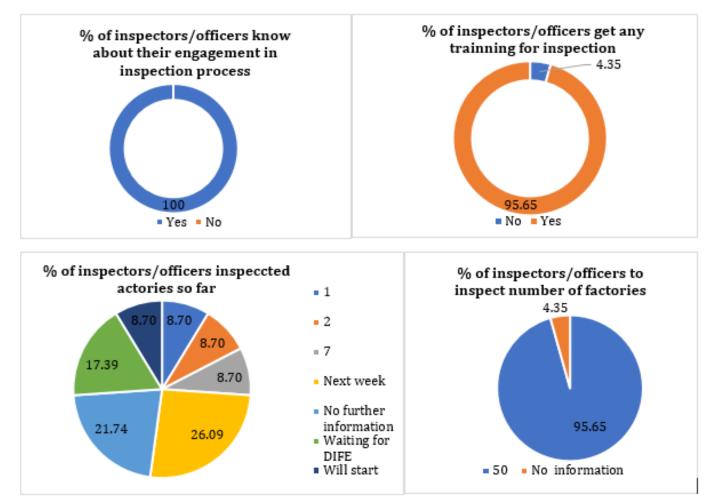


Figure 6 Inspection status of Bangladesh Fire Service and Civil Defense (BFSCD)²⁰

Source: Author's illustration from primary survey.

- The status of **DoE** is better compared to FSCD (Figure 7)
 - Inspectors were prior informed about the initiative
 - About 96% of the inspectors attended the training programmes at the BIDA
 - Around 26% surveyed inspectors went for inspection who inspected 20 factories; these factories are related to footwear, plastic, and aluminium sectors
 - Other 26% of the member informed that they will start inspection from the next week
 - About 40% of the inspection team members informed that they were waiting for office notice for inspection and have received no further information
- According to the KIIs with DoE
 - The factories located in old Dhaka were found to be desperate to improve their working environment as the workplace environment was not conducive to run operation
 - The majority of the factories have **not maintained any proper effluent** treatment facility for liquid and solid waste materials
 - Plastic related factories (pipe fittings and other toiletry fittings) try to undertake measures for developing effluent treatment of liquid waste and trash
 K G Moazzem (2022) et al.: Industrial Safety in
 - Some of the plastic factories have no environmental clearance

Figure 7 Inspection status of Department of Environment (DoE)²¹



Source: Author's illustration from primary survey. K G Moazzem (2022) et al.: Industrial Safety in Non-RMG Enterprises

- Only one factory is found to be aware about carbon emission, whereas other factories did not acknowledge the concern
- None of the factory has fulfilled all the criteria of environmental clearances
- Similar to FSCD, the inspectors of DoE confronted logistic problems (vehicle shortage) and was unable to conduct comprehensive inspection smoothly
 - Unlike the FSCD, there is shortage of human resources for the inspection at the DoE
- Some concerning issues were observed under the BIDA initiative
 - The initiative has confronted 'initial phase' challenges as such activity is new to BIDA and such coordinating mechanism is new to associated organisations
 - This is a public-private sector led initiative which has positive and negative aspects
 - Several mismanagements were identified in the FSCD inspection process
 - The overall progress of inspection was slow in case of both FSCD and DoE
 - There was shortage in the human resources particularly at DoE, boiler authority and even at DIFE
 - Shortage of transportations has been identified as a main obstacle of the inspection

- FBCCI involved by providing one representative in each inspection team
 - FBCCI safety council provides technical support to the team
 - Members of different associations are involved in the advisory committees
 - Different associations have different views regarding the inspection drive
- ILO is very strangely kept outside the whole initiative despite the fact that ILO expressed its willingness to be engaged in the process
 - ILO Geneva office expressed its willingness to work with the government
 - ILO team met with the Private Sector Advisor of the Prime Minister and expressed its interest to be involve in the process
 - ILO country director met with FBCCI President in November, 2021 and expressed its willingness to work with the Apex body to work in collaboration for the remedial process
 - ILO team met with MoLE and DIFE regarding possible partnership/ collaboration for engaging in the initiative
- ILO has long track record of working with different ministries/departments particularly related to workers 'safety and workers' rights through a tri-partite framework
 - The successful remediation initiative in the RMG sector during the post-Rana Plaza period has been carried out by the employers, brands and workers where ILO provided the important coordination and technical support Non-RMG Enterprises

- ILO has specific short, medium and long term recommendations with regard to the remedial measures
 - Strengthening policy, legislative and institutional environment for the enforcement of fire safety standards
 - Strengthening national capacity in fire safety practice
 - Improvement of enforcement for prevention and safer work environment
 - Fire safety effectively regulated in operational industrial buildings
- Despite having the technical preparation and ready to engage in remedial measures, keeping ILO at 'arm's length' is a point of major concern
 - Does it indicate government's political intention to undertake it without the support of the intergovernmental organization?
 - Will the existing institutional set up, operational modalities and process of undertaking different activities be able to undertake the remedial measures efficiently given that there is sign of sluggishness in the inspection process?

K G Moazzem (2022) et al.: Industrial Safety in Non-RMG Enterprises

- Non-RMG enterprises and establishments have been rising in the country because of growing economic activities targeting local and export markets
 - These rising sectors include food processing, plastic products, textiles, processed leather, basic metal products and non-metallic mineral products – mostly vulnerable for occupational safety and health
 - Most of the sectors/establishments confronted accidents and casualties mainly in housing, hospitals and market places, commercial and factories
 - Fire related accidents and deaths and injuries have been rising mainly in four clusters Dhaka, Gazipur, Narayangonj and Chittagong
 - In service related activities, highest level of risks is observed in case of shopping mall/market (42.3%), educational institutions (22%) and health care services (19.2%)
- Industrial safety in the non-RMG sector has been deteriorating day by day due to lack of safety measures undertaken with regard to structural, fire and electrical issues. This is because of
 - Lack of proper monitoring and enforcement of different compliance standards by different public agencies
 - Weaknesses in safety related laws, rules and acts concerning fire, electrical, structural, boiler and environmental issues

- Factory owners/management have limited interest to invest in safety measures
- Workers are not fully aware about the safety concerns and most of the non-RMG factories have no safety committees
- No pressure from stakeholders including consumers, workers, and CSOs to ensure compliance standards
- Meagre punitive measures under different laws, rules, acts (e.g. Boiler Act 1923, Explosive Act 1884) made reluctant to the factory management to undertake proper compliance measures

- The BIDA-led initiative to identify the safety concerns of a sample set of factories is a positive initiative
 - The initiative has yet to deliver the expected outcome due to lack of leadership, problem of coordination, limited capacity to handle the data for identifying the problems and limited technical expertise
 - Given the sluggish progress of the overall activities so far, it is doubt whether the initiative ultimately deliver the expected outcome
- The BIDA-led process confronted a number of operational challenges
 - Difficulty in coordination between different offices responsible for factory
 - Problem of managing time by the officials of the DC offices in different districts in participating inspection
 - The officials of DoE and PWD have other departmental engagements and could not maintain the time schedule for inspection
 - Excessive work pressure on the officials of the department of explosive and office of chief boiler owing to shortage of human resources. In some areas, one official is a member of 8-10 inspection teams
- Database management is likely to be a major challenge particularly to deliver overall and factory-specific challenges and recommendations

- BIDA should develop a common digital platform to store data, disclose the data and publish the inspection progress quarterly, half-yearly, or annually.
 - In order to ensure transparency and accountability in the monitoring system
- BIDA needs to provide a strong leadership role in implementing the measures in time bound manner
 - Necessary resources, logistic support and human resources need to be made available for concerned public offices and inspection teams for timely implementation of the inspection
- The operational modalities need to be simplified in order to quickly complete the inspection works and start working on the important next part – remediation related measures
 - A large team with representatives from different public and private organizations who have different types of constraints and limitations have slowed down the process of inspection

- It is highly unclear what would be next step after completion of the inspection
 - How the inspection related outcome will be used?
 - Who will guide factories in identifying their weaknesses and how those will be addressed by firms?
 - Which organizations will take responsibility whether the remedial measures are appropriately been carried out by firms?
 - If the remedial measures are not done properly, then how to take measures to alert firms?
- It is important for BIDA to invite ILO in the implementation process given ILO's long experience of working on industrial safety related issues
 - Based on ILO's proposal for short, medium and long term activities to be undertaken, necessary plan of work could be designed and implemented accordingly
- BIDA should ensure that different private sectors which are targeted for inspection should be on same page in maintaining the quality of inspection
 - In terms of providing necessary support for inspection, extending cooperation in the implementation process of suggested measures
- Dhaka and Narayangonj which are the most concentrated industrial clusters have found with least progress in inspection despite having the required logistics and human resources
 K G Moazzem (2022) et al.: Industrial Safety in
 - Raises question on accountability of the inspection process

FSCD

- FSCD needs to report the fire incident separately for chemical, plastic, textile, and aluminium sectors as most of the fire accidents in non-RMG enterprises took place in those sectors
- FSCD should focus on major industrial clusters more (especially in Dhaka and Chattogram)
 - FSCD should increase their operation and inspection in hill track and highland areas
- According to ILO (2021), liaising with inspection departments to identify 2-3 sectors in which to initiate a fire safety action plan is immediately needed
 - Identifying 3-4 key fire safety measures that have most impact on building safety (i.e. <u>detection, early warning systems, protected escape routes, emergency drills</u>...) should get priority
 - Developing checklist, simple report format, follow-up methodology on key fire safety issues are required
 - Fire safety licensing for multi-departmental licensing approvals coordination (e-fire license linked with LIMA) needs to be developed
 - Capacities of FSCD professionals through an internationally recognized certification program needs to be developed
 - Fire science and engineering curreicylum and laboratories for engineers and fire professionals developed Non-RMG Enterprises

58

DIFE

- The Remediation Coordination Cell (RCC) needs to be involved in the inspection and monitoring process of non-RMG factories with necessary human resources and logistic facilities
- According to ILO (2021)
 - SOP for labour inspectorate on building safety measures and develop capacity of DIFE to exercise role on fire safety, are immediately needed
 - Fire safety licensing for multi-departmental licensing approvals coordination (e-fire license linked with LIMA) needs to be done
 - Jointly develop SOPs identifying roles of each department on fire safety enforcement in existing buildings (Fire service act, BLA, BNBC defined roles), is important
 - Fast-track rollout of DIFE Industrial Safety Unit and establish relationship with FSCD and other inspection departments, are required
 - DIFE and FSCD inspectors need to complete the ILO-ITC fire safety management (FSM) and Fire Inspector course (FI) as prerequisite for workshop

DoE/Other Offices

- The DoE should recruit more inspectors/officers and provide necessary training for proper inspection
- The transportation problem should be resolved as early as possible in order to complete the initial inspection as quick as possible
- The DoE should maintain regular inspection of the non-RMG factories and should increase awareness related to environmental cost and damage among the industrialists
- The boiler and explosive-related laws and acts need to be amended as the inspection checklist developed based on some century-old laws and acts

Thank you.

K G Moazzem (2022) et al.: Industrial Safety in Non-RMG Enterprises