It has been five years since the horrific collapse of a Bangladeshi garment factory complex called Rana Plaza. The dead numbered 1,134, mostly young women; the injured, some 2,500. It was the worst accident in the history of the apparel industry and one of the deadliest industrial disasters of any kind.

This report marking the fifth anniversary of Rana Plaza describes the economic forces that contributed to the catastrophe and evaluates what has happened since. It then charts a path toward a safer and more secure future for the Bangladeshi garment sector.

Bangladesh deserves attention, not only because it ranks as the world’s second-largest clothing manufacturer, behind only China, but because the human rights concerns affecting its workers also affect workers in garment-manufacturing countries around the world.

Before looking at the responses to Rana Plaza or the industry’s future, the disaster itself warrants recalling.

On April 23, 2013, workers at the massive eight-story structure on the outskirts of Dhaka, the Bangladeshi capital, noticed deep cracks forming in the building’s walls and support pillars. Five separate factories operating on floors three through eight produced t-shirts, pants, and blouses for such Western brands as Benetton, Bonmarché, Joe Fresh, Mango, Primark, and Walmart. Called to the scene, a local engineer declared the building unsafe. Police ordered it emptied pending further inspection. But the owner, Mohammad Sohel Rana, insisted that, despite indications his building had begun to come apart, all was well. Factory managers ordered employees to return the next day or risk losing their jobs.

Most did return. Just before 9 a.m. on April 24, a power outage stopped work. On the upper floors, diesel generators weighing several tons apiece rumbled into action. Vibrations rippled downward. Built illegally, the top four floors lacked necessary support walls. The building’s foundation rested on swampy ground that compromised its integrity. Destabilized by the generators, the entire structure crumpled inward, story by story, creating a nightmare pile of concrete slabs, shattered columns, mangled sewing machines, and crushed bodies.³

Rana, the owner of the fatally flawed building, made a run for the Indian border, but Bangladeshi authorities caught up with him four days later. So far, he has been sentenced to three years in prison on corruption charges and still faces prosecution for murder.
Blame also shadowed the Western fashion brands and retail chains that patronized Rana Plaza’s factories—and thousands of other manufacturing facilities in Bangladesh. The catastrophe raised anew questions first posed in the 1990s about the global garment industry’s responsibility for working conditions in places like Dhaka: By driving down prices they pay to suppliers, do corporations such as Gap, Walmart, and Inditex create incentives for factory owners to scrimp on safety and put worker lives at risk? How far would Western companies go to please consumers in the United States and Europe who demand ever-cheaper casual clothes? And in a country such as Bangladesh—whose economic fortunes turn on the success of its apparel sector, but whose government so far has proven unable or unwilling to protect workers—how can foreign corporations ensure the safety of supply chains made up of factories they don’t own or operate to prevent more Rana Plazas?

International Responses and Their Limitations

To their credit, Western brands and retailers responded swiftly to the humanitarian and public relations crises of April 2013. Within months, they formed a pair of unusual initiatives—the European-led Accord on Fire and Building Safety in Bangladesh and the American-led Alliance for Bangladesh Worker Safety—designed to get garment factories up to international standards. The initiatives were different in some important respects, such as the involvement of European-based trade unions and non-governmental organizations in the Accord. But they shared the basic goal of leveraging the economic power of member companies to see that factories were inspected and then made safe. Bangladeshi suppliers that refused to comply with the process faced a draconian punishment: being cut off by the participating Western buyers. Nothing quite like this had been tried before, certainly not at this scale.

How Bangladesh Stacks Up Globally

Top clothing exporters*; US$ billion and (percentage of merchandise exports)*

<table>
<thead>
<tr>
<th>Country</th>
<th>Value (US$)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>$161</td>
<td>8.0%</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>$28</td>
<td>80.9%</td>
</tr>
<tr>
<td>Vietnam</td>
<td>$25</td>
<td>13.0%</td>
</tr>
<tr>
<td>India</td>
<td>$18</td>
<td>5.5%</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>$16</td>
<td>3.9%</td>
</tr>
<tr>
<td>Turkey</td>
<td>$15</td>
<td>10.6%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>$7</td>
<td>4.4%</td>
</tr>
<tr>
<td>Cambodia</td>
<td>$6</td>
<td>54.3%</td>
</tr>
<tr>
<td>USA</td>
<td>$6</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

*2016 statistics, most recent available; **2014 statistics
Source: World Trade Organization
The foreign initiatives have improved conditions in many factories. They are not, however, panaceas. In two earlier reports, published in April 2014 and December 2015, the NYU Stern Center for Business and Human Rights pointed out some of their built-in limitations. The chief constraint is that between them, they now cover only about 2,300 active factories serving their member companies. The Bangladeshi government separately retains oversight for another 1,650 or so. But that total of nearly 4,000 leaves out thousands of additional factories—and their workers.

Many of the left-out factories primarily do subcontracting work and don’t have direct relationships with the large Western buyers, which often are not even aware of the subcontracting of their orders. “Unauthorized subcontracting is a significant challenge in Bangladesh’s [garment] industry,” the U.S. Senate Committee on Foreign Relations said in a report in November 2013. The committee went on to describe “unknown factories that operate in the shadows” and are “often the most dangerous in terms of worker safety.” While some subcontractors have closed down in recent years because of greater vigilance by Western companies, others have opened, and the practice remains common. Networks of subcontractors play a vital role in helping larger mother factories handle the ebb and flow of export orders. Operating on very slim margins, subcontractors also help maintain low production costs. Later in the report, we describe our recent visits to subcontracting facilities.

In part because of uncertainty over the number of subcontractors, there isn’t a consensus on how many factories in Bangladesh make clothing for export. The government has not done an industry census. Comparing various databases, the NYU Stern Center in 2015 calculated a total of about 7,100. Using a similar methodology, BRAC University’s Centre for Entrepreneurship Development in Dhaka in 2016 generated a count of more than 8,000.

Other researchers at such institutions as Pennsylvania State University have contested NYU Stern’s analysis, estimating that the figure is between 4,000 and 5,000. Whatever the precise number of export factories in Bangladesh—the figure shifts as facilities open and close—we remain convinced that in the long run, existing inspection and remediation regimes are not sufficient to protect all of the country’s workers. This conclusion seems self-evident, as the industry-backed programs initially were designed to last for only five years. The Alliance is essentially phasing out in 2018. The Accord has announced it will continue provisionally for up to three additional years, through 2021. Once the foreign-funded programs pull out, the Bangladeshi government will inherit responsibility for all factories and workers, despite widespread concern that it lacks the resources and determination to meet the need.

**The Deeper History of a Vital Business**

The ready-made garment sector, or RMG, as the industry calls itself, has fueled the Bangladeshi economy for three decades. With annual sales now exceeding $28 billion, the sector generates 80 percent of Bangladesh’s export revenue and employs close to five million people. Since the mid-1990s, it has helped propel, on average, a 6% overall annual growth rate. Despite a reputation for government corruption, monsoon-season floods, and rural destitution, Bangladesh actually presents a case study of successful development. Largely because of the garment industry, the portion of Bangladeshis living below the poverty line has fallen from more than 44 percent in 1991 to less than 13 percent. In 2014, the World Bank promoted Bangladesh to “lower middle-income country status.” The country today has a population of 165 million, more than Russia.

Taylor, a professor of entrepreneurship at the University of Pennsylvania, has questioned the claim that Bangladesh’s garment industry is responsible for much of the country’s growth. “What made Bangladesh successful as a supplier of casual fashion, however, has also historically made its garment business dangerous. Western brands gravitated to Bangladesh because of its extraordinarily low prices, which over time the brands drove even lower. Rock-bottom prices reinforced low wage levels and translated into paltry investment in factory safety. Even before Rana Plaza, Bangladeshi garment facilities were perilous: Between 2005 and 2012, more than 500 workers died in fires and building collapses.”

To understand how apparel making evolved into such an economically vital but often-hazardous business, one has to go back to the decade after Bangladesh’s War of Independence in 1971, when the country broke away from Pakistan. The Bangladeshi military, which took over by coup in 1975, reversed an initial move toward socialism and instead encouraged private enterprise and foreign investment.

Bangladesh wasn’t an obvious place to start a new industry. Its roads were poor; its electrical grid unreliable; it lacked raw materials and a deep-water port. But a global export-quota system worked in Bangladesh’s favor. The system exempted the south Asian country from restrictions on sales to Europe and the United States. And when Korean and Taiwanese companies hit limits on how much clothing they could sell in the West, they began opening factories in places like Bangladesh. Scores of educated
Bangladeshi Garment Factory Accidents by the Numbers*

**Total Number of Factory Accidents by Year**

- 2013: 38
- 2014: 26
- 2015: 21
- 2016: 34
- 2017: 20

**Number of Significant* Accidents by Year**

- 2013: 17
- 2014: 2
- 2015: 3
- 2016: 5
- 2017: 4

**Factory Accidents by Cause**

- Fire: 130
- Boiler: 5
- False Alarm: 1
- Machine: 1
- Building Collapse: 1
- Water: 1

**Repeat Incidents in the Same Factory**

- 5 Factories have had more than one incident

- 100% of reoccurring incidents at factories are fires

*The statistics on this page refer not only to export-oriented cut-and-sew factories, but also to facilities performing such tasks as knitting, weaving, spinning, washing, dyeing, printing, and making accessories.

Data visualization by Hovsep Agop, based on information compiled by the NYU Stern Center.
Bangladeshis were sent to Korea for management training and went on to start their own factories back home. Low barriers to entry amounted to the cost of buying a batch of sewing machines and renting a building in which to put equipment and workers. The country had few industrial premises, so many entrepreneurs opened factories in flimsy tenements.

Promoting the garment industry became Bangladeshi national policy. In the 1980s, military rulers made it easier for factory owners to finance fabric purchases and warehouse their goods duty free. The government signaled to foreign fashion brands that the country’s poor rural population provided a large labor pool eager for $1-a-day jobs. “They used words like ‘value,’ ‘good bargain,’ and ‘reliable workforce,’” and the brands understood what they meant—low wages and low prices for the clothes,” says Sanchita Saxena, director of the Chowdhury Center for Bangladesh Studies at the University of California, Berkeley.

Growth continued when civilian democratic government was reestablished in the early 1990s. From 384 factories employing 120,000 workers in 1984, the industry expanded to 2,000 factories employing more than 1 million in 1994. As garment manufacturing eased Bangladesh’s poverty, the country saw gains in a wide range of human-development measures. Life expectancy, literacy, and per-capita food intake increased, while child mortality decreased. Unemployed young rural women streamed into Dhaka and other cities to take jobs that brought previously unimaginable economic and social independence.

Not that anyone gets rich laboring in a garment factory. Bangladeshi wages have long been the lowest among major apparel-exporting countries. Rana Plaza led to an impressive-sounding 77% increase in the minimum wage, but that translates to the equivalent of only $64 a month, or 31 cents per hour. Higher prevailing wages still do not cover the living needs of many workers.

The Cost of ‘Fast Fashion’

Bangladesh’s extreme low-wage, low-price approach to manufacturing intersected with a consolidating global apparel industry aggressively searching for cheap, plentiful labor; high-volume production; fast turn-around times; and tight regulation. Beginning in the 1990s, retailers and brands increasingly used point-of-sale technology to follow consumer trends in what became known as “fast fashion.” Chain stores kept smaller inventories and changed orders more frequently, putting pressure on their suppliers in Bangladesh and elsewhere to comply or risk losing business. Consumers in the U.S. and Europe grew accustomed to choosing from ever-changing arrays of inexpensive clothing. The real dollar price of apparel entering the U.S. declined 48% from 1989 to 2010, squeezing the already-slight margins of Bangladeshi factory owners. One study that focused on men’s and boy’s cotton pants produced in Bangladesh for export to the U.S., found that prices fell 41% from 2000 to 2014.

Small profit margins, usually hovering in the low single digits, exacerbated a tendency on the part of Bangladeshi suppliers to cut corners on safety. Making matters worse, Bangladesh’s extraordinarily weak regulatory apparatus provided inadequate oversight. And an underdeveloped, highly politicized local union movement did not provide workers with widespread protection.

A grim litany told the resulting story: The Spectrum Sweater factory collapse in 2005 killed 64. Twenty-two died in the Phoenix Garments building collapse in 2006. The Garib & Garib sweater factory fire left 21 dead in 2010. Later the same year, a fire at That’s It Sportswear killed 29. In November 2012, five months before Rana Plaza, a fire at the nine-story Tazreen Fashions factory resulted in 112 deaths and more than 200 injuries. Tazreen made clothes for Walmart as a subcontractor, although the giant American chain said it had not authorized the factory to do this work—an illustration of the shadowy arrangements that characterize significant parts of the industry.

The sudden disintegration of Rana Plaza, snuffing out so many lives all at once, brought home the need for a dramatic departure from past practices. How garment manufacturers, their North American and European clients, and the government of Bangladesh reacted to Rana Plaza has helped determine the future of the country’s most important industry.

Other forces are shaping that future, as well. Ethiopia, Myanmar, and other new challengers are seeking larger shares of the global garment business. Automation, meanwhile, may eventually displace hundreds of thousands, even millions, of low-skilled employees in Bangladesh, creating a daunting social challenge for the country. But for the foreseeable future, Bangladeshis in large numbers will continue to make clothing. Worker well-being will remain a concern. And as a result, the response to Rana Plaza and current gaps in factory safety deserve urgent attention.

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