

## Kudos to BGMEA, but no room for complacency

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**G**ARMENT manufacturing in Bangladesh has been a silent revolution. That has been said before.

Garment manufacturing has provided mainly our women workers and their families with economic security and hope, despite the occasional gender-based harassment and need to do more in terms of better workplace precautions and protection. That you have heard before.

Garment manufacturing and exporting have bided well for many entrepreneurs in Bangladesh. That is evident from expansion and linkage projects.

This sector has portrayed a vastly positive image of this country abroad. That has been written about.

These fountains of social expectation and financial refuge have ironically been the cause of tragedy and despair for many due to rampant fire accidents particularly in the 1990s. That has also been widely reported.

What has hitherto not been given wide publicity is the unified effort of the Bangladeshi Garment Manufacturers and Exporters Association (BGMEA) in making the factories safer from fire incidents. For the sake of our workers and in keeping with the demands of the international community we need to make factories, not only those manufacturing garments, safer work places.

In our story today, Anisur Rahman reports on the improved track record of a sector that was beleaguered in the face of several fatal accidents, most of which appeared to have been avoidable.

While the focus of BGMEA has been 'fire' for obvious reasons, they must also give due attention to other aspects health and safety at work

places. These will include moving machinery, handling materials, heat appliances, physical facilities, light and ventilation, and services. In fact, every sector dealing with work, be it textiles, jute, tea, construction, shipyards, even television broadcasting, for example, must take structured measures, if need be executed in phases, to make the work environment safer and thereby more productive.

What the BGMEA, or for that matter any other of the associations, we are certain will not do is bask in the satisfaction that a reduction in fire accidents is the fulfilment of their responsibilities. Work places by and large are still congested, ill-planned, illegally set up in unauthorised buildings, dark and badly lit, hot and humid, unventilated, without proper rest rooms, canteen and crèche (Factories Act 1965), and generally unsafe (for instance, electricity, boiler, handrail lacking in staircases and roof tops where workers have their lunch).

It has been said many a time, much has been written on it, but we cannot emphasise any more on a cliché without repeating. Much more needs to be done.

The author is Professor, Dept. of Architecture, BUET and Consultant to the Editor on Urban issues



## Fire safety in garments factories: An overview of the present status

ANISUR RAHMAN

**T**HE garments industries in Bangladesh have contributed extensively to the economy and development of Bangladesh. It is not only the largest sector to contribute to Bangladesh's foreign exchange earning, the garments surplus has made smart clothes cheaper and more accessible in this country. In spite of this positive aspect, there have been at least 83 fire-related incidents and 126 deaths since 1990 in the city. Most of the deaths have been caused due to lack of foresight of factory owners who have failed to invest in safe working conditions. Zealous security measures, narrow staircases, lack of regular fire drills and improper storage facilities are some of the major causes of the recurring tragedy. Factory owners have been compelled by law to install an external staircase as fire escape. Its effectiveness is under scrutiny with reference to construction, material, width, etc. The Bangladesh Garment Manufacturers and Exporters Association (BGMEA) in the past few years have undertaken five-day training for workers as well as regular inspection to increase awareness about fire safety among the workers.

Readymade Garment (RMG) sector plays a very significant role in the socio-economic development of Bangladesh. In Bangladesh the total contribution of RMG in export is more than 74% of total export earnings. Given the appropriate policy support the RMG sector can make more contribution in increasing the export earnings of Bangladesh. However, garments factories of Bangladesh have earned the reputation of failing to incorporate the factor of fire safety in the overall working process. The unplanned

manner of the development of these industries to a large extent fails to live up to the lawful requirements.

Garment industry of Bangladesh has become the largest foreign exchange earning sector, exporting apparel of all sorts to the USA, Europe and other developed countries. The garments industry of Bangladesh is an impressive document of the leadership of private enterprise and the country's successful transition to a major export oriented economy.

Bangladesh registered its first apparel export in 1978, but the progress since the early 1980's has been simply phenomenal. It has by now become a giant industry, earning the lion's share of the country's foreign exchange and providing its women with the largest formal employment.

Unfortunately, garment factory owners are generally not adequately aware about fire, its potential dangers and consequences, preventive and control measures that need to be adopted. It appears that in their haste to establish a footprint in the very competitive market, fire protection seems to have missed out as a priority.

**BGMEA**  
The Bangladesh Garments Manufacturers and Exporters Association (BGMEA) is the only recognised trade body that represents the export-oriented garment manufacturers and exporters in the country. The association started functioning with only 134 members in 1983. The total membership of the association has now swelled to about 4000.

The objectives of BGMEA include:

1. To protect and uphold the interest of the industry by helping formulation of government policies congenial to the healthy growth of the sector.
2. To provide welfare services to

the workers and employees of the member units.

3. Educating the displaced workers below the age of 14 years and the children of the workers through setting up of school-cum-health centres in different zones of Dhaka, Narayanganj and Chittagong.

4. Ensuring adoption of safety measures in order to avert fire accidents in factories.

5. Having regular coordination with the labour organizations in the garments sectors to resolve labour related issues and to establish cordial employer-worker relationship.

6. Co-sponsoring with GOB, ILO and UNDP for implementation of welfare measures for garments

table conferences on current trade issues to develop awareness and consensus among the members and other related parties.

(Source: BGMEA Member Directory 2002-2003)

### Problem Statement

#### General Conditions

The present situation in most of Bangladesh's garments industries (excluding very few) are very poor because of the following reasons

1. The circulation is congested
2. The working space is non-ventilated
3. Poor natural and artificial lighting system
4. Hot and humid environment



Staircase occupied by materials obstruct escape.

workers in border areas of primary health care, transportation, social security & insurance coverage, housing & skill training.

7. Contributing financial aid for the victims in case of casualty in fire accidents in member-factories.

8. Organizing seminars and round

5. Escape routes are crammed with work tops and haphazardly kept combustible materials

6. Improper wiring and electrical design, illegal connections

7. Careless smoking and heating practice

8. Narrow staircases

9. Insufficient number of staircases

10. Exit points at ground (escape) level are locked or made very narrow for security

### Causes of Fire

1. Improper, indiscriminate and exposed wiring system
2. Overload on electricity and electric machines
3. Heat generated from steam iron and boiler sections

### Causes of Fire Hazard in Garments Factories (not exhaustive)

1. Presence of highly combustible materials creates excessive fire load
2. Improper layout in commercial and residential buildings that are not designed for garments industries. This unauthorised change in building use causes various types of hazards including fire hazards
3. Machine layout compels workers to travel round machine lines to reach the exit thereby exceeding travel distance beyond the safe limits of 30-40 meters

4. Users become panicky because they do not know the behaviour of fire or their responsibilities in a fire situation

5. Movement of people in dark and concealed space in case of power cut, and in narrow congested corridors and staircases

6. Absence of adequate fire exits and sometimes no fire exit

7. The main staircase is often the only staircase operational

8. Narrow exits are either locked, or only about 18 inches of a collapsible gate is kept open as zealous security measures, and to save on security personnel

9. Security measures driven to extremes, causing safety hazards

10. Improper waste disposal, and lack of maintenance

11. Not using fire protective materials for finish and interior works

12. Not aware about how to use fire

### The Survey

#### CASE STUDY 01

Type: Residential building converted into garments factory  
Floor area: 2250 sft per floor, 5-storyed building

Number of employees: 350

Features:

Entry: - No separate entry for loading/unloading

Toilets: - Insufficient (1:60). No separate toilet for male and female

Layout: Process lines are disrupted by columns

Clearance: Machine to machine distance is not adequate for movement of materials and workers

Emergency exit: - Typical narrow Mild Steel staircase

#### CASE STUDY 03

Type: Commercial building converted into garments factory  
Floor area: 15000 sft per floor, 7-storyed building

Number of employees: 1500

Features:

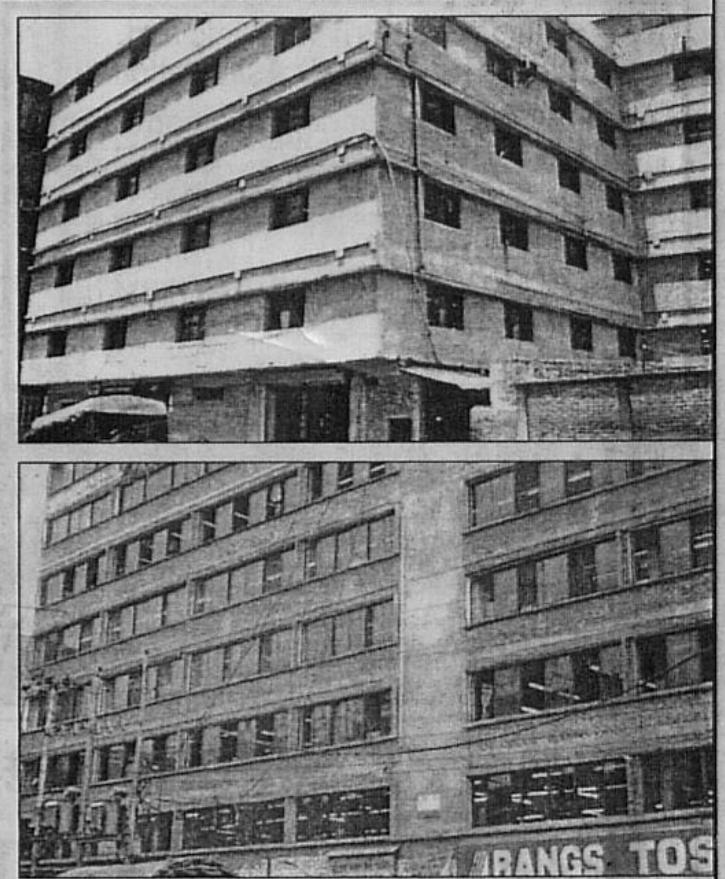
Entry: - separate entry for officers, workers and for loading/ unloading of goods

Path interrupted by machine, furniture and goods

Clearance: Insufficient clearance between machinery

No sitting provision for helper

Store area - Insufficient



as management personnel of its member units. BGMEA Safety Measures Cell organises the awareness and training programmes, enforces and monitors safety regulations.

Simultaneous to providing compensation to the affected workers and their families BGMEA has intensified the need for compliance to safety regulations and awareness in the member organisations. In case of death or injury at work, in addition to the compensation of the individual factory owners, BGMEA pays the cost of treatment and extra compensation to the affected worker or his family. Between December 1990 and September 2001, the BGMEA has paid taka 54,09,000 towards compensation to affected workers.

**Concluding remarks**

The Readymade Garments industry in Bangladesh has experienced an unprecedented growth over the last decade and half. The exports of the industry accounted for over 76% of Bangladesh export earnings in fiscal 2001-2002 and provided employment to 1.8 million people, of whom 80% are women. It promotes the development of other key sectors of the economy, including textiles, banking, packaging, transportation, insurance and support industries. Several million more jobs in Bangladesh are linked to the clothing sector.

To ensure fire safety in every garments factory the following measures should be adopted: (not exhaustive)

1. The possibility of a fire should be restricted by design.

2. Sufficient precautionary measures should be taken to minimize the possibility of a fire starting.

3. A properly designed Means of Escape should be ensured.

4. Fire control means should be ensured.

5. Proper inspection and investigation.

The BGMEA strongly feels the relocation of garment factories in open areas outside the busy city will help the members better fulfil their commitment to the workers and the international community. To that end, the association has been working on setting up garment villages. Once the proposed garment villages are set up, it would be easier to ensure management personnel of its member units. BGMEA Safety Measures Cell organises the awareness and training programmes, enforces and monitors safety regulations.

It is an urgent need to transfer the city centre garment factories in a planned way to a suitable location for availing planned commercial advantages including the security of the labour force engaged in garments industry and decreasing the number of accidents parallel to compliance with international standards and legislation.

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