



# REMEDIATION FINANCING

## in Bangladesh's Ready Made Garment Sector

An Overview



International  
Labour  
Organization



**IFC** International  
Finance Corporation  
WORLD BANK GROUP



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## Acronyms

<b>ADB</b>	Asian Development Bank
<b>BDT</b>	Bangladeshi Taka
<b>BTC</b>	Bangladesh Textile Competitiveness
<b>CAP</b>	Corrective Action Plan
<b>EMC</b>	Emerging Markets Consulting
<b>EU</b>	European Union
<b>IFC</b>	International Finance Corporation
<b>ILO</b>	International Labour Organization
<b>JICA</b>	Japan International Cooperation Agency
<b>NBFI</b>	Non-Bank Financial Institution
<b>NGO</b>	Non-Governmental Organization
<b>NTPA</b>	National Tripartite Plan of Action on Fire Safety and Structural Integrity
<b>RMG</b>	Ready-Made Garment
<b>US</b>	United States
<b>USD</b>	United States Dollars



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The study was coordinated by Eleonore Richardson and Naveed Noor from IFC, and Nyske Janssen from the ILO. We want to express our appreciation to George Faller (ARUP), Stephanie Sarta (ARUP), Brad Loewen (Accord), Mark Jones (Alliance) for their technical input into the report, and acknowledge our colleagues who provided peer-review: Nabeera Rahman (IFC), Marie Bouvet (IFC), Rehan Rashid (IFC), Steven Needham (ILO). Final thanks to Patrick Carpenter (IFC) for the editing and layout work.

## About the study

IFC and the ILO jointly commissioned this study on remediation financing to assess the needs and constraints faced in Bangladesh's Ready Made Garment (RMG) sector. The study was to analyze both the cost of safety remediation for structural, electrical and fire safety work in RMG factories, and the factory's ability to finance this work - either through their own resources, through buyers' support, or through accessing loan capital. Within this analysis would be an overview of financing options available to RMG factories, including a review of Bangladesh's banking sector and the credit facilities recently developed by international organizations specifically for RMG remediation. Lastly, the study would identify key challenges to remediation by looking at bottlenecks in the availability and cost of safety inputs, as well as the capacity of sector stakeholders to provide the necessary services.

The study is intended to:

- 1) Contribute to the development and capacity building of the Bangladesh regulatory framework in relation to building and fire safety and to contribute to the implementation of the National Tripartite Plan of Action Plan on Fire Safety and Structural Integrity in the Bangladesh RMG sector signed by industry partners on 25 July 2013.
- 2) Help catalyze investments in safety upgrades by RMG factories by presenting a realistic overview of the scale of opportunities for financial institutions in this area, and by recommending sector-level interventions that can mitigate the constraints banks and factories face accessing remediation finance.





## Executive Summary

The April 2013 Rana Plaza tragedy in Savar, Bangladesh spurred an unprecedented collaboration between local stakeholders, buyers, and the international community to address worker safety in the country's ready-made garment (RMG) sector. Three initiatives were established to carry out structural, electrical and fire safety inspections in over 3,500 export factories: the Accord on Fire and Building Safety in Bangladesh (Accord), the Alliance for Bangladesh Worker Safety (Alliance), and the ILO-supported National Tripartite Plan of Action (National Initiative). Results of the inspections prompted corrective action plans including time-bound remediation actions factories would have to implement to improve worker safety.

With remediation needs clearly mapped and remediation efforts underway, IFC and the International Labour Organization (ILO) jointly commissioned this study to provide an analysis of the overall cost of safety remediation that RMG factories must pay for structural, fire and electrical work, and a corresponding overview of a factory's ability to finance these operations - either through their own resources, buyers' support, or through accessing loan capital. The study included a detailed review of financing options available to RMG factories through the Bangladeshi banking sector and credit facilities recently developed specifically for RMG remediation by international organizations. In addition, the study identified a number of challenges to remediation by studying the cost of safety inputs and services, bottlenecks to their availability, and the capacity of enabling sector stakeholders to conduct factory assessments and inspections.

Fire, electrical and structural safety reports from a sample of 100 RMG factories were analyzed in order to evaluate the types and unit costs of issues identified during inspections. Cost estimates were compiled to establish a total cost of remediation for the sector. Subsequently, interviews were conducted with a selection of industry stakeholders, including RMG factory managers, business associations and development organizations, government bodies, and banks to validate and share study findings. The study concluded with a presentation of the preliminary research findings to stakeholders to validate and update the initial findings.

## SAFETY REMEDIATION

The study focused on all RMG factories involved in at least one of the three remediation initiatives (Alliance, Accord, and National Initiative) at the time of research. This criterion resulted in a total number of 3,778 RMG exporting factories identified. While most factories in the sector (62%) employ fewer than 1,000 workers, the general characteristics of the factories as separated by the three initiatives vary considerably. Alliance and Accord factories are generally larger, with European and American brand (buyers) business partners. Factories in the National Initiative tend to be smaller in size and export mostly to smaller international brands that exhibit comparatively less concern for safety and labor law compliance.

According to the surveyed factories, remediation efforts are highly dependent on international buyers' requests and the strength of the relationship between the RMG factory and the buyers. A second factor is factory size (workforce and turnover), which is an important consideration for local lending banks in approving factory loan applications.

Inspections across the sector revealed an average of 59 noncompliance issues per factory, most of which (51%) fall under electrical safety. Electrical safety issues, including unsafe cabling and wiring, distribution boards and grounding systems, tend to be the cheapest, quickest, and therefore most likely to be fixed; study results show 45% and 56% of all electrical issues within the Alliance and Accord initiatives, respectively, already addressed.

Fire safety issues (30%) received the highest prescribed urgency of remediation due to the direct danger they pose to worker safety. These issues tend to be more expensive than the electrical, with most common items including installation of fire barriers, doors, alarms, and emergency exit pathways. Higher costs have resulted in slower remediation progress, with study estimates showing 42% of all Accord and 35% of Alliance fire issues already addressed.

Structural safety (19%) has shown the least remediation progress, due to the significant costs of extensive remedial work necessary for the factories. Also significant to the pace of progress is the fact that a number of actions in the remediation plans first require factory managers to hire engineers to conduct in-depth investigations to determine whether the factory needs additional work.

Study results show costs of remediation vary greatly from factory to factory. For those factories not needing extensive structural retrofitting, total costs can range from USD 20,000 (10% of factories) to USD 900,000 (10% of factories). Total remediation costs for the majority of factories (80%) are estimated to be between USD 100,000 and USD 250,000. Approximately 75% of factories will not require structural retrofitting; the 25% that will require retrofitting are facing total remediation costs that in extreme cases can reach USD 1.5 Million. Most factories (80%), however, are expected to require between USD 120,000 and USD 320,000 worth of remediation repair.

Total cost of remediation in the RMG sector prior to implementation, according to study analysis, is estimated to be USD 929 Million. However, the last two years have seen remediation activities begun in earnest, reducing the remaining remediation costs to around USD 635 Million, with USD 262 Million in structural, USD 201 Million in electrical, and USD 171 Million in fire related issues.

Challenges to remediation identified by this study are largely related to the costs and the willingness of factory managers. Cost per factory can be all but prohibitive, and entrepreneurs can be unwilling to spend large amounts of capital on investments that will not increase their productivity, efficiency, or product quality. Further challenges are in the capacity of multiple sector stakeholders (e.g., RAJUK, DIFE, etc.), as well as in the lack of quality product certification mechanisms for safety equipment.

## ACCESS TO REMEDIATION FINANCE

Until recently, there were no financial products specifically available to the RMG sector for remediation. Factory owners faced a long bureaucratic loan application process and could only accept available term loans with high interest rates. (Interest rates for loans in local currency can range from 11% to 18% for smaller enterprises, and from 9% to 16% for larger enterprises.) One significant disadvantage for many factories is their inability to present proper, reliable audited financials to banks; this has a direct effect on the amount of collateral requested by financial institutions to guarantee the loan. Banks can ask for up to 100% of the value of the loan to be guaranteed by collateral in the form of land, buildings, or other assets. Larger factories with strong business relationships to international brands are most likely to be awarded loans, as they can provide long term purchase orders to prove future cash flow; smaller factories with less regular and less strategic business relationships are perceived as risky investments by banks.

Bangladesh's recently launched RMG credit facilities have increased the amount of capital available for remediation activities. These facilities have clear advantages and disadvantages. "Pure Credit Facilities", such as the one launched by IFC, increase the amount of lower-cost capital to local banks but do not reduce the credit risk banks incur and therefore leave riskier factories without any real access to finance. "Risk Reducing Facilities", such as the one launched by USAID, reduce the risk of lending to the RMG sector with a guarantee and therefore encourage banks to consider riskier client profiles. This facility alone does not have a direct impact on the amount of money available in the market specifically for remediation. However, the guarantee does act as a very effective risk reduction mechanism. "Government to Government Facilities", such as those designed by JICA and AFD, provide loans through the Government to a much larger group of participating banks, thereby expanding the number of RMG factories that can access credit. A disadvantage of such facilities is that they tend to result in higher interest rates charged to the final clients.

It can be estimated that through the capital made available by these facilities, the total remaining financing gap for factory remediation in Bangladesh is around USD 448 Million.



## BACKGROUND: ESTABLISHMENT OF THE INITIATIVES

Since the April 2013 Rana Plaza disaster, attention has been directed at improving structural, electrical, and fire safety in Bangladesh's RMG factories. In an unprecedented effort to help prevent the occurrence of such tragedies, international aid organizations (e.g., the ILO) alongside European and American buyers created three initiatives to ensure and verify safety conditions in their supplier factories:

- The Accord on Fire and Building Safety in Bangladesh (Accord) was signed on May 15, 2013. It is a five-year, independent, legally binding agreement between brands and retailers from over 20 countries in Europe, Asia, North America and from Australia.
- The Alliance for Bangladesh Worker Safety (Alliance) is a group of 28 American global retailers formed to develop and launch the Bangladesh Worker Safety Initiative, a binding, five-year undertaking. Alliance members represent the majority of North American imports of ready-made garments from Bangladesh.
- The Government of Bangladesh's National Initiative under the Tripartite Plan of Action, supported by the International Labour Organization (ILO) with backing from Canada, the Netherlands, and the United Kingdom, covers RMG factories that are not being inspected by the Alliance or the Accord.

Considerable progress had been made by the time of completion of the study, but a vast number of local manufacturers still struggle to afford the capital necessary to make their factories compliant.

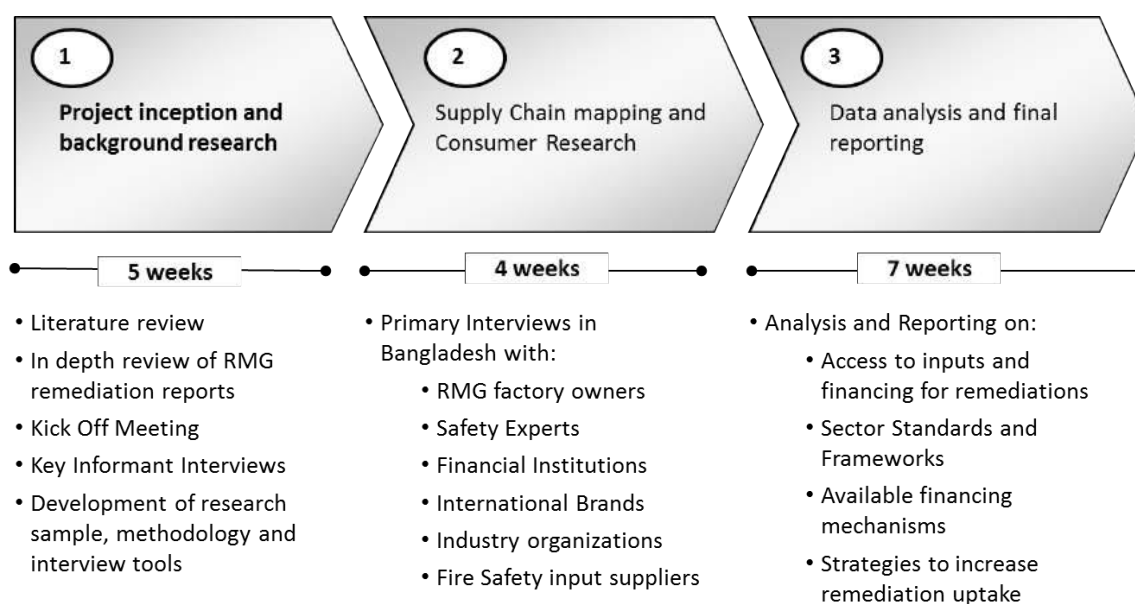
In Bangladesh, IFC implements the Bangladesh Textile Competitiveness program to strengthen the competitiveness of the sector through strategic interventions. The ILO launched a US\$31.4 million, three-and-a-half year program to support implementation of the National Tripartite Plan of Action on fire safety and structural integrity.



## METHODOLOGY

The study was divided into three components, starting with a review of all available information on the sector and a full review of assessments reports (fire, electrical and structural) from 100 factories to estimate individual costs of remediation activities for a statistically representative number of RMG factories. The second component consisted of interviews of sector stakeholders. The final component was devoted to analyses and reporting.

Figure 1 - Study Methodology and Timeline



### 1. REVIEW OF 100 INSPECTION REPORTS

The three initiatives provided factory reports covering fire, electrical and structural analysis for each of their assessed factories. To estimate average costs of remediation activities per factory, a sample of 100 remediation reports (Fire/Electrical/Structural) was taken and the cost of each corrective action was analyzed. The sample size was statistically representative of the total number of RMG factories in Bangladesh (estimated at 4,296 factories). The selection sample methodology is defined in Figure 2, where  $n$  is the sample size,  $t$  is the value that defines the level of confidence desired,  $p$  is an estimate of the proportion that one is trying to estimate in the population, and  $d$  is the acceptable error within the responses given by the sample:

Figure 2 - Sample Size Selection Formula

$$n = \frac{t^2 * p(1-p)}{d^2},$$

A sample of 100 over a population of 4,296 allows for a confidence level of 95%, and a confidence interval of approximately 10%. Factory selection in the sample intentionally included reports from all three initiatives, and was based on the number of completed factory assessments reports by the initiatives at the time<sup>1</sup> of selection. As Table 1 attests, the final sample contained 44 factory reports from Accord, 31 from National Initiative, and 25 from Alliance.

<sup>1</sup> August 2015

Table 1 - Sample Breakdown, number and percentage of completed reports

Completed Assessments			
	Total	Percentage (%)	Data Source
Accord	1,281	44%	http://database.dife.gov.bd/ as of August 2015
Alliance	737	25%	
NI	893	31%	

Results are presented in accordance with categorization based on electrical, fire and structural issues. In some instances there can be overlap between the three. For example, an electrical report from one initiative might indicate the need for fire protection barriers to be applied to a generator room. However, the same action identified in a different location (e.g. on a production line or stairs), might end up in the fire safety report and therefore categorized under fire issues. This study therefore follows the categorizations as they appear in the assessment reports.

The 100 (Fire/Electrical/Structural) reports were reviewed by the study's team of structural, electrical, and fire engineers. The Alliance and Accord reports were downloaded from their websites; the National Initiative made a selection of their reports available. After the estimation analysis was completed, an engineering team joined the research team for eight factory visits (selected out of the 100) and on-site inspections to check the accuracy of the study estimations .



## 2. PRIMARY INTERVIEWS IN DHAKA

A total of 32 interviews were carried out with local sector stakeholders. These included interviews with safety input providers, experts, industry associations, government bodies, local financial institutions, international buyers, international organizations and RMG factories (see Table 2).

Table 2 - Stakeholder Interviews

Group	Organization
Safety Input Providers	Grand Arch
	Electrical Advising Engineers
Safety Experts	ARUP
Industry Association	BGMEA
	Accord
	Alliance
	National Initiative
Government Body	Department of Inspections for Factories and Establishments
Banks	City Bank
	Prime Bank
	Mutual Trust Bank
	IDLC (NBFI)
	Standard Chartered
Buyers	H&M
	TESCO
	Walmart
	VF Corporation
International Organization	Better Work
	IFC
	JICA
	AFD
	USAID (In Dhaka)
	WRAP
	GIZ
RMG Factories	DK Globals
	Flash Apparels
	Plummy fashions limited
	Prime Garments Ltd
	Mascot Fashion
	Mahdi knit design ltd
	Coit (Pvt) ltd
	Columbia Garments
	Smug Sweaters

### 3. VALIDATION MEETINGS

The final step was to conduct a series of validation meetings in Dhaka with multiple sector stakeholders. Participants were presented with preliminary study findings from the analysis and collected feedback on key research hypothesis, market analyses and cost estimates. These meetings were conducted with:

- ILO and IFC Staff
- Alliance, Accord and the Department of Inspection for Factories and Establishments.
- RMG Factories
- International Organizations

These findings were additionally presented at the January 2016 IFC Buyers' Forum. The final findings were presented in April 2016 to a group of twenty stakeholders, including development organizations and representatives from BGMEA and BKMEA. In addition to validating the results of the study, the group agreed on five key areas of action that the sector should implement to move forward. These areas of action are detailed in the section on Identified Areas of Need, page 47.





## FACTORY SEGMENTATION

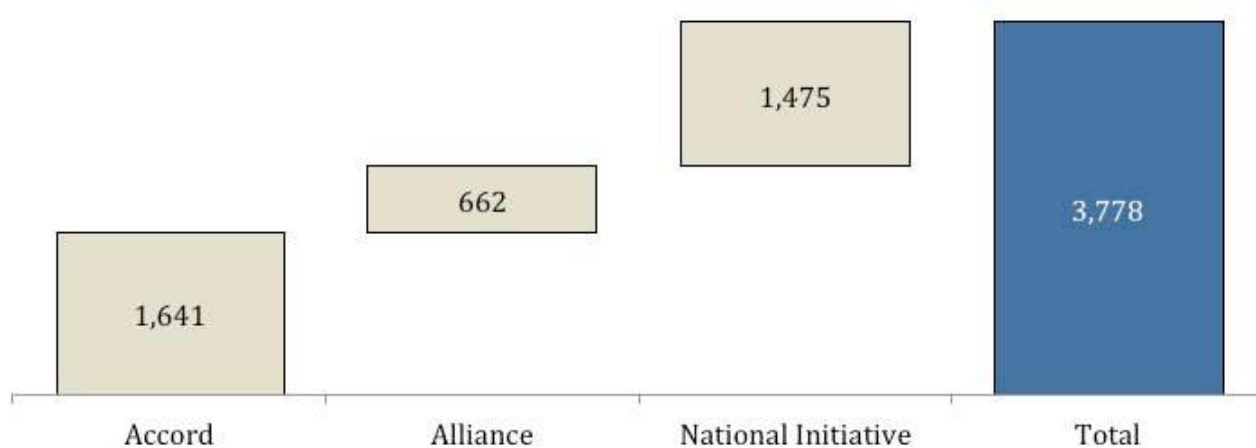
This section introduces the key characteristics and dynamics of garment factories. Information presented here will be matched later in this report with data on average remediation values and access to finance in order to estimate the market need for remediation financing.

In order to quantify the total need for remediation financing in the RMG sector, it was necessary to first quantify the number of factories likely to need and apply for financial products to remediate safety conditions.

The Bangladesh Garment Manufacturers and Exporters Association (BGMEA) estimates that there are around 4,296<sup>2</sup> active garment factories in Bangladesh. This includes factories of all sizes that may (or may not) be members of different remediation initiatives, work with international brands, and export to a number of different countries or produce for the local market.

As of December 2015, 3,778 factories were enrolled in one of the three remediation initiatives, and had therefore received or were in the process of receiving a compliance assessment. It should be noted that this number recognizes the possibility of double counting a factory in more than one initiative; this can happen with factories that are shared between Alliance and Accord (working with both American and European brands) or between either of the Western initiatives and the National Tripartite Initiative, as some factories are in the process of being transferred from the former to the latter. Figure 3 shows the number of reported active factories in each of the initiatives.

Figure 3 - Number of RMG Factories



Accord covers the largest number of factories, followed by the National Initiative and then Alliance. In order to estimate the cost of remediation, this report will only focus on the 3,778 factories included in one of the three initiatives. It should however be acknowledged that the actual number of existing factories is difficult to quantify, as there are many that either produce solely for the local domestic market, or engage in sub-contracting activities, and therefore lack the international standards incentive to remediation. BGMEA, with the support of the ILO, is in the process of streamlining and confirming its large member directory.

<sup>2</sup> BGMEA Trade Data Accord Dec. 2015 Report, ILO Sept. 2015 Report, Alliance Sept. 2015 Report.

The study intentionally divides factories by initiative because the different initiatives offer different types of incentives and support towards remediation:

- Factories under Alliance and Accord: have working relationships with reputation-conscious buyers who prioritize working conditions and impose strict remediation requirements on the factories. The buyers create the greatest impetus for structural, electrical and fire safety remediation. In addition, some factories (those strategic to buyers) may receive financial support from buyers towards remediation.
- Factories under National Initiative: do not receive the same type of buyer pressure to remediate as those under Alliance and Accord, and tend not to have long-term relationships with buyers who either push or support their efforts at remediation.
- RMG factories in Bangladesh tend to be large-scale enterprises. Therefore this study uses a classification of Small, Medium and Large Enterprises based on size trends observed in the sector, as well as feedback received by key industry stakeholders:

Small: fewer than 1,000 employees

Medium: Between 1,000 and 3,999 employees

Large: More than 4,000 employees

Table 3 shows the distribution of factories by size between the initiatives. An estimated 67% of the total number of RMG factories in Bangladesh employ fewer than 1,000 workers, while 29% employ between 1,000 and 4,000 workers; only 4% of factories employ over 4,000 workers.

Table 3 - Factory size by percentage (%) in Accord, Alliance, and National Initiative<sup>3</sup>

	Small (Below 1,000)	Medium (1,000 < x < 4,000)	Large (Above 4,000 Workers)
Accord	57%	38%	5%
Alliance	47%	46%	7%
National Initiative	82%	16%	2%
Total	67%	29%	4%

An additional factor useful to classify and describe the sector is the relationship between a factory and the brands they work with. Both buyers and factories interviewed during the primary research of this study confirmed that brands tend to financially support their most strategic factories (those factories they either have or intend to have long-term relationships with). Interviews also noted that the strength of the buyer–factory relationship is a strong indicator of a given factory's maturity and willingness to invest in remediation.

One way of classifying these relationships is to use data directly produced by Accord, which records and classifies the business relationships between a single factory and international brands. Relationships are classified along three tiers, depending on the amount of production ordered by the buyer in the single factory:

**Tier 1:** "Facilities representing, in the aggregate, not less than 30%, approximately, of each signatory company's annual production in Bangladesh by volume." These factories will be referred to as strategic suppliers.<sup>4</sup>

<sup>3</sup> The breakdown for Alliance and Accord's factories is directly calculated from their full factory lists. The data for National Initiative comes from the 31 factories in the sample of remediation report analysis utilized by this study, and an assumption has been made that the remaining factories in the market would follow a distribution similar to factories in the National Initiative.

<sup>4</sup> Accord, March 2013

**Tier 2:** “Together, Tier 1 and Tier 2 factories shall represent not less than 65%, approximately, of each signatory company’s production in Bangladesh by volume.” These factories will be referred to as regular suppliers.

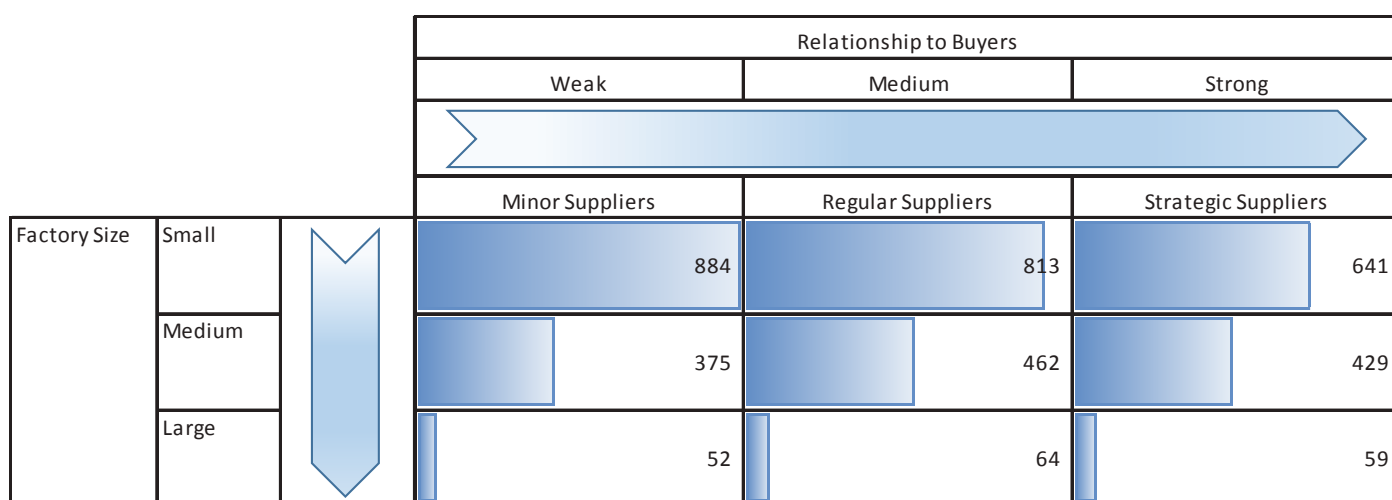
**Tier 3:** These factories represent no more than 35% of a signatory’s production. Tier 3 includes facilities with occasional orders and where the buyer has limited leverage with the factory. These factories will be referred to as minor suppliers. Factories subject to limited initial inspections to identify high risks.<sup>5</sup>

According to Accord data, 75% of enlisted factories are classified as either Tier 1 or Tier 2, with the remaining 25% classified as Tier 3. Alliance does not report such data; however, for the purpose of this analysis it will be assumed that its factories follow a similar split. Conversations with industry stakeholders regarding National Initiative factories revealed that 10% of their factories could be classified as strategic suppliers, followed by 30% as regular suppliers and 60% as minor suppliers. Applying this additional information to the total number of factories in the three initiatives enables the study to distribute factories along a matrix, represented in Figure 1 - Study Methodology and Timeline. On the horizontal axis, factories are distributed in relation to their estimated relationship to international brands, from weak to strong. On the vertical axis, factories are distributed along their workforce size.

The results show an overall market dominated by two large groups: small factories with weak ties to international brands (around 754), and small size factories with average relationships (around 693). Both types are likely to have challenges in accessing finance, but the former will be less likely to receive support from international brands for remediation than the latter. The third largest group is comprised of small factories characterized by strong ties to brands. These are likely to receive support from their buyers.

Bangladesh’s medium and large sized factories show a similarly even distribution in terms of strength of relationships with international brands, with medium factories registering weak (~319), average (~394) or strong relationships (~366) and larger enterprises (~150) showing weak (~44), average (~54) and strong (~50).

Figure 4 - Size & Relationship matrix, number of factories

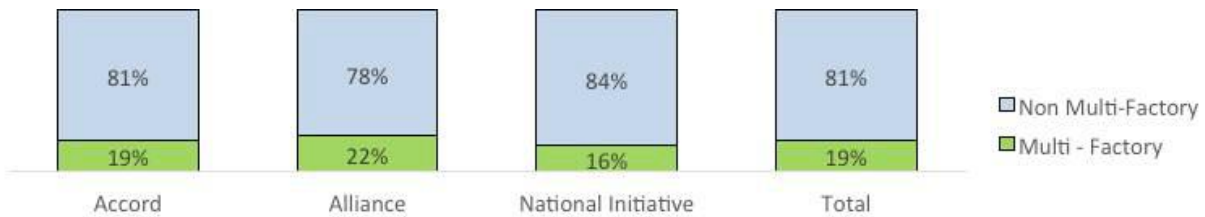


<sup>5</sup> Accord, “Meeting of the Brand Caucus”, January 2015

## OTHER FACTORY CHARACTERISTICS

It is important to determine whether production occurs in a single or multi-factory building; Figure 5 shows that 19% of all factories operate in multi-factory buildings, where there are immediate complications related to responsibilities for safety and remediation efforts. Issues relating to the entire building may have to be divided among factory owners sharing the premises. An example would be remediation of all staircases for fire safety compliance. If two or more factories are operating in the same building, then remediation would have to be agreed by all, which could make payment and implementation potentially more challenging.

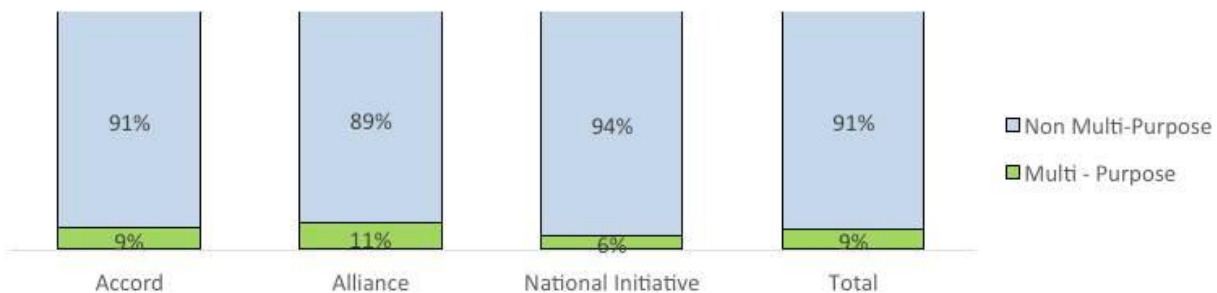
Figure 5 - Multi-factory buildings: percentage (%) of factories<sup>6</sup>



Factories operating in multi-factory buildings are often renting from the building owner. This presents an additional challenge to remediation, as disputes may arise between entities as to who should be responsible for the remedial work. Interviews with factory managers confirmed that they are likely to be unwilling to invest sizable amounts of money into improving conditions of premises they do not own. This was also confirmed by interviews with buyers, who set strict policies against working with suppliers located in rented premises for this reason. Buyers also tend not to work with factories located in multi-factory locations; an exception is when multiple factories on different floors of the same building have the same owner, and therefore the remediation activities are the responsibility of a single entity, or single group of companies.

A similar issue is posed by factories operating in multi-purpose buildings. As shown in Figure 6, approximately 9%<sup>7</sup> of garment factories across the three initiatives are currently operating in buildings not originally designed for garment factories. It is not unusual that garment factories and completely different types of enterprises operate on different floors of the same building. The concern is that the weight of a large amount of equipment, fabric, inputs, finished garments, and staff may exceed structure bearing capacities. Furthermore, structural requirements specific to a garment factory might differ considerably from the requirements of a different type of establishment (operating on a different floor); in such cases, building owners have a less of an incentive to remediate the building to satisfy the needs of only one of their tenants.

Figure 6 - Multi-purpose buildings, percentage (%) of factories<sup>8</sup>



6,7,8: Alliance and Accord's numbers are calculated from their factory lists. Data for National Initiative comes from the 31 factories in the sample of remediation report analysis utilized by this study. The value for National Initiative factories is calculated on a small sample, and stakeholder consultations indicated the percentages of multi-factory and multi-purpose are expected to be higher.

## REMEDIATION OVERVIEW

### ISSUES IDENTIFIED IN THE FACTORIES

Any meaningful analysis of all remediation issues first must solve a lack of standardization of recommended activities in the remediation reports. The sample reports from the 100 factories contained approximately 6,000 individual remediation activities that had been developed by different engineering teams under different remediation initiatives and covered factories with different remediation needs. It was therefore a challenge to categorize remediation activities into specific, universally acceptable categories. The following section presents the study's best overview of the non-compliance issues common to all (or nearly all) factories.

The analysis carried out in the safety assessments indicates that factories average 59 identified issues needing remediation. More than half of these are related to electrical safety (51%), followed by fire (30%) and structural (19%) safety. As shown in Figure 7 below, Corrective Action Plans (CAPs) require most (41%) of issues to be solved within two months, followed by 31% within six months and 13% immediately. Fire (19%) and Electrical issues (9%) are the categories more likely to require short-term action.

It is important to note that electrical issues tend to be both easier to remediate and cheaper than fire and structural issues. Structural issues are likely to revolve around one significant procedural aspect: most require factories to conduct further investigations on their buildings, but do not necessarily require immediate remediation activities. This means that in order to estimate the cost of structural remediation (as presented later on in this report), the engineering team had to postulate how many of these initial structural investigations would result in additional, necessary remediation work.

Figure 7 - Remediation urgency, percentage (%) of identified issues

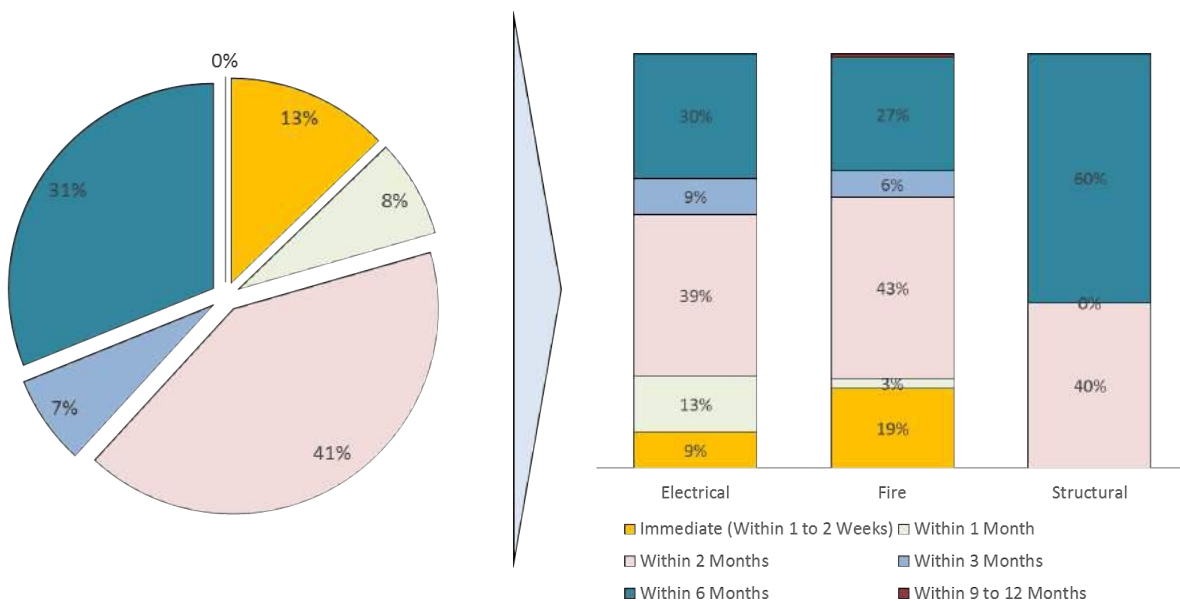


Table 4 shows the average frequency per factory of electrical, fire and structural non-remediation issues common to all 100 factories included in the sample of this analysis.

Electrical items are the largest set of non-compliance issues in terms of numbers. Out of around 3,000 electrical items in the samples, cabling and wiring were the most commonly cited issues. In these instances, factories have been requested to carry out a variety of activities including, but not limited to, sealing cable penetrations with fire- and water-resistant elements, replacing group wiring of cables with individual circuits, replacing flexible cables with fixed, soldering, crimping and insulating exposed cables, as well as other activities. The second most common category of electrical issues was earthing systems, related to ensuring that all panels are provided with proper and separate earth connections, providing each generator with an earthing connection, digging earth pits, as well as other activities.

Fire issues are the second most prevalent, are usually characterized by the highest urgency of remediation, and tend to be more expensive than electrical issues. An average factory can have around five separate non-compliance issues connected to fire barriers (i.e., protective walls between buildings, designed isolation of building sections for better fire containment). All factories feature an average of nearly two non-compliance issues connected to fire alarms. These are related to automatic detection of fire and smoke hazards, as well as reliable methods of alerting workers in case of a fire emergency. Fire alarms encompass all systems and activities necessary for reliable automatic detection of fire and smoke hazards. This includes the installation of fire alarm systems, the installation of detectors across factory property, and their connection to a centralized and computerized system.

Structural Items are most commonly connected to load-bearing potential, whereby the current structure of the factory is either not able or suspected to not be able to support the factory's weight. A second structural issue common to all factories is excessive stress on and inadequate support (injections, bracing, etc.) for the columns of a building. Missing documents on the building and its maintenance were also a common issue.

Table 4 - Average frequency of non-compliance issues common to all factories, Number of issues per factory

Area	Action	Issues / Factory
Electrical	Cabling / Wiring	6.4
	Earthing System	3
	Distribution Board / Panels	2
	Circuit Breakers	1.8
	Planned Periodical Inspections	1.8
	Generator	1.2
	Lighting Protection System	1
	Clearance	1
	Single Line Diagram	1
	Transformer	1
	Marking	0.9

Fire	Fire Barriers	5.3
	Automatic Fire Alarm	1.8
	Emergency Signals, Pathways and Isle Marking	1.4
	Side-hinged swinging doors	1.3
	Fire Doors	1.3
	Illumination	1.1
	Handrails	0.8
Structural	High Loads	2.3
	Column Stress	1.4
	Missing Documents	1

Table 5 shows a second set of non-compliance issues that, while not common to all factories, were nevertheless noteworthy.

Table 5 - Average frequency of non-compliance Issues common to nearly all factories, Number of Issues per Factory

Area	Action	Issues / Factory
Electrical	Light Fixtures	0.6
	Phase Separators	0.6
	Neutral	0.6
	Rubber Mats	0.5
	Ventilation	0.5
	Thermographic scanning	0.5
	Safety Training and Equipment	0.5
Fire	Stand Pipe and Hose System	0.7
	Engineer to design passage ways and exits	0.5
Structural	Discrepancies	0.6
	Water Infiltrations	0.6
	Bracing System	0.6
	Testing	0.4
	Beam Cracks	0.4

## REMEDATION ALREADY COMPLETED

The study also researched ongoing factory activity/progress with remediation. Creation of the initiatives effectively launched sector-wide remediation efforts, and both Alliance and Accord publish updates on their factories' progress. Both show greatest progress made in electrical remediation, largely due to lower costs and less time required. As previously noted, fire compliance issues usually require the installation of expensive equipment, and structural remediation is by far the most complex, with the need for engineers to first investigate and verify compliance issues and estimate the length of time needed for implementation.

Accord publishes regular status updates on the progress of the CAPs, categorizing the total number of electrical, fire and structural issues by: "Corrected", "Pending Verification" and "In Progress". Table 6 shows this breakdown.

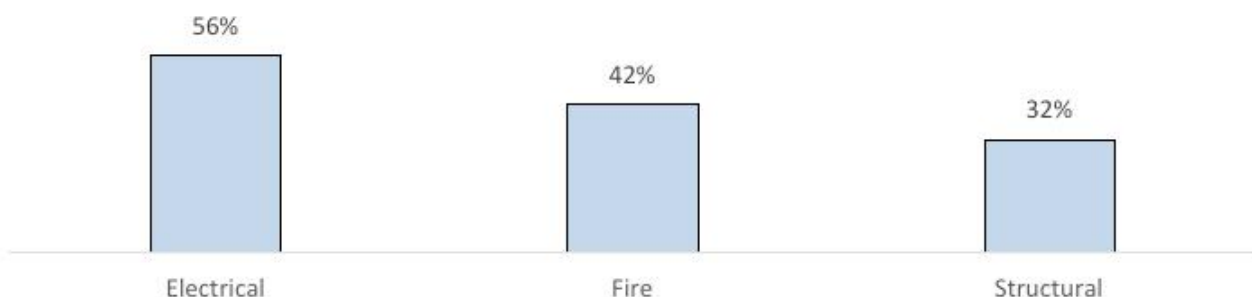
Table 6 - Accord's remediation status update, percentage (%) of CAP Issues<sup>9</sup>

	Electrical	Fire	Structural	Total
In Progress	39%	54%	62%	49%
Pending Verification	23%	22%	27%	23%
Corrected	37%	24%	11%	28%

"Corrected" designates issues remediated by factories and approved by Accord. Issues "Pending Verification" have been reported as corrected by factories but still must be verified by Accord engineers. Conversations with Accord indicate that around 80% of these issues have been confirmed as correctly remediated, with 20% to be requiring further repair. "In Progress" Issues are those still undergoing remediation by the factories.

Varying degrees of progress have been made in implementing remediation plans across all compliance categories within the Accord factories. Figure 8, illustrates the study's estimates that 56% of electrical issues, 42% of fire issues and 32% of structural issues in Accord factories had been remediated by date of publication.

Figure 8 - Accord Factories Remediation Status, % of Remediated Issues

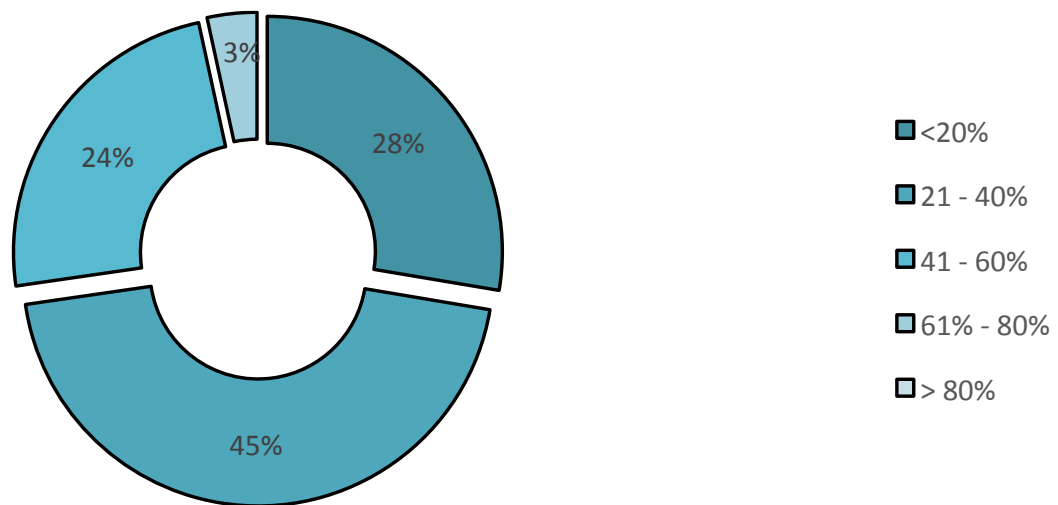


Alliance also publishes status updates of the remediation progress implemented by their member factories. Figure 9 shows that most Alliance factories (45%) have remediated between 21% and 41% of their non-compliance issues. Approximately 28% have remediated less than 20% of their overall issues, and 24% of factories have implemented between 41% and 60%. Only 3% of Alliance factories have remediated more than 80% of their issues.

<sup>9</sup> As of 1 February 2016

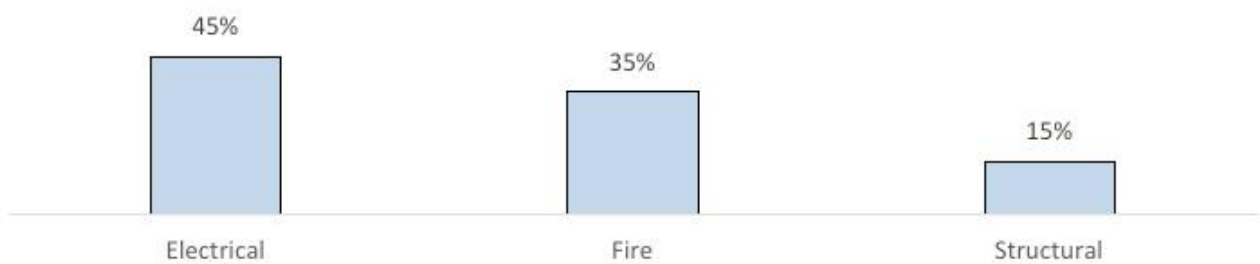


Figure 9 - Alliance Remediated Issues, % of Factories



From consultations with Alliance, estimates can be made on progress made in the three remediation categories. As shown in Figure 10, Alliance factories have so far remediated 45% of their electrical issues, 35% of their fire issues and 15% of their structural issues.

Figure 10 - Alliance Factories Remediation Status, % of Remediated Issues



No data is available on the remediation status of National Initiative factories, but interviews with key stakeholders in the industry, including BGMEA, indicate that around 80% of those factories have not implemented remediation plans; the remaining 20% have at least begun remediation (though no data exists on progress levels of implementation). The study therefore uses these estimates to help calculate the value of remediation still to be implemented in the sector.

### ASSESSMENT FRAMEWORKS AND AVAILABILITY OF SERVICE PROVIDERS

Factory interviews indicate that the lack of a single unified set of safety requirements was an impediment to progress during the time when Accord and Alliance were still developing their frameworks. Factories were requested to simultaneously comply with multiple and occasionally conflicting safety requirements from multiple international buyers. This issue of multiple compliance frameworks was resolved in 2013 with acceptance of the first harmonized standards by Accord, Alliance and National Initiative through the Technical Committee of the National Tripartite Working Group on the Plan of Action on Fire Safety and Structural Integrity for the RMG Sector in Bangladesh.

Interviews with initiative representatives also indicate that the three Initiative's frameworks are largely harmonized, and except for a few procedural differences, assessments are based on the same framework. Interviews with international brand representatives found that they only apply and enforce the requirements from their own initiative. Interviews with factory managers confirmed this, but also shed light on an additional issue: Factory managers are confident that once they have received, reviewed and agreed to their factory's CAP, the CAP will constitute the backbone of their remedial activities, and they will not be subject to additional requirements; however, it is not easy to find certified fire and electrical equipment, or installation and construction service providers that can meet the international standards required by the initiatives. It is evidently common for a factory to purchase equipment (e.g. fire doors) that appears to be legitimate, only to realize after inspection by initiative engineers that the equipment is actually not certified, and ultimately a financial drain.

In response to such issues, initiatives now review quotes that factory managers receive from input and service providers to ensure the proper quality of equipment is purchased. Reportedly<sup>10</sup>, initiatives also specify which input and service providers they should be sourcing from. For example, Accord has a list of 55 providers on their website for factory consideration (without explicitly endorsing any). Factory managers confirmed that the number of suppliers is not an issue, as demand has risen sharply and products are now easily available. However, price is a factor, as most fire safety and advanced electrical equipment must be of international quality standards and therefore imported. The Government of Bangladesh granted duty-free import status to safety input importers in 2014, thereby reducing their costs. However, the price in terms of affordability is still significant.

Two European producers of fire equipment are currently looking into opening production facilities in Bangladesh to tap into the large domestic market at lower prices. However, the lack of availability in Bangladesh of a few key intermediate products necessary to manufacture fire equipment is impeding greater foreign investment/interest. Fire doors, for example, require latches that are not available in-country, and a manufacturer would have to either establish production in-country or accept steep import costs, since the duty-free status for fire equipment only applies to finished products.



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<sup>10</sup> <http://www.dhakatribune.com/business/2014/aug/31/accord-now-dictates-fire-safety-equipment-sources>

## ANALYSIS OF REMEDIATION COST

This section estimates the total financial amount necessary for factories to carry out the remaining remediation work based on the assessment reports of the 100 factory sample. Each reported compliance issue was analyzed for estimated cost. This allowed for a break down of total cost of remediation into the three categories of electrical, fire and structural compliance work. These results were then applied proportionately to the entire Bangladesh RMG sector, minus the value of the remediation work already implemented, in order to determine the total remaining cost of remediation.

### COST ESTIMATES PER FACTORY

The average cost of remediation for the 100 factories in the report is around USD 189,000. It was however observed that the distribution of the cost estimates were not symmetrically distributed (there were more factories with low total costs than high). The team then proceeded to calculate how the individual costs were distributed from the minimum value (min), first quartile (Q1), Median, third quartile (Q3) and maximum (max).

One important analytical item previously mentioned is that in roughly 30% of all cases, the list of structural remediation actions was limited to investigations or testing of equipment and/or structural elements. It was therefore necessary to estimate the total potential cost for each factory in case the listed investigative work resulted in additional structural or retrofitting work. From the study's sample, it can be estimated that the cost of the investigations or testing only accounts for 28% of the total structural remediation work if retrofit/additional structural work is deemed necessary. From interviews with engineers and construction service providers, it can be estimated that approximately 25% of all factories will have to undergo additional retrofitting work on their buildings as a result of their assessment reports.

Table 7 shows the cost estimates for structural retrofitting work, and categorizes the sample factories by cost required. Estimates for factories that do not need retrofit work (75% of factories) vary from a minimum of around USD \$20,000 for factories with low levels of non-compliance, up to a maximum of over USD \$900,000 for factories with larger non-compliance issues reported. Estimates for factories that will require retrofitting work (25% of factories) vary from a minimum of USD 24,000 to a maximum of USD 1.1 Million.

For certain factories, the total cost of remediation will be prohibitive compared to the size of their factories' business operations. In these situations, a factory manager might compare the total cost of remediation to the factory's annual turnover and decide that implementing the remediation work makes less commercial sense than relocating the factory, or tearing down the existing building to build a new (safety compliant) one. The estimates presented in this report do not take into consideration the cost of relocating the factory to a new building or the cost of building a new one. Instead they focus on the cost of remediation issues stated in the assessment reports.

Table 7 - Factory cost estimates distribution, USD and percentage (%) frequency

	Minimum	Quartile 1	Median	Quartile 3	Maximum
USD Value of remediation without retrofit work	20,155	96,029	160,578	253,416	909,167
USD Value of remediation with retrofit work	24,503	121,367	203,366	319,160	1,577,297
Frequency	10%	30%	30%	20%	10%

The cost of fire related remediation activities can range from a minimum of USD \$5,000 to a maximum of USD \$197,000, with a median value of USD \$72,000, as illustrated in Table 8.

Table 8 - Distribution of fire costs, USD

	Minimum	Quartile 1	Median	Quartile 3	Maximum
Fire	5,678	43,127	72,736	116,196	197,728

The cost of fire safety compliance is mostly driven by the cost of the equipment. As shown in the table below, fire safety items tend to have a high unit cost multiplied by the number of units needed across the factory compound, which can result in significant expenditure. Fire doors are quoted as the one of the key cost drivers, as a single fire door can cost USD 1,300.

Table 9 – Cost of most common fire remediation activities, BDT & USD

Remediation Action / Item	Unit	Rate (BDT)	Rate (USD)
Outwards swinging side hinged doors	Each	23,500	305.50
Handrails	sft.	1,400	18.20
Fire Doors	Each	100,000	1,300.00
Design of fire rating smoke proof enclosure	Person Day	50,000	650.00
Fire rated construction at unprotected window adjacent to external staircase	cft.	150	1.95.00
Design and plan for automatic detection system with addressable fire alarm and control panel	Design of fire alarm control main panel (FACMP)	200,000	2,600.00
Install Manual activation call point at all exit routes.	Each	3,500	45.50
Smoke Detectors	Each	5,000	65.00
1.5 inch hose pipe and 2 inches stand pipe	Each	35,000	455.00
Prepare plan and design dedicated storage tank for firefighting operation	cft.	550	7.15
Aisle marking guiding to evacuation pathways	rft	2,700	35.10
Egress path illumination	Each	36	0.47

Electrical costs per factory tend to be driven by installation or services rather than equipment costs. Cost per factory can range from USD 11,000 to USD 268,000.

Table 10 - Distribution of electrical costs, USD

	Minimum	Quartile 1	Median	Quartile 3	Maximum
Electrical	11,598	36,122	59,505	93,681	268,968

The lower cost of electric inputs (cables, switches, etc.) means that expenditure is largely for payment of installation and testing of equipment by electrical engineers and technicians.

Table 11 - Cost of most common electrical remediation activities, BDT & USD

Remediation Action / Item	Unit	Rate (BDT)	Rate (USD)
Updated SLD matching existing installation at factory	sqft	10	0.13
Substation illumination	each	20,000	260.00
Rubber mats	each	2,500	32.50
Modify generator room to meet requirements	sqft	2,000	26.00
Distribution boards	each	20,000	260.00
Individual fuse protection	each	250	3.25
Switchboards made of nonflammable materials	each	25,000	325.00
Provide cable connections with properly soldered/ welded lugs at DB's	each	1,000	13.00
Conductors and MCCB/MCB adequate sizing without exceeding permissible current carrying capacity for insulation	each	10,000	130.00
Use individual circuit and over current device for every incoming and outgoing circuit at the distribution boards	each DB	15,000	195.00
Provide circuit diagram/circuit list with proper current ratings and fuse size	each	1,000	13.00
Seal cable penetrations through walls with fire resistive elements.	each	5,000	65.00
Replace all flexible cables/wires with fixed wiring	per feet	300	3.90
Seal cable entry-exit points of DB's with non-flammable materials.	each	6,000	78.00
Generator earthing/grounding	each	30,000	390.00
DBs and doors earthing/grounding	each	16,000	208.00
Planned periodical inspection and testing	lot	225,000	2,925.00
Silica gel refill	sft.	2,000	26.00
Provide and maintain clear and legible identifications numbers on all incoming and outgoing circuits of HT and LT panel.	per DB	300	3.90
Caution Boards at DBs	per DB	300	3.90
Vertical shaft of 200 x 400 mm for every 1500 sq.m. of floor area, (For buildings > 20m high)	sft.	450	5.85
Provide proper height of panel board (< 2m from floor level).	each board	5,000	65.00
Circuit Breakers	each	1,000	13.00
Neutral	per sft	300	3.90

The minimum value for structural remediation per factory ranges from a minimum of USD \$2,700 for factories not needing any retrofitting work (but still requiring structural repair), to above USD \$1.1 Million, for large factories in need of extensive retrofitting.

Table 12 - Distribution of structural costs, USD

	Minimum	Quartile 1	Median	Quartile 3	Maximum
Without Retrofit Work	\$2,879	\$16,780	\$28,336	\$43,539	\$442,471
With Retrofit Work	\$7,227	\$42,119	\$71,124	\$109,283	\$1,110,601

As previously mentioned, factory assessment reports frequently require factories to hire qualified engineers to conduct tests and investigations that may result in the factory having to carry out additional remedial work. A factory can therefore be requested to hire engineers to carry out a Detailed Engineering Assessment (DEAs) to verify structural issues (e.g., cracks in the structure or dampness in roofs and walls, as well as checks to the building loading plans and bracing structures).

Table 13 - Cost of most common structural remediation activities, BDT & USD

Type of work	Unit	Rate (BDT)	Rate (USD)
Plaster removal to investigate dampness penetration in building walls	sft	20	0.26
Cement sand plaster with sand cleaning & scaffolding	sft	30	0.39
Plaster removal at joint point between brick wall and columns	rft	15	0.20
Joint point refilling (If cracks do not penetrate into building structure)	rft	350	4.55
Plastic emulsion paint	sft	35	0.46
Investigation of cracks by qualified structural engineer	man day	50,000	650.00
Investigation of dampness occurring by qualified structural engineer	man day	50,000	650.00
Design, loads and columns stresses review	sft	8	0.10
Verify insitu concrete stresses either by 100mm dia. core, or existing cylinder strength data	No.	18,000	234.00
Produce and actively manage a loading plan with consideration to floor capacity and column capacity	sft	8	0.10
Inspect joint steel structure and bracing system to ensure structure stability by building engineer	man day	50,000	650.00
Cable bracing system	rft	250	3.25
Steel bracing system	rft	400	5.20
Join steel structures if joint needs to be replaced or strengthened	ton	140,000	1,820.00
Install water proofing and drainage system	sft	125	1.63
Detail engineering assessment	sft	8	0.10
Prepare machine layout plan	Sft	2	0.02
Floor load plan with necessary calculation	sft	2	0.03

## ESTIMATION METHODOLOGY

This section estimates the total value of remediation work in the Bangladesh RMG sector as well as the total value of remediation work still to be implemented by factories.

Total cost of remediation work first requires an estimate of the total number of factories in the RMG sector; for the purposes of this study, the total number of factories in the sector was agreed to be all factories registered in any of the three initiatives at the time of this evaluation.

As shown in Table 14 this study considers the Bangladesh RMG sector as composed of 3,778 factories potentially in need of remediation, with most of them being registered in Accord (1,641), National Initiative (1,475) and Alliance (662). As previously mentioned, this study also assumes that 25% of these will be in need of additional structural work.

Table 14 - Retrofitting work in number of factories

		Total Number of Factories	Not Needing Retrofit Work (75%)	Needing Retrofit Work (25%)
Market Size	Total Number of Factories	3,778	2,834	945
	Accord Factories	1,641	1,231	410
	Alliance Factories	662	497	166
	National Initiative Factories	1,475	1,106	369

The cost of remediation per factory is not symmetrically distributed across the sample 100 factories. The best approach to estimating the total value of remediation is therefore to divide cost estimates into five sub-categories and multiply the cost of remediation of each sub-category by the number of factories inside, as follows:

- **Minimum:** Factories between 0 and Q<sub>1</sub> - Minimum 10%
- **First Quartile:** Factories between Q<sub>1</sub> – Minimum and Median – Q<sub>1</sub> 30%
- **Median:** Factories between Median – Q<sub>1</sub> and Q<sub>2</sub> – Median 30%
- **Third Quartile:** Factories between Q<sub>2</sub> – Median and Maximum – Q<sub>2</sub> 20%
- **Maximum:** Factories between Maximum – Q<sub>2</sub> and Maximum 10%

This is represented in terms of number of factories in Table 15.

Table 15 - Factory retrofitting need, number of factories

	Minimum	Quartile 1	Median	Quartile 3	Maximum
Factories Needing Retrofitting Work	94	283	283	189	94
Factories NOT Needing Retrofitting Work	283	850	850	567	283

## TOTAL VALUE OF REMEDIATION IN THE BANGLADESH RMG SECTOR

The total value of the cost of remediation in the Bangladesh RMG sector, prior to any remediation efforts, was around USD 929 Million. As Figure 11 illustrates, if no remediation efforts had occurred, the cost of remediation for factories in Accord would amount to ~USD 403 Million, followed by ~USD 362 Million for factories in the National Initiative and finally by ~USD 162 Million in factories in the Alliance.

Figure 11 - Total initial cost of remediation, USD

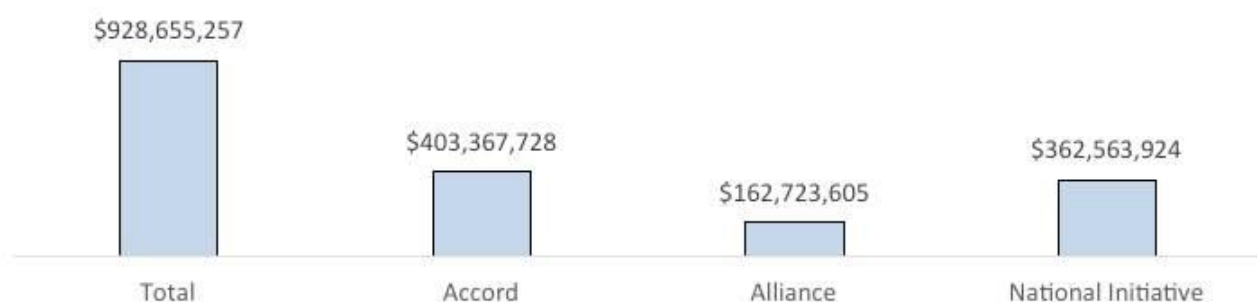


Table 16 breaks this total initial cost estimate into expenditure by remediation issue and initiative. Structural remediation accounted for the greatest expense (~USD 347 Million), followed by fire related issues (~USD 295 Million) and finally by electrical remediation (~USD 285 Million).

Table 16 - Total initial cost of remediation, USD

	Total Remediation			
	Total	Accord	Alliance	National Initiative
Fire	\$295,963,744	\$128,553,866	\$51,860,243	\$115,549,635
Electrical	\$285,166,611	\$123,864,058	\$49,968,316	\$111,334,238
Structural	\$347,524,901	\$150,949,805	\$60,895,046	\$135,680,050
Total	\$928,655,257	\$403,367,728	\$162,723,605	\$362,563,924

It is important to reiterate that these estimates are for the total cost, based on the CAPs, if no factory had begun remediation. As mentioned previously, a number of factories have started and/or completed remedial work and therefore these costs must be subtracted from the estimates.

## TOTAL REMAINING VALUE OF REMEDIATION IN THE BANGLADESH RMG SECTOR

It is clear that varying levels of progress have been made in remediating electrical, fire and structural non-compliance issues. By removing the non-compliance issues that have already been remediated from the total cost estimates, it is possible to establish a remaining value of remediation work to be implemented.

As evident in Figure 12, this study estimates that from the starting remediation value of ~USD 929 Million, ~USD 635 Million remains to be implemented. Most are connected to National Initiative factories (~USD 290 Million), followed by Accord factories (~USD 232 Million) and finally by Alliance factories (~USD 113 Million). This appears logical, since factories in the National Initiative were assessed later and have fewer incentives to remediate than others (i.e. international buyers' requests). While Accord factories appear to have remediated the most in terms of percentage of remediated issues, Accord is the largest initiative and therefore the value of its remaining remediation can be expected to be larger than the one for the Alliance factories.



Figure 12 - Initial and remaining remediation value, USD Millions

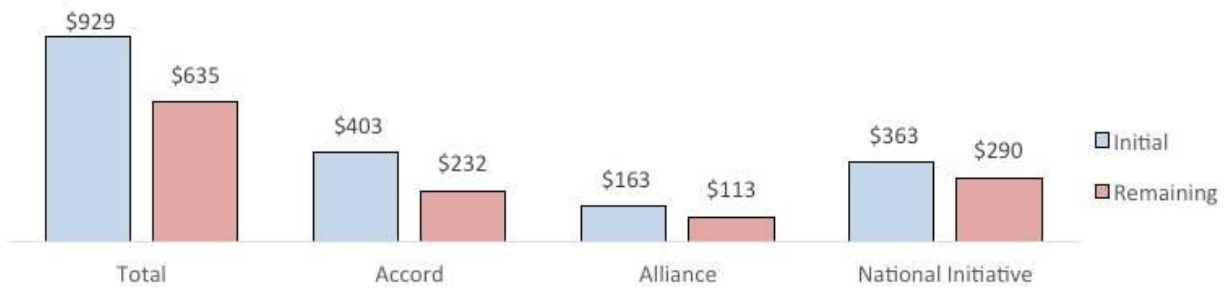


Figure 13 provides a further breakdown of this estimate, showing the largest outstanding amount of remediation costs, some ~USD 262 Million, connected to structural items. The second largest category is fire non-compliance, amounting to ~USD 201 Million, and finally electrical non-compliance, for a total value of ~USD 171 Million.

Figure 13 - Remaining remediation per category, USD Millions



## ACCESS TO REMEDIATION FINANCING

### BANKING SECTOR OVERVIEW

The Bangladesh financial sector can be divided into the formal sector, the semi-formal sector and the informal sector. For the purpose of this study, the focus is on the formal sector and its actors, to the exclusion of the semi-formal and informal sectors. The formal sector consists of:

- The Money Market: banks, non-banking financial institutions (NBFIs).
- The Capital Market: investment banks, stock exchanges, credit rating companies.
- The Foreign Exchange Market

Bangladesh Bank, the country's central bank, oversees the financial sector, which consists of 56 scheduled and 4 non-scheduled banks, as well as 31 NBFIs<sup>11</sup>. Bangladesh Bank also oversees 18 Life and 44 Non-Life insurance companies, multiple stock exchange players and 599 Micro-finance Institutions. The sector is characterized by a large number of operating banks and financial institutions, and overall a low level of service sophistication, high interest rates, and long bureaucratic processes for obtaining loans.

The banking sector is regulated by the Banking Companies Act of 1991 (Amended in 2013), the Financial Institutions Act of 1993, the Financial Institution Regulation of 1993 and the Money Loan Court Act of 2003. An additional series of guidelines and regulations have been developed over the years to regulate more specific dynamics of the sector, and include: prudential regulations for banks, guidelines on credit risk management for banks, Environmental Risk Management Guidelines for Banks & Financial Institutions, policy guidelines for green banking and foreign borrowing procedures and guidelines.

As previously stated, there are 56 scheduled banks operating in the country:

- Six State Owned Commercial Banks, fully or majorly owned by the Government of Bangladesh
- Two Specialized Banks, also largely owned by the Government, but tasked with specific activities (agriculture and industrial development).
- 39 Private Commercial Banks (PCBs), mainly owned by private parties. These can be further divided into:
  - 31 Conventional PCBs
  - Eight Islami Shariah Based PCBs
- Nine Foreign Commercial Banks (FCBs) operating as branches of banks incorporated abroad.

As shown in Table 17, 59.5% of total banking assets and 59.4% of total deposits in Bangladesh are concentrated in national and foreign private commercial banks.

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<sup>11</sup> Bank of Bangladesh, Overview of the Financial Sector. Following the definition of Bangladesh Bank, scheduled banks are those institutions which "get license to operate under Bank Company Act, 1991 (Amended in 2013)", while non-scheduled banks are "established for special and definite objective and operate under the acts that are enacted for meeting up those objectives".

Table 17 - Bank assets, BDT and percentage (%)

Bank Type	Branches	Total Assets (Billion BDT)	% of Total Asset	Deposits	% of Total Deposits
National Commercial Banks	3,384	786	33%	654	35%
Government Owned Finance Institutions	1,354	187	8%	100	5%
Private Commercial Banks	1,776	1,148	48%	956	51%
Foreign Commercial Banks	48	285	12%	151	8%
Total	6,562	2,407	100%	1,860	100%

From available data published by Bangladesh Bank, it is possible to analyze the credit rating of each bank in Bangladesh. From Table 18 below, it's easy to see that foreign banks have the highest credit ratings, followed by privately-owned commercial banks, Islamic banks, State owned commercial banks and specialized banks.

Table 18 - Bank credit ratings, percentage (%) of banks per category

	AAA	AA	A	BBB	BB	B	CCC	Unrated
Foreign Banks	33%	11%	44%	-	11%	-	-	-
Islamic Banks	-	50%	25%	13%	-	-	-	13%
Privately Owned Commercial Banks	-	68%	6%	26%	-	-	-	-
Specialized Banks	-	-	25%	-	-	25%	25%	25%
State Owned Commercial Banks	-	50%	-	50%	-	-	-	-

There are four non-scheduled banks operating in the country:

- Ansar VDP Unnayan Bank
- Karmashangosthan Bank
- Probashi Kollyan Bank
- Jubilee Bank

Non banking financial institutions (NBFIs) are specifically regulated under the Financial Institution Act of 1993 and are not allowed to issue cheques, receive demand deposits, be involved in foreign exchange financing or operate in diversified financing modes<sup>12</sup>.

## AVAILABLE FINANCING PRODUCTS

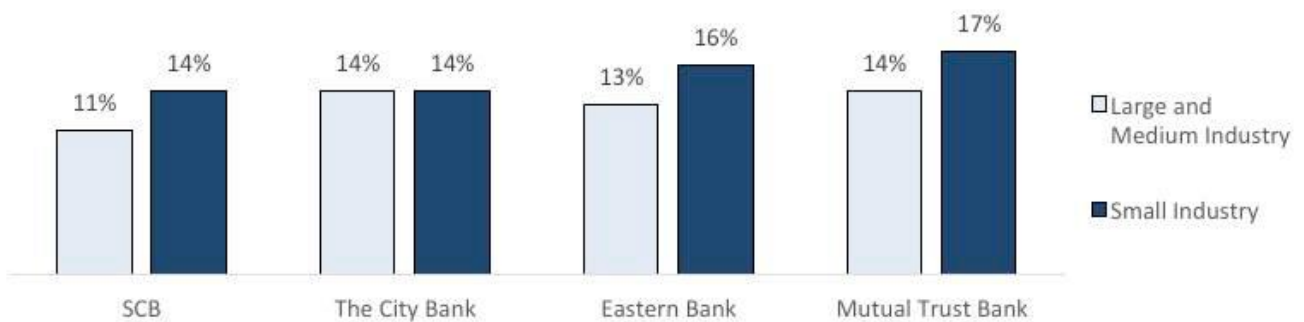
This study aims to provide an analysis of the ability of RMG factories to access financing products. This first requires a review of the currently available products that enterprises can access from banks in the country. While no product specifically designed solely for RMG factories has been identified, a variety of standard financial products are available. They are as follows:

**Trade financing.** Trade financing includes Letters of Credit (LCs), Back to Back LCs, and Export Financing through the Export Development Fund (EDF). LCs are designed to help enterprises import raw materials. The bank guarantees payment in full to the supplier provided certain conditions are met. The bank assumes the risk of the purchaser defaulting on payment. In Bangladesh, repayment terms are usually between 90 to 180 days, depending on the individual enterprise's cash cycle.

<sup>12</sup> These include syndicated financing, bridge financing, lease financing, securitization instruments, and private placement of equity.

**Back to Back LCs** are specialized LCs issued by a bank against a proof of an enterprise exporting a stated amount of goods. The bank's client obtains two letters of credit (back to back), with one covering the purchase of inputs and the other linked to export operations; this allowing them to match repayment time with payment delivery by the clients. Back to Back LC value tends to be lower than the total value of the client's export, and in Bangladesh it can be up to 90% of this total value. Repayment times can (occasionally) be extended up to a maximum of 270 days (with approval from Bangladesh Bank). Figure 14 shows the average interest rates charged by four banks (SCB, City Bank, Eastern Bank, Mutual Trust Bank) in Bangladesh for Back to Back LCs, when trade capital is provided in BDT.

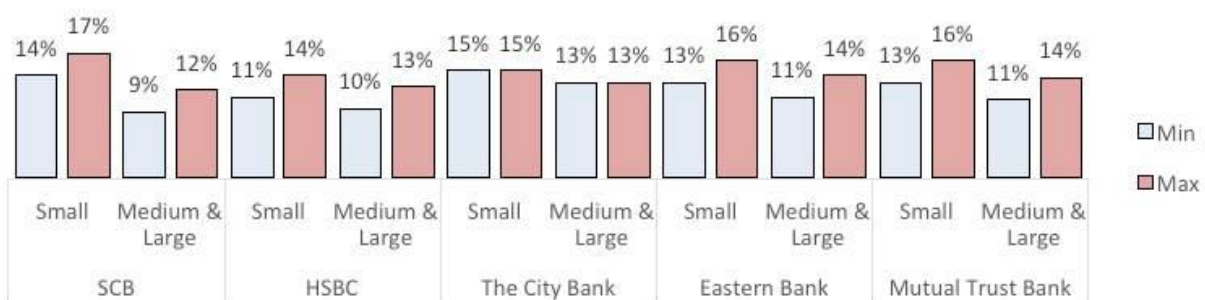
Figure 14 - Trade financing interest rates, yearly percentage (%)<sup>13</sup>



In 1989, in order to make interest more competitive on foreign currency loans, the Government of Bangladesh created a facility called the Export Development Fund (EDF). The goal was to support exporters trying to diversify into higher value products. The fund makes foreign currency available to scheduled banks in Bangladesh, with the provision that they lend to exporting manufacturers. Under this initiative, banks offer trade financing products to their clients at an interest rates between LIBOR +1.5% and LIBOR+2.5%. An exporter is allowed to request letters for amounts not higher than USD \$500,000 in a single case, and the total outstanding exposure of one client to the bank should not be higher than USD \$1,000,000.

Working capital financing to RMG factories often comes via packing credit products; these are designed to help support manufacturers with their production processes. These products are usually short term financing, utilized solely for expenses relating to shipping goods under letters of credit mentioned in the packing credit letter. A packing credit is granted once an RMG company receives a purchase order from a client, and tends to be in the form of a revolving credit facility between the manufacturer and its long-term bank. The usual value of packing credit lines is ~10% of the Freight on Board (FOB) value of the export. Figure 15 shows the industry rates charged by five local banks to their clients, depending on size of enterprise. The interest rates, spanning from 9% (for larger enterprises) to 17% (for smaller) are related to working capital loans provided in BDT.

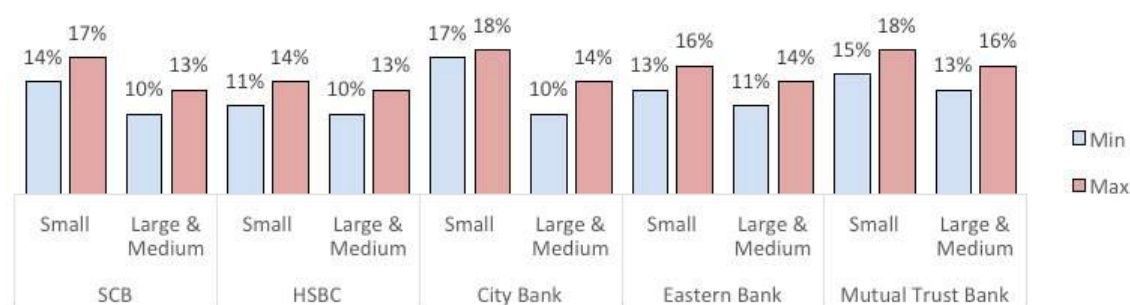
Figure 15 - Working capital interest rates, yearly %<sup>14</sup>



<sup>13</sup> Bank of Bangladesh, December 2015

<sup>14</sup> Bank of Bangladesh, December 2015

Figure 16 - Term loan interest rates, yearly percentage (%)<sup>15</sup>



Applying for and obtaining a loan in Bangladesh is a lengthy bureaucratic process, whereby the applicant must submit up to 20 documents, including personal identification, previous credit risk assessment, and a statement of personal net worth, as indicated in Table 19.

Table 19 - Loan application required documents

### Application Steps & Documents

1. Demand Promissory Note
2. Letter of Authority
3. Letter of Arrangement
4. Letter of Disbursement
5. Letter of Revival
6. Personal Net Worth statement
7. Copy of National ID
8. Credit Approach in Business Pad of the Borrower
9. Credit Application in prescribed format duly filled in
10. Photograph of the Borrower
11. Up to date CIB Report
12. Credit report of the Borrower/Supplier
13. Liability Declaration of the borrower along with an Undertaking that they have no liability with any bank or financial institution except as declared.
14. Undertaking stating that, they will not avail any credit facility from any other bank or financial institution without prior consent of the bank.
15. Undertaking stating that customer does not have any relationship as Director or Sponsor with the bank.
16. Undertaking stating that customer shall not sell or transfer the ownership of the business/ factory/shop until all amounts due to the bank are fully paid or without NOC of the bank.
17. Credit Risk Grading Score Sheet (CRGS)
18. Post-dated cheque covering the credit facility
19. Acceptance by the Borrower of the Sanction Letter
20. Proper Stamping

Applicants also have different specific documentation requirements, depending on whether they apply as individuals, simple firms or limited companies, as listed in Table 20. The actual time needed to undergo these procedures can vary. A factory with a more sophisticated accounting department applying for a loan from their current bank will take days, whereas a smaller, less financially literate entrepreneur might take a much longer time to apply for a loan from a bank where he/she has no previous banking relations.

<sup>15</sup> Ibid

Table 20 - Specific borrower requirements

SL	Type of Borrower	Document
1	Individual Borrower	<ul style="list-style-type: none"> <li>• Letter of Guarantee of a Third Person</li> <li>• Personal Net-Worth Statement (PNS) of Guarantor</li> <li>• Personal Net-Worth Statement (PNS) of the Borrower</li> <li>• Letter of Guarantee of the Spouse of the Borrower</li> </ul>
2	Proprietorship Firm	<ul style="list-style-type: none"> <li>• Trade License (up to date)</li> <li>• Personal Net-Worth Statement (PNS) of Proprietor</li> </ul>
3	Partnership Firm	<ul style="list-style-type: none"> <li>• Trade License (up to date)</li> <li>• Registration of Firm with RJSC&amp;F</li> <li>• Partnership Deed (Registered with Sub-Registrar)</li> <li>• Letter of Guarantee of the partners</li> <li>• Personal Net-Worth Statement (PNS) of Partners</li> <li>• Letter of Partnership.</li> <li>• Partnership Account Agreement.</li> </ul>
4	Limited Company	<ul style="list-style-type: none"> <li>• Trade License (up to date)</li> <li>• Memorandum and Articles of Association (Certified by RJSC)</li> <li>• List/Personal profile of the Directors</li> <li>• Certificate of Incorporation</li> <li>• Form XII Certified by RJSC (Particulars of Directors)</li> <li>• Board Resolution in respect of availing loans and execution of document with Bank</li> <li>• Letter of Guarantee of the Directors</li> <li>• Personal Net-Worth Statement (PNS) of Directors</li> <li>• Deed of Mortgage and Hypothecation for creation of Charge on fixed &amp; floating assets (existing &amp; future) with RJSC</li> <li>• Modification of charge with RJSC through form 19.</li> <li>• Certified copy of charge creation certificate from RJSC</li> <li>• Undertaking stating that the borrower shall not make any amendment or alteration in Memorandum and Article of Association without prior approval of Bank.</li> <li>• Approval of the Bank for any inclusion or exclusion of Directors in and from the company</li> <li>• Certificate of Commencement (In case of Public Limited Company)</li> <li>• Joint venture Agreement (In case of Joint Venture company)</li> <li>• BOI Permission (In case of Joint venture company)</li> </ul>

It is important to note that multiple sector stakeholders, including RMG managers, bank representatives and industry associations, have indicated that this process is a challenge to RMG manufacturers. Many RMG managers are unable to submit all documentation themselves, or do not have the time. Factory managers and banking representatives indicated that there are a number of available service providers (mainly individuals) that support RMG managers in their loan applications for a fee. Often times, these individuals are staff of the banks where the borrower is applying for a loan. In these instances, such staff may be in a position of conflict of interest, either against the factory or against the bank. As discussed later in the recommendations section, remediation stakeholders may wish to consider support for RMG factories by providing access to reliable independent consultants to guide them through the application process.

Finally, documentation requirements also vary depending on the various types of collateral that the borrower is able to provide in order to offset the risk (and cost) of the loan they are applying for. Table 21 gives an extensive list of possible typologies of collateral to be provided, and the associated documentation. From interviews with factory owners and bank representatives, it appears that banks usually ask for the collateral provided to be valued at around 90% to 100% of the total value of the loan disbursement. This represents a major challenge to manufacturers, especially smaller ones with less property or fewer purchase orders to offset the risk/cost of the loans.

Table 21 - Types of collateral and related documentation

SL	Type of Security	Document
1	Corporate Guarantee	<ul style="list-style-type: none"> <li>• Corporate Guarantee of Guarantor Company on Non-Judicial Stamp</li> <li>• Resolution of the Board of the Guarantor Company (Memorandum of the Guarantor company must permit to do so.) regarding Guarantee.</li> </ul>
2	Hypothecation of Stock/ Receivables	<ul style="list-style-type: none"> <li>• Letter of Hypothecation</li> <li>• GPA to sell hypothecated Stock / Receivables</li> <li>• Letter of disclaimer form the owner of Rented Warehouse</li> </ul>
3	Pledge of goods in trade	<ul style="list-style-type: none"> <li>• Letter of Pledge</li> <li>• IGPA to sell pledged goods</li> <li>• Letter of disclaimer form the owner of rented Warehouse</li> </ul>
4	Assignment of Bill	<ul style="list-style-type: none"> <li>• Assignment of Bill by the beneficiary through IGPA</li> <li>• Letter of Acceptance of Assignment by the work giving authority</li> <li>• Original Work Order</li> </ul>
5	Lien on Financial Instrument like FDR etc.	<ul style="list-style-type: none"> <li>• The Instrument duly discharged on the back of it.</li> <li>• Letter of Lien (1st Party Lien' - if the Borrower is the owner of the Instrument, 3rd Party Lien' - if the Owner of the Instrument is one other than Borrower)</li> <li>• Letter of Authority to encase the instrument as and when needed by the Bank</li> <li>• Confirmation of Lien (Marking of Lien) from the issuing Bank.</li> </ul>
6	Lien on Demated Stock/Shares	<ul style="list-style-type: none"> <li>• NOC of the Company in case of Sponsor's Share</li> <li>• Confiscate Request Form (Form19-1) duly signed by the pledge.</li> <li>• Pledge Request form (By Law 11.9.3) duly signed by the holder of the share.</li> <li>• Pledge setup Acknowledgement from Brokerage House</li> <li>• CDBL generated copy of Pledge Setup</li> </ul>
7	Pari-Passu Security	<ul style="list-style-type: none"> <li>• Pari Passu Security Sharing Agreement among lenders.</li> <li>• NOC from existing lenders if property/assets already under pari passu sharing.</li> <li>• Certificate of RJSC on creation of charge on Fixed &amp; floating assets of company.</li> <li>• Form XIX for modification of charge on Fixed and floating assets with RJSC</li> </ul>
8	Mortgage of Landed Property	<ul style="list-style-type: none"> <li>• Original Title Deed of the property</li> <li>• Certified copy of Purchase Deed along with Deed – Delivery receipt duly endorsed (In absence of original Title Deed)</li> <li>• Registered Partition Deed among the Co-owners (if required)</li> <li>• Mortgage Deed duly Registered along with Registration Receipt duly discharged</li> <li>• Registered IGPA favoring Bank to sell the property</li> <li>• Bia Deeds of the mortgaged property</li> <li>• Certified Mutation Khatian along with DCR</li> <li>• Record of Rights i.e. CS, SA, RS Parcha, Mohanagar Jorip parcha (if within Mohannagar Area)</li> <li>• Affidavit to be sworn by the owner of the property before 1st class Magistrate that he has valid title in the property and not encumbered otherwise</li> <li>• Up-to-date Rent Receipt</li> <li>• Up-to-date Municipal Tax Payment Receipt (if property within Municipal Area)</li> <li>• Up-to-date Union Parishad Tax Payment Receipt (if property within UP)</li> <li>• Approved Plan of Construction from concerned authority (if there is any construction upon the land)</li> <li>• Original Lease Deed (In case of Lease hold property)</li> <li>• Allotment Letter favoring Lessee (in case of Leasehold Property)</li> <li>• Mutation letter favoring Lessee (in case of Leasehold Property)</li> <li>• NOC of the competent Authority for Mortgage.</li> <li>• NEC along with search fee paid receipt</li> <li>• Board Resolution of the Mortgagor company duly supported by the provision of Memorandum and Article of Association (when one company mortgages on behalf of the loan of other company)</li> <li>• Photograph of the Mortgaged Property</li> <li>• Location Map</li> <li>• Survey Report from professional Surveyors</li> <li>• Physical Visit Report by Bank Officials</li> <li>• Lawyer's opinion in respect of acceptability of the property as collateral security</li> <li>• Lawyer's satisfaction certificate regarding appropriateness of mortgage formalities</li> </ul>

## LOANS IN FOREIGN CURRENCY

Interest rates for loans in foreign currency (USD) are much lower than loans issued in BDT. For this product, interest rates are supposed to be set at LIBOR + 4.5%, but banks are actually able to apply a sub-set of fees and commissions to the loans, thereby making the effective rate paid by the borrower around 6% above LIBOR. Under the Companies Act of 1994, enterprises are allowed to raise financing in foreign currency from different sources<sup>16</sup>:

- International banks, international capital markets, multilateral financial institutions (such as IFC, WB, ADB, CDC, DEG, FMO, OPIC, OPEC Fund)
- Export credit agencies
- Suppliers of Equipment
- Foreign equity holders.

Foreign lending is only allowed in the industrial sector for activities such as import of capital goods for new projects, or modernization/expansion of existing production units. While access to financial products in foreign currency is advantageous owing to lower interest rates, it also requires additional approvals by the Bangladesh Board of Investment (BOI)<sup>17</sup>. From interviews with both bank representatives and factory managers, it appears that this additional step of application approval can take up to six months. The process involves the following<sup>18</sup>:

- i) Application form
- ii) MOU signed by both parties. In case of a draft agreement, the borrowing company must submit a consent letter from the non-resident lender summarizing major terms and conditions (e.g., principal amount, rate of interest, repayment period, fees and expenses)
- iii) Copy of BOI project registration (full set)
- iv) Board's resolution relating to proposed borrowing
- v) Repayment period along with repayment schedule
- vi) Grace period if any for repayment
- vii) Calculation of all-in-cost with schedule as defined in the application form
- viii) Feasibility report
- ix) Financial analysis
  - a. Internal Rate of Return (IRR)
  - b. Year of achieving break-even point with break-even analysis
  - c. Pay-back period
  - d. Sensitivity analysis in terms of IRR
  - e. Debt Service Coverage Ratio (DSCR)
- x) Track record of past foreign borrowing
- xi) Track record of past FDI
- xii) Credential of sponsors
- xiii) Certified copy of Memorandum & Articles of Association of the company along with schedule X and form XII
- xiv) Certificate of incorporation with Registrar of Joint Stock Companies & Firms
- xv) As to collect CIB report from Bangladesh Bank, the relevant inquiry forms and undertaking from the Sponsors Director
- xvi) Bank certificate as to indebtedness and creditworthiness of borrowing company and its sponsors from the nominated bank/designated bank
- xvii) Undertakings/consent from the L/C opening bank for opening 4C in favor of the project (in case of suppliers credit only)

<sup>16</sup> Board of Investment, Existing Procedure and Guidelines for approval of Foreign Private Loan. Stakeholders have also indicated that some more sophisticated factories might be able to source foreign currency financing off-shore at competitive rates.

<sup>17</sup> BOI was established by the Investment Board Act of 1989 to promote investment in the private sector from domestic and overseas sources with a view to contribute to socio-economic development. It is headed by the Prime Minister and is part of the Prime Minister's Office.

<sup>18</sup> Board of Investment, Existing Procedure and Guidelines for approval of Foreign Private Loan



## BANKS' DECISION MAKING PROCESS

Banks value a prospective borrower along four main criteria: profitability, efficiency, leverage and liquidity. In order to determine whether a borrower qualifies for the loan, and the correct pricing, they apply a methodology called Risk-Based Pricing, based on seven key analytical dimensions:

1. **Cost of funds:** The rate at which the bank is able to attract funds of equivalent tenor to the loan in question. In banks that apply funds transfer pricing, this rate is a wholesale rate, usually the swap rate (fixed or floating, depending on whether the loan is fixed or floating) of an equivalent tenor.
2. **Expected Loss:** The number of basis points that corresponds to the expected loss on the loan, which will be higher on loans with more credit risk and lower on loans with less credit risk.
3. **Cost of Allocated Capital:** The cost of allocated capital is the amount of capital the bank has allocated to the loan as coverage for unexpected loss, multiplied by the target return on equity for the bank as a whole, and expressed in terms of basis points.
4. **Term cost of liquidity:** The number of basis points that captures the cost arising from the fact that loans of longer tenor require stable funding, which will be costly for the bank above and beyond any interest-rate risk considerations
5. **Cost of liquid asset buffer:** A liquid asset buffer must be held in case any extremely adverse situation a run on deposits may occur and the bank may be forced to sell assets quickly at low prices or seek additional deposits or other funds at high rates.
6. **Loan administration costs:** For any loan, big or small, there are staff costs involved in origination and monitoring. Some of these costs are up-front and some are ongoing, but they all must be expressed in terms of basis points over the life of the loan.
7. **Competitive margin:** Given its funding and expense structure, this margin may even be negative, if the bank desires to gain a temporary competitive advantage. However, it should not be negative on any kind of loan product for an extended period of time.

Following the Environmental Conservation Act of 1995, banks and financial institutions are also expected to apply an additional rating and screening to their clients based on their environmental risk exposure. These "Environmental Risk Management Guidelines for Banks & Financial Institutions" request banks and NBFIs to calculate the Environmental Risk Rating (EnvRR) of any client that features specific potential environmental impacts within the enterprise's operations.

Table 22 - Environmental guidelines summary

Area	Description
Policy	Under Environmental Conservation Act (ECA) 1995 and Environmental Conservation Rule (ECR) 1997.
Goal	To understand and manage risks that arise from environmental concerns and to integrate credit risk with environmental risk.
Targets	Small and Medium Enterprises (SMEs) for financing above USD 32,500
	Corporate for financing above USD 130,000
	Real estate financing above USD 130,000
Effect	Banks need to manage the environmental risk of their borrowers within tier credit risk management. Therefore if a borrower has a high environmental risk, borrowing will be more difficult and the process will be lengthier.

Banks and financial institutions are therefore to evaluate prospective and current clients via a checklist that assesses potential environmental impact, as exemplified in Table 23. This is directly relevant to garment manufacturers due to the operational risk of contaminating water (through chemical coloring and dyeing), and factory exposure to fire related disasters.

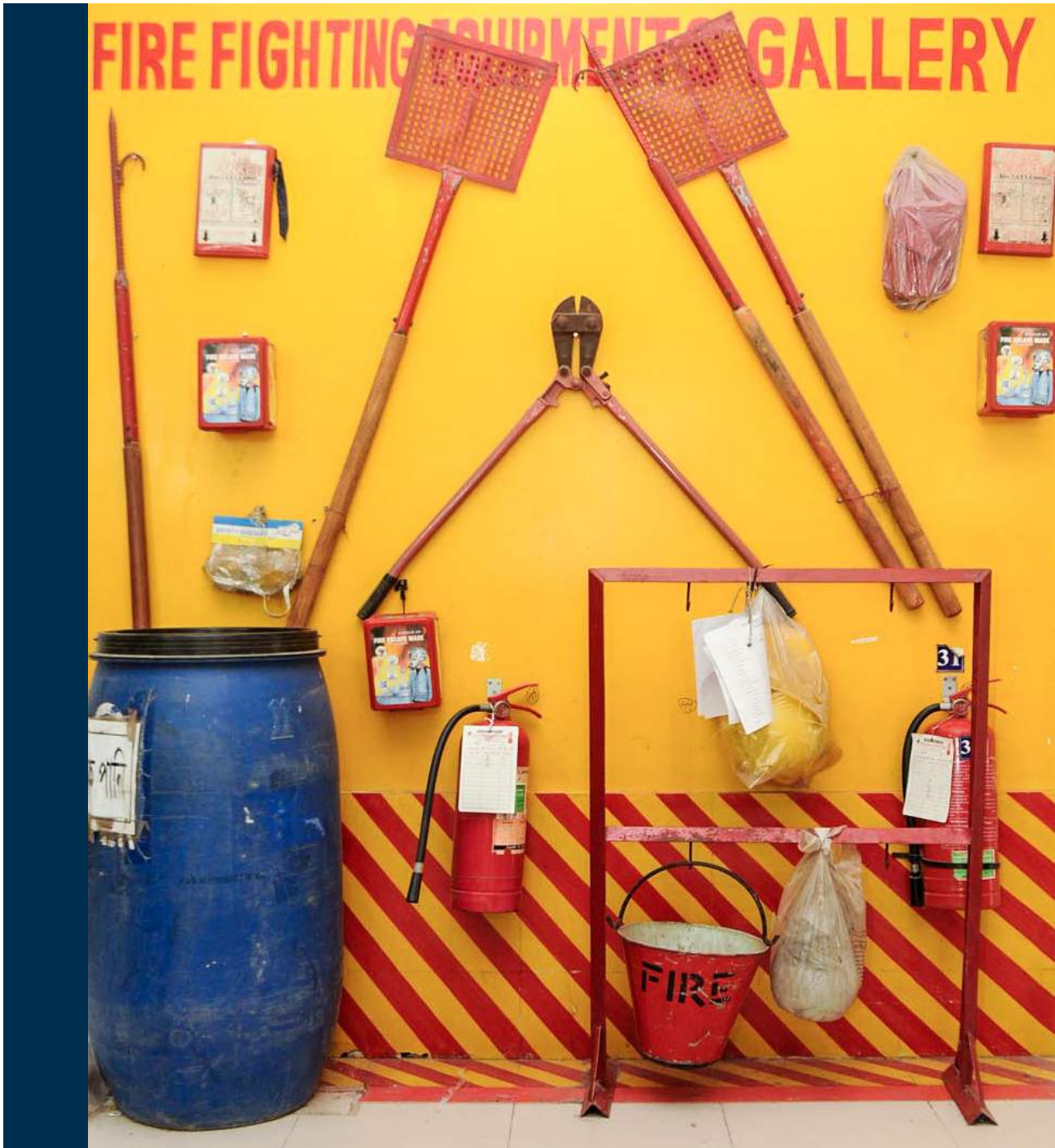
Table 23 - EnvRR checklist example

Particulars	Yes / No / NA
1. <b>Hazardous Chemicals:</b> <i>Does the business activity include appropriate hazardous chemicals management methods in pretreatment, dyeing and other processes?</i>	
2. <b>Wastewater / ETP:</b> <i>* Does the proposed business activity have an ETP?</i>	
<i>* If business activity uses specific dyes (e.g. chrome dyes, sulphur dyes or phenolic compounds) in dyeing process, is there a method to check the limits of particular compounds in the effluent discharged?</i>	
<i>* Has the ETP design ensured that there is no bypass arrangement?</i>	
3. <b>Solid Wastes:</b> Is the management of solid wastes properly planned and methods of disposal identified? The wastes include trials, trimmings, cuttings of fabrics, spent dyes, pigments, and printing pastes; and ETP sludge containing mainly fibres and grease.	
4. <b>Air emissions:</b> Are air pollution control devices planned in the finishing processes such as coating and dyeing to manage air emissions that may contain toxic compounds?	
5. <b>Fire and explosions:</b> <i>Have proper design provisions been made to prevent fire and explosion hazards that may arise from operations?</i>	
6. <b>Monitoring:</b> Is environmental monitoring, particularly effluent characteristics, proposed on a periodic basis?	
7. <b>Export requirements:</b> If it is an export-oriented business or part of the supply chain, have all the buyer environmental requirements been met ?	

## BANKS MARKET SHARE IN THE RMG SECTOR

The RMG sector is a key source of employment, destination of foreign investment, and contributor to GDP. Manufacturers vary in size from small to massive, and it is therefore to be expected that most banks operating in Bangladesh have a portfolio of garment clients. However, due to insufficient data, it is challenging to assess what the total market share of each bank in the RMG sector is.

BGMEA's online database of members provides information records of each factory's main banking relation, however this is not necessarily representative of the market share held by banks in the sector, as RMG manufacturers in Bangladesh can by law have up to three active banking relationships concurrently. In other words, it is possible that they have accounts and loans active with three banks simultaneously, making the market extremely fragmented.



## AVAILABLE FINANCIAL OPTIONS SPECIFIC TO RMG REMEDIATION FINANCING

Until recently, there were no available financial products on the market that were specifically designed to target RMG factories in their need to carry out fire, structural and electrical remediation work. RMG factories paid for the cost of remediation activities through their own resources, through standard term loans from banks, or alternatively through support from international buyers. Today there are a few RMG-specific products available from Bangladesh Bank, local banks, and the international community. The section gives an overview of these products.

## GREEN RE-FINANCING MECHANISM THROUGH BANGLADESH BANK

In 2009, Bangladesh Bank set up a revolving green re-financing scheme<sup>19</sup> of BDT 2 Billion (~USD 25.6 Million) as a financing option for green products (solar energy, bio-gas, effluent treatment systems, etc.). In 2013, Bangladesh Bank expanded the amount of products that could be re-financed under the facility to 16 products, which was then further extended in 2015<sup>20</sup>, to 47<sup>21</sup>, including products specifically designed for the RMG sector.

Members of BGMEA, of the Bangladesh Garment Accessories and Packaging Manufacturers and Exporters Association (BGAPMEA) and Bangladesh Terry Towel and Linen Manufacturers and Exporters Association (BTTLMEA) now have access to the re-financing mechanism. In the garment sector, the re-financing facility is open to any “green initiative” (solar panels, waste water treatment, etc.) but as far as safety remediation is concerned, the facility is currently only targeting issues related to fire safety. However, as previously mentioned, a variety of electrical and structural CAP issues are easily connected to fire safety and therefore garment manufacturers have some flexibility in applying for financing.

Under this scheme, banks and NBFIs will provide financing (in BDT currency) to an RMG factory, using capital previously sourced by the bank at higher interest rates. Banks and NBFIs will then submit a request to Bank of Bangladesh for re-financing. If the loan is approved within the mandate of the scheme, Bangladesh Bank then re-finances the financial institution at an interest rate of 5%. One key condition for the bank to obtain re-financing is that the interest rate charged to the borrower should not exceed 9%.

The maximum amount that a RMG factory is allowed to borrow under the facility is BDT 10,000,000 (~USD 128,000); higher limits are allowed for other activities. At the latest review, 35 Banks and financial institutions were enrolled in the scheme, each having set up a specific “Green Banking Unit” (GBU) within their institutions to properly manage their participating clients.

## IFC CREDIT FACILITY

In July 2015, International Finance Corporation (IFC) announced the launch of a credit facility specifically targeted at supporting financing of electrical, fire and limited structural remediation in RMG factories in Bangladesh. The total value of the facility is USD 40 Million, distributed among four participating banks. Under this facility, each participating bank borrows USD 10 Million directly from IFC and commits to using the funds to finance RMG factories to pay for the remediation work necessary in their factory as identified in the corrective action plan (CAP) from either an Accord or Alliance inspection.

There are four main actors involved in the facility:

- **IFC:** provided four loans of USD 10 Million to four local banks for a total amount of USD 40 Million. IFC is responsible for conducting Due Diligence on participating banks.

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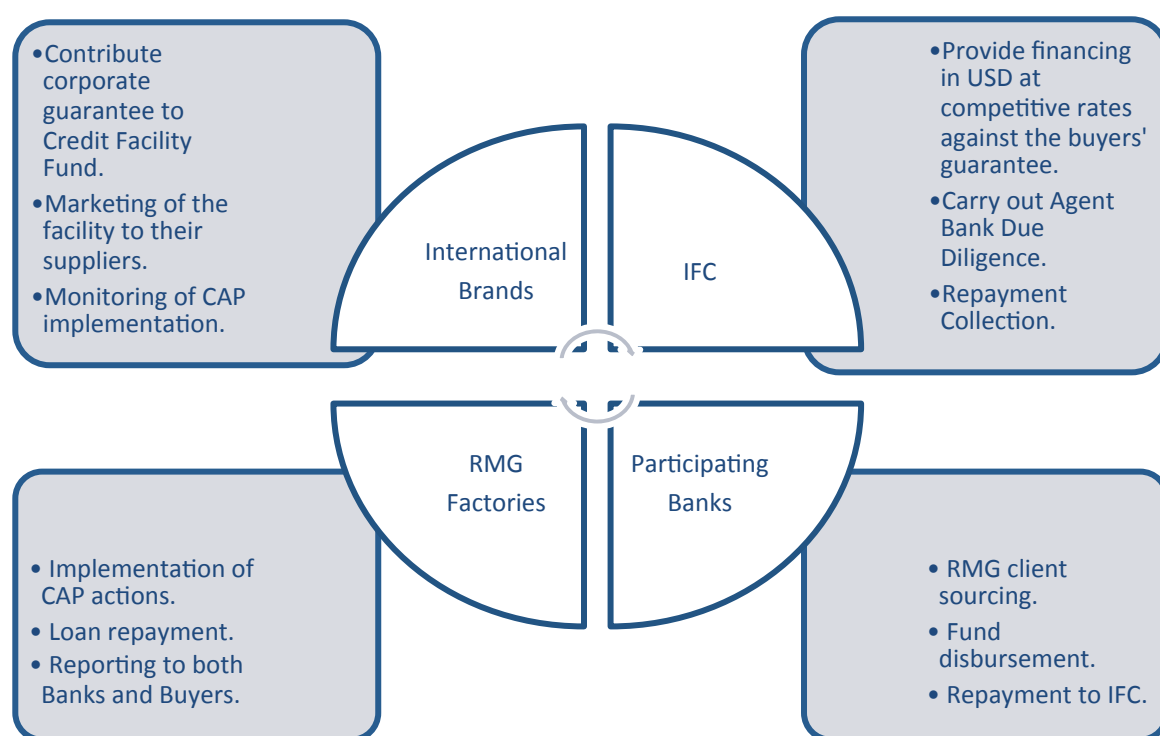
<sup>19</sup> Bangladesh Bank, Sustainable Banking Regulatory Framework, 2014

<sup>20</sup> Dhaka Tribune, BB to refinance RMG factories in green scheme

<sup>21</sup> products include biomass based large bio-gas plant, poultry and dairy based large bio-gas plant, 1-mw or above solar PV plant, solar cooker assembly plant, solar water heater assembly plant, solar air heater and cooling assembly plant, solar driven cold storage, bio-energy driven power generation plant, power switch assembly plant for power saving, hybrid cook stove assembly plant, LED bulb or tube light assembly plant, power generation from municipal waste, compost generation from municipal waste, recyclable non-oven polypropylene yarn and baggage manufacturing, palm oil production plant, supplying and purifying of surface water project, pumping through solar pumps, establishing green industry and ensuring work environment and safety in the textile and garment industries.

- **Participating Banks:** consists of Prime Bank, City Bank, Eastern Limited Bank and United Commercial Bank. These banks are responsible for sourcing and identifying clients, executing the loan agreements, distributing the loan amounts, collecting re-payment, and monitoring the execution of the remedial work according to the loan application. Banks are also able to liaise with the initiatives to discuss remediation updates undergoing in the factories.
- **RMG Factories:** under the facility, RMG factories receive financing at a competitive rate, and implement the corrective actions included in their CAP. They are responsible for reporting the implementation of these remediation actions to both the agent bank and their lead buyer.
- **Buyers:** international brands are responsible for promoting the loan product among their suppliers, and are also responsible (under either Alliance or Accord) to monitor the implementation of the remediation actions.

Figure 17 - IFC credit facility actors



IFC provides the credit facility to the four banks in USD at competitive international interest rates. Under this facility, banks agree to provide loans to RMG factories at an all-in price that aims not to exceed the current commonly accepted threshold of 4.5% for loans in USD. However, as previously mentioned, the actual cost of the loan to RMG factories (including banking fees and charges) is closer to LIBOR + ~6%. Banks under the facility are also allowed to distribute loans in BDT, depending on the client's requirements, and in that case interest rates are expected to hover around 9%, but could rise to 12% depending on client risk profile.

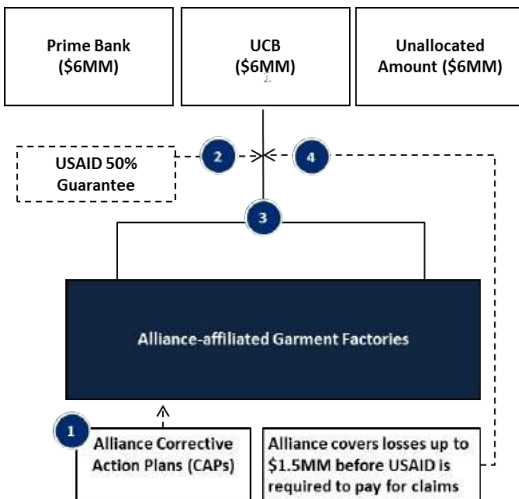
Loans can span from USD 100,000 to USD 2 Million. A key point of the facility is to ensure that no market distortive mechanism is brought to the system, and therefore selection of qualifying RMG factories is completely left to the four participating banks.

A shortcoming in the mechanism design is that banks are naturally inclined to select only the least risky clients, avoiding financing factories with high cash flow volatility, or factories with weaker business relationships to their buyers (and therefore less regular purchase orders). Another feature of the facility constitutes a potential challenge. The 4 participating banks were not selected because of the size of their garment sector portfolios, but rather only on their credit worthiness (due diligence).

## USAID GUARANTEE SCHEME

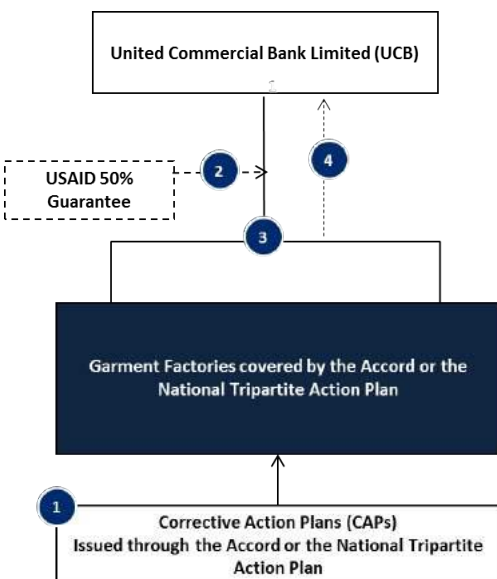
In September 2015, the United States Agency for International Development (USAID) launched two credit guarantee schemes providing USD 22 Million for loans to RMG factories for remediation work. The first facility of USD 18 Million is a guarantee given to local banks to increase their willingness to provide loans to RMG factories belonging to the Alliance. As depicted in Figure 18, two banks (Prime Bank and UCB Bank) have already received 6 USD Million each, with the remaining USD 6 million still to be allocated.

Figure 18 - USAID USD 18 Million guarantee structure<sup>22</sup>



The goal of this 50% guarantee on RMG loans provided by these two banks is to expand their willingness to provide loans to smaller and medium sized factories that banks would otherwise perceive as too risky. Alliance is also financially involved in the guarantee, and committed to cover potential losses from loans for up to USD 1.5 million. The commercial banks involved will then distribute loans (expected to average at USD 250,000) in either USD or BDT, with fewer collateral requirements and longer repayment terms (expected to span from 2 to 5 years) for factories. The length of the guarantee itself is 6 years, and has a guarantee ceiling of USD 9 Million.

Figure 19 - USAID USD 4 million guarantee structure<sup>23</sup>



<sup>22</sup> USAID and Alliance, 2015

<sup>23</sup> Ibid

The second guarantee designed by USAID is similar in structure, but varies in target and size. The target of the second facility is to support those RMG factories belonging either to the Accord or the National Initiative. The total size is USD 4 Million.

The selected bank for this second facility is United Commercial Bank Limited; the length of the guarantee is 8 years, with a total guarantee ceiling of USD 2 Million. Except for these differences, the guarantee follows the structure of the first one, with the goal to guarantee up to 50% of the value of loans provided to RMG factories, in order to increase the bank willingness to loan to smaller and riskier garment manufacturers.

## JICA CREDIT FACILITY

The Japan International Cooperation Agency (JICA) launched a financing facility to support the RMG sector in financing the retrofitting, rebuilding and relocating of factory buildings. The USD 13 Million facility was made available through a Government to Government Loan (G2G) between Japan and Bangladesh at an annual rate of 0.01%. Participating financial institutions (banks and NBFIs) obtain a sub-loan from the Bangladesh Bank at 5% interest, then loan to factories at an additional rate of up to 5%. This means qualified factories receive loans at an annual interest rate between 5 and 10%. It should be noted that this facility is specifically targeting small and medium garment factories (employing up to 2,000 workers) that are members of BGMEA or BKMEA. JICA is already planning a second phase for this facility, with expectations for financing to grow up to USD 100 Million (The Urban Building Safety Project, signed on 13 December, 2015). JICA is also providing technical assistance (assessment, design, drawing and construction supervision) to the eligible factories.

Figure 20 - JICA Financing Scheme's Structure



Operating as a G2G organization grants the JICA facility one key advantage and one key disadvantage. The advantage is that JICA does not carry out the due diligence of the participating banks; Bangladesh Bank advertises and disburses the facility and bears the responsibility for the due diligence. Currently, there are 25 commercial banks and 21 NBFIs participating, all of whom qualified by demonstrating the strength of their garment portfolios, and manage the loans through an SME specific unit within their organizations (or have developed a specific unit to operate these loans).

The disadvantage is that there are numerous steps and entities between the provider of the initial capital (JICA) and the final receivers (RMG factories). This tends to keep interest rates high, with transaction and risk management costs at every step. This is especially true for the interest rates charged to Bank of Bangladesh by the Ministry of Finance.

The credit facility<sup>24</sup> allows participating banks to apply for the fund in two ways:

- A Pre-Finance scheme allows banks and NBFIs to obtain the funds before the date of disbursement to the SMEs. To do this, the financial institution must submit all documents to the Project Implementation Unit (PIU) within the SME & Special Program Department (SMESPD) of Bangladesh Bank. This process allows the commercial bank to obtain capital

<sup>24</sup> JICA, Medium – Long Term Investment Loans for SMEs.

before the disbursement, and therefore to avoid using its own resources, but it is also a longer, more complicated procedure.

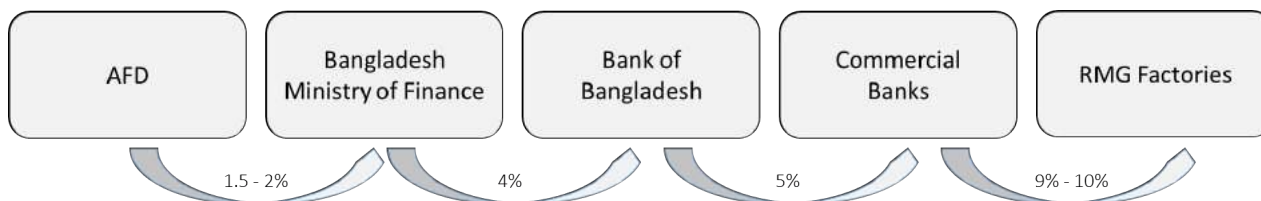
- A Re-Finance scheme allows banks and NBFIs to receive loans after they disburse loans to RMG factories out of their own resources. This process has a negative effect on the commercial banks, but allows them to obtain permission from the PIU within two to three weeks, therefore allowing them to distribute funds quickly to clients who urgently need funding.

### AFD CREDIT FACILITY

The Agence Française de Développement (AFD) is currently in the process of securing capital to launch a new credit facility that will add on to the aforementioned IFC, USAID and JICA programs. AFD is expecting to secure funding by mid-December 2015, and to be able to launch its facility by mid-2016.

The AFD facility will include a variety of components and supporting partnerships (e.g., the European Union (EU), the Kreditanstalt für Wiederaufbau (KfW) and the Gesellschaft für Internationale Zusammenarbeit (GIZ)). The basis of the credit facility will be a total fund of EUR 50 Million, of which tentatively 67% (EUR 33.5 Million) will target safety remediation work, and 33% (EUR 16.5 Million) will target environmental activities. Funds will be distributed following the same G2G approach as the JICA facility, with AFD lending to the Ministry of Finance (in Euros), who will provide sub-loans to Bangladesh Bank (in BDT), which then on-lends to RMG factories (in BDT).

Figure 21 - AFD Credit Facility's Structure



AFD expects the average loan size for safety remediation activities to be ~USD 300,000. Similar to JICA, the final interest rate charged to factories will be relatively high (9% to 10% in BDT), but the AFD facility has been designed to include two additional grants provided by the EU and KfW for a total amount of USD ~10 Million that will be part of the overall program, out of which USD ~7 Million will be structured as a performance-based investment grant mechanism. This will be used to incentivize factories to complete the remediation work properly and on time. If a factory is successful, it will be able to apply for deductions from the original loan. This means that, once a factory is approved to access the investment grant, its implied interest rate over the entire life span of the loan will be below 7% (in BDT). The incentive is even higher for environmental upgrades.

The remaining ~EUR 3 Million from the KfW and EU contributions will support technical assistance (TA) programs and activities implemented by GIZ to develop the capacity of Bangladesh Bank, RMG factories (to improve industry standards), and service providers (i.e. consulting and auditing).



## BUYERS' SUPPORT

Buyers with Accord have signed a binding agreement to support their suppliers in case the suppliers are not able to independently sustain remediation expenses. Under article 22 of the Accord:

“In order to induce Tier 1 and Tier 2 factories to comply with upgrade and remediation requirements of the program, brands and retailers will negotiate commercial terms with their suppliers which ensure that it is financially feasible for the factories to maintain safe workplaces and comply with upgrade and remediation requirements instituted by the Safety Inspector.” This approach has been confirmed by brands and suppliers, who have acknowledged the following arrangements in support of suppliers implementing remediation work:

- Improved supplier payment times: a buyer might reduce the payment time for specific orders from a maximum of 60 days to a lower minimum of 21 days, to help the suppliers better manage cash flow.
- Longer commitments: if a buyer considers a specific supplier to be strategic, it will consider committing to purchase orders from that supplier with one or two years in advance, which improves its financial standing and therefore its access to loan products.
- Modifications to FOB Prices of inputs and outputs

Also from article 22 of the Accord:

“Each signatory company may, at its option, use alternative means to ensure factories have the financial capacity to comply with remediation requirements, including but not limited to joint investments, providing loans, accessing donor or government support, through offering business incentives or through paying for renovations directly.”

The support of the initiatives fall under this type of support from international buyers. For example, Alliance has several members working directly with factories in their supply chains to help them access affordable finance. The cooperation between VF Corporation and IFC, for example, is a program under which IFC extends credit to VF suppliers, backed by a VF corporate guarantee, for building and fire safety improvements that have been identified during the inspections. Another example is Walmart, an Alliance Member, which created a facility<sup>25</sup> separate from those launched by donors and the initiatives. Through Standard Chartered Bank, Walmart created a credit facility able to cover up to USD 50 Million in remediation financing specifically targeted at their suppliers. Walmart will assess the remediation need stemming from its suppliers' CAPs, and recommend the factory to carry out specific remediation activities. If the factory agrees, then Walmart will recommend them to apply for a BDT currency loan from Standard Chartered Bank, with an average life span of two years.

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<sup>25</sup> <http://corporate.walmart.com/our-commitment-to-the-workers-of-bangladesh>

## STAKEHOLDER FEEDBACK ON CREDIT FACILITIES

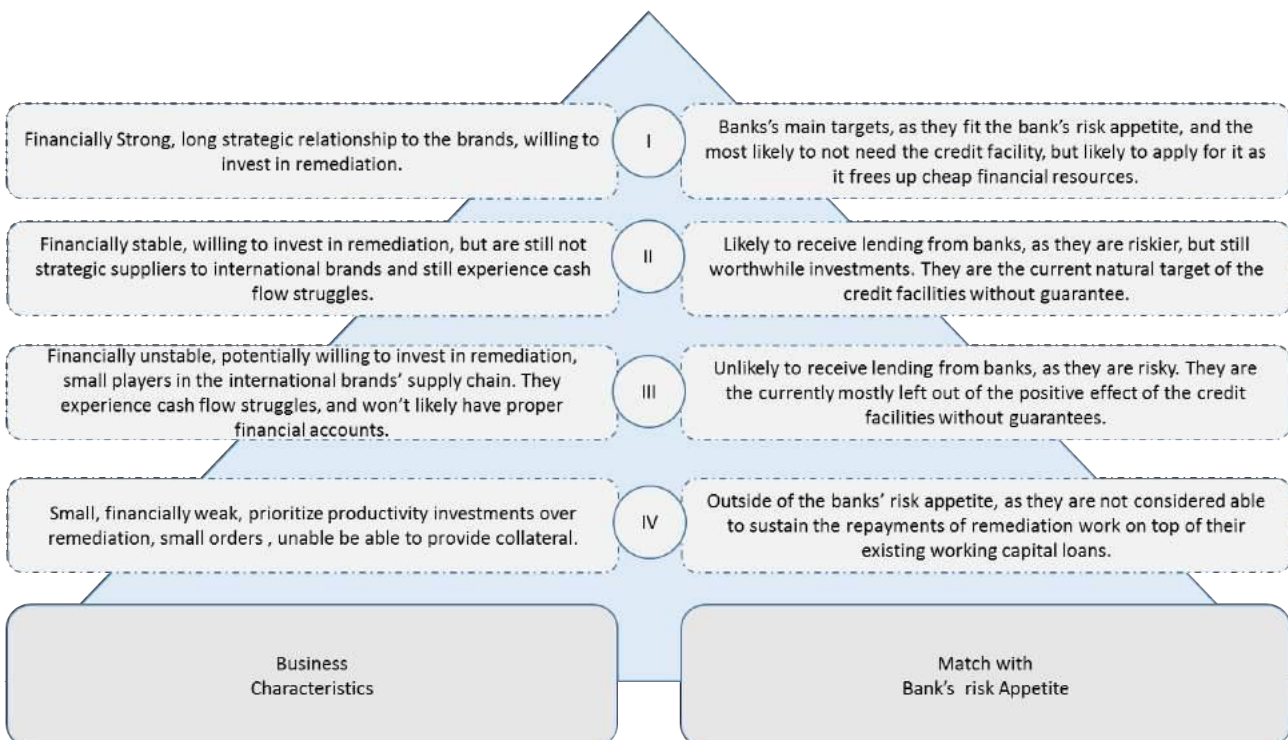
Interviews with local bank representatives have indicated that the injection of money through a facility such as the ones launched by IFC, the AFD or JICA, increases the amount of money that banks are able to distribute to the sector, but it does little to decrease the risk they incur in lending to this sector.

Banks consider the money provided by the IFC, the AFD and JICA appealing, as it represents financing at rates lower than the ones otherwise available in the market. However, they are still exposed to the risk that the borrower might default on the loan. This means that through these facilities alone, banks will tend to lend to either the most financially solid (constant cash flow, proper financial records, long term advanced buyer's orders) and they prefer to lend to their existing clients.

The preference to lend to existing bank clients is driven by two main reasons; the first being that banks have existing relations with these factories, are aware of their financials, and are able to track their liquidity on their bank accounts and ultimately to freeze their assets in case of default. The second reason is the fact that enterprises in Bangladesh are limited to a maximum of three banking relations. Therefore, marketing new, cheaper loans to other factories is challenging, as it would likely force RMG factories to close a previously existing banking relation in order to open a new account with the new lending bank.

Interviewed banks have indicated their preference for financial products that reduce risk, and therefore would largely prefer a product that offers a combination of the loans available through the IFC credit facility (loans at a lower cost) and the guarantee offered by USAID (which reduces risk).

Figure 22 – RMG Factory Types matched against Banks' Risk Appetite



From the information provided by banking sector stakeholders, it is possible to group garment factories<sup>26</sup>, based on their business characteristics and the corresponding levels of bank willingness to lend them money.

The first group consists of the strongest manufacturers in the country. These are sophisticated enterprises with strong financials, long term strategic relationships to western buyers and easy access to credit for remediation even without credit facilities being made available. These are often the first preference for banks.

The second group is composed by factories that show continued profitability but may not be long term strategic suppliers of large western buyers. Like most businesses, they experience cash flow issues and some degree of business risk. Banks are willing to loan to them, especially due to the new credit facilities which reduce bank cost of capital. Because of their slightly higher level of business risk, banks are able to charge slightly higher interest rates.

The third group is composed of factories that play a peripheral role in the supply chain of international brands. These enterprises are financially weaker, as they rely on season-to-season orders and are unlikely to have well-documented financial records. These enterprises are unlikely to receive financing from banks even with the credit facilities offered from IFC, JICA and the AFD, and consequently are currently left out of the positive effects of credit facilities that do not provide guarantees or other mechanisms to offset bank risk.

The fourth and final group is the one facing the largest challenges. These are outside bank risk preferences. The only way to increase their access to financing is to develop specific financial products that target them specifically. The JICA credit facility, specifically targeted at facilities with less than 250 employees is a good example of this.



<sup>26</sup> Factory grouping depending on business and banks' appetites was based on one-on-one conversations with banking representatives.

## SUMMARY OF FINDINGS

### REMAINING REMEDIATION VALUE

The results of this research indicate that progress has been made in remediating the structural, electrical and fire safety of factories, but a significant amount of remediation work still needs to be implemented.

At the time of this research, it is possible to estimate that the cost of the remaining remediation work to be implemented at around USD 635 Million, with factories in the National Initiative requiring around USD 290 Million in remediation work, followed by factories in the Accord (~USD 232 Million) and finally by factories in the Alliance (~USD 113 Million). The largest part of the total amount is for remediating structural non-compliance (~USD 262 Million), followed by fire issues (~USD 201 Million) and finally by electrical non-compliance (~USD 171 Million).

Following the same factory segmentation presented in Figure 4, which distributed all factories belonging to one of the three initiatives into two groups (factory size and factory relationship to international buyers), it is possible to segment the value of remaining cost of remediation, and estimate which factories will have an easier or more difficult time accessing financing. Figure 23 shows this distribution:

- **Minor Suppliers:** will have an overall need for remediation which collectively may cost up to ~USD 220 Million. These factories have weaker relationships to their buyers than regular or strategic suppliers and will therefore likely have a harder time in remediating. In addition, they are more likely to be financially weaker, and thus not able to have enough resources to invest, and are also unlikely to receive business support from international brands, as brands do not consider them as strategic suppliers. Finally, banks may not view them as a worthwhile investment, as these factories do not have long term, stable business relationships with brands, and therefore their cash flow may not appear strong enough.
- **Regular Suppliers:** will have an overall need for remediation of ~USD 224 Million. These factories are characterized by average business relationships with their brands. This means they will receive requests from their buyers to remediate, and will be expected to follow through, given the incentive of expanding relations with brands and the possibility of becoming strategic suppliers. Banks will consider these factories risky, though some are financially strong enough (i.e. land or assets to use as collateral) to qualify for loans from financial institutions – though at higher interest rates and greater collateral.
- **Strategic Suppliers:** will have an overall need for remediation of ~USD 189 Million. From primary research, this group is currently the banks' primary target for lending as they feature a lower risk profile (i.e. longer term purchase orders from brands and therefore stronger cash flow statements).

Figure 23 - Segmentation of Remaining Remediation Value, USD

		Relationship to Buyers		
		Minor Suppliers	Regular Suppliers	Strategic Suppliers
Factory Size	Small	\$ 148,532,554.99	\$ 136,484,488.81	\$ 107,713,040.92
	Medium	\$ 62,905,547.14	\$ 77,574,976.10	\$ 71,980,527.90
	Large	\$ 8,747,422.29	\$ 10,723,512.77	\$ 9,924,305.89

As the data suggests, it is likely that the majority of these required investments will not be financed from factory revenues, therefore indicating the need for external financing in the Bangladesh remediation space.

### EFFECTS OF CREDIT FACILITIES

Cost is the largest impediment to factory remediation. To fill the financing gap, various development organizations have attempted to increase the amount of capital available. The following are key advantages of the various types of credit facilities that have recently been launched:

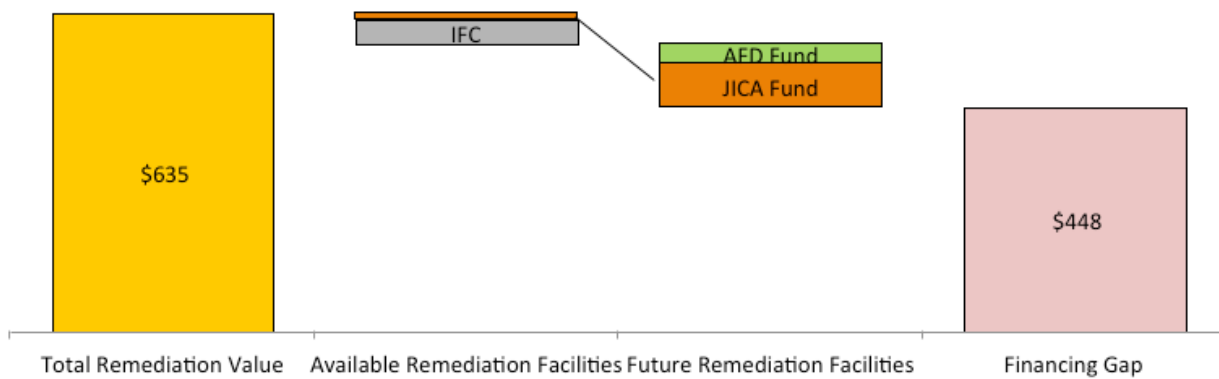
- Pure Credit facilities without risk reducing programs: IFC’s credit facility provides a sizable amount of lower cost capital to local banks. This facility is well appreciated by banks since they can obtain foreign capital at competitive international rates. However, the current facility does not reduce the operational risk incurred by banks, who will not be willing to provide loans to riskier factories. Additionally, IFC’s facility is working with only a few participating banks, who reach a combined market share in the garment sector of approximately 10%.
- Loan Guarantee Facilities: A facility such as the one launched by USAID reduce bank lending risk in the RMG sector. This should encourage banks to lend to riskier clients, as their overall business risk is mitigated by the guarantee. This facility alone does not have a direct impact on the amount of money available in the market for remediation specifically. However, the guarantee can be an effective risk reduction mechanism when used in combination with the IFC’s credit facility. One key issue of the facility is the fact that it primarily targets Alliance’s factories (USD 18 million) with also a low amount of non-Alliance factories (USD 4 Million). An additional limitation is that the credit guarantee is only currently available to a limited number of banks (two for the first facility and one for the second one).
- G2G Credit facilities: Credit facilities that provide loans through the Government of Bangladesh manage to provide loans to a much larger group of participating banks, therefore expanding the number of RMG factories that can access credit. A disadvantage of such facilities is that they tend to result in higher interest rates charged to the final clients.

o JICA's facility has an additional focus, as it manages to reach a specific sub-segment of the RMG market (SMEs with less than 250 employees), thereby ensuring that factories which otherwise would not be able to access such financing are actively targeted by the banks, through their existing (or specifically created) SME loan departments.

o AFD's facility has the additional benefit of featuring a compensation incentive mechanism for factories that complete the remediation properly. This mechanism manages to reduce to effective interest rate paid by RMG factories. Additionally, the TA component has the additional benefit of developing capacity of multiple stakeholders, including Bangladesh Bank and Service Providers among others.

Figure 24 shows the impact of these facilities on the RMG sector, with the remediation financing gap estimated to decrease to ~USD 448 Million. The USAID facility is not considered in these calculations as it does not provide an influx of capital, but rather it allows banks to lend to "riskier" factories that would in other ways not receive loans.

Figure 24 - Remediation Financing Gap, USD Millions



## IDENTIFIED AREAS OF NEED

This section presents a set of five key areas of intervention that sector stakeholders should focus on in order to support efforts towards safety and remediation in the Bangladesh RMG sector. These areas of intervention were identified by local and international stakeholders in April 2016 during a workshop to present the findings of the study.

### I. TECHNICAL ASSISTANCE

There is a need for further technical assistance to be provided across the multiple actors of the sector:

- **RMG Factories:** need multiple types of technical assistance. First and foremost, they need financial literacy and accounting support to be able to present banks and to prospective investors proper balance sheets, profit and loss statements and cash flow projections. Factories also need support in their loan application process, as the current level of bureaucracy prevents some of them from either applying or from being selected.
- **Public Actors:** National inspection bodies such as RAJUK and DIFE lack the resources necessary to carry out the whole of the activities that compose their mandates (monitoring, inspections, approvals, etc.).
- **Banks:** local banks involved in remediation financing need support to be able to properly read and verify the extendibility of cost estimates provided by factories (i.e. engineering and construction work, as well as fire equipment).

### II. IMPLEMENT THE STEERING COMMITTEE RECOMMENDATION

The current interest rates for BDT loans provided through facilities such as the Green Re-Financing Scheme and the JICA facility (and the AFD facility in the future) are still prohibitive. As shown in Figure 25 below, a key driver of this interest rate is the transfer of the money between the Bangladesh Ministry of Finance and the Bangladesh Bank (4%).

Figure 25 - G2G facilities Interest Rates



The Standing Committee of the Bangladesh Ministry of Industry and Commerce, in order to ease access to the existing remediation financing facilities, has submitted a proposal to Ministry of Finance to lower the refinancing rate from GoB to BB from 4% to 1%. If this proposal were to be accepted by the Ministry of Finance, the final interest rates charged to factories might be lowered to 6% - 7%.

### **III. IMPROVE SELECTION MECHANISMS OF THE GREEN RE-FINANCING FUND**

Facilities such as the Green Re-Financing Scheme have enjoyed little success so far. While interest in the funds is widespread, one challenge to fund distribution has been lack of understanding of the application process from factories. The selection criteria for factories need to be made clear and available across the sector, in order to foster the amount of applications submitted and the number of successful recipients of funds.

### **IV. MOBILIZE ADDITIONAL RESOURCES**

There is a clear gap of funds available specifically for remediation financing. The results shown in this study should be used to raise awareness of this financing gap among government, banks and development partners. As safety remediation is a critical challenge to the sustainable growth of the RMG sector in the country, this study should be used to advocate the Government of Bangladesh towards further action in the area.

The financing gap is substantial; there is scope for more development partners to join the remediation effort. One option is for development organizations to design and launch new credit remediation facilities; new facilities would increase the amount of capital available for banks to distribute in the sector. Depending on the strategic interest of each development partner, facilities could be developed with specific factory targets. The downside of developing new credit facilities is the long design and launch phase necessary to get them operational. Another possibility, to avoid this issue is for development partners to join in an already pre-existing credit facility, therefore increasing their total capital.

### **V. ADVOCATE TO ALLOW RE-FINANCING**

Accessing remediation financing has been challenging for Bangladesh's RMG factories. However, as shown in this report, some remediation has taken place. One way of fostering the continuation of these efforts would be for banks to allow re-financing options for remediation investments already implemented. This would free resources within factories that have already started remediation work, and would help spur additional factories in starting remediation work using their own finances if they have the prospect of obtaining a re-financing loan later.



## অগ্নি নিরাপত্তার next

### ১০টি পদক্ষেপ।

০১. অগ্নি কাভ বেন না বট্টে লো ব্যবস্থা গ্রহণঃ
  - \* সকল বিদ্যুতিক সরঞ্জামের নিরাপত্তা পরীক্ষা।
  - \* সকল কেমিক্যাল জাতীয় বস্তু, তেল, তরল, এবং বিদ্যুৎ হতে দূরে রাখুন।
  - \* অনুমোদিত স্থান ছাড়া গুমপান নিষিদ্ধ করণ।
০২. দ্রুত অগ্নিনির্বাপক ব্যবস্থা গ্রহণঃ
  - \* আগনের সূত্রপাত হওয়া মাত্র "আগুন আঁকুন" বলে চিৎকার করতে হবে।
  - \* অগ্নি সতর্কতা খস্টা বাজাতে হবে।
০৩. বড় ফায়ারানা সমূহে অগ্নি সনাতকরী যন্ত্র স্থাপন করণঃ
  - \* স্টোকে ডিটেক্টর।
  - \* হিট ডিটেক্টর।
  - \* বৈদ্যুতিক এলার্ম।
০৪. নিরাপদ বহির্গমনের জন্য প্রশিক্ষণঃ
  - \* নিয়মিত ফায়ার ড্রিল।
  - \* অগ্নি নিরাপত্তা মন্ত্রণা।
০৫. অগ্নি বহির্গমন পথ সমূহ পরিষ্কার রাখাঃ
  - \* ইভাকুইশন প্লান।
  - \* ইমাজেপি সাইট।
  - \* ভাল আহিলাস মার্কিং।
০৬. পর্যাপ্ত বহির্গমন রুটঃ
  - \* কমপক্ষে দুইটি বহির্গমন পথ থাকতে হবে।
  - \* বড় কারখানা সমূহে আরও অধিক রুট থাকতে হবে।
০৭. বহির্গমন দরজা কখন ও তথ্য বন্ধ না থাকাঃ
  - \* বাহির হওয়ার সকল দরজা অবশ্যই খোলা থাকবে।
  - \* কারখানা চলাকালিন অবস্থায় কখনও লক করা যাবে না।
০৮. সিডি সমূহ পর্যাপ্ত চতুর্ভা ও নিরাপদ হওয়াঃ
  - \* সিডি কোন ধরনের প্রতিবন্ধকতা থাকতে পারবে না।
  - \* সিডি এর এমন হবে যাতে কারখানার সকলে নিরাপদে বের হয়ে আসতে পারে।
০৯. সঠিক স্থানে সঠিক অগ্নি নির্বাপন যন্ত্র স্থাপন করাঃ
  - \* পর্যাপ্ত পরিমাণ অগ্নি নির্বাপন যন্ত্র স্থাপন করতে হবে।
  - \* যে স্থানে যে ধরনের আগনের সূত্রপাত হতে পারে সেখানে সেই ধরনের অগ্নি নির্বাপন যন্ত্র স্থাপন করতে হবে।
১০. উপরে উল্লিখিত পয়েন্ট সমূহ নিয়মিত পরীক্ষা করণ, অগ্নি

## দুর্ঘটনা মোকাবেলায় শ্রমিক-কর্মচারীদের করণীয়

- ★ প্রথমে আপনার মেশিনের সুইচ বন্ধ করুন।
- ★ মহিলা শ্রমিকগণ নিজ নিজ চুল ও পরিধেয় বস্ত্র ভালভাবে বেঁধে ফেলুন।
- ★ তাড়া হুড়া না করে দুর্ঘটনা সম্পর্কে নিশ্চিত হউন।
- ★ যদি আগুন লেগে যায় তাহলে কোথায় আগুন লেগেছে তা নিশ্চিত হউন।
- ★ আপনি যদি অগ্নি নির্বাপণে প্রশিক্ষণ প্রাপ্ত হন তাহলে দ্রুত গতিতে অগ্নি নির্বাপক বস্ত্র/ হোস পাইপের নিকট চলে যান এবং পদ্ধতিগত ভাবে অগ্নি নির্বাপক বস্ত্র/ হোস পাইপ ব্যবহার করে আগুন নিভিয়ে দিতে চেষ্টা করুন।
- ★ বৈদ্যুতিক মেইন সুইচ বন্ধ করুন এবং ফায়ার এলার্ম সুইচ টিপে ফায়ার এলার্ম চালু করুন।
- ★ আপনি যদি অগ্নি নির্বাপণে প্রশিক্ষণ প্রাপ্ত না হন তাহলে ছুটা ছুটি না করে জরুরী নির্গমন পথে দ্রুত গতিতে হেঁটে বাহিরে বেরিয়ে যান।
- ★ মহিলা শ্রমিকদের আগে নামতে দিন।
- ★ লাফ দিয়ে নামার চেষ্টা করবেন না।
- ★ বাহির হওয়ার পথে কেউ যদি পড়ে যায় তাকে অবশ্যই উঠিয়ে সাথে করে নিয়ে যাবেন।
- ★ ফায়ার সার্ভিস এবং বিদ্যুৎ অফিসে জরুরী টেলিফোন করে অবহিত করুন।
- ★ ফোর খালি হওয়ার পর ও পরিস্থিতি নিয়ন্ত্রনে আসার পর শ্রমিক গণনা করুন শ্রমিক সহ সবকিছু ঠিক আছে কিনা সবকিছু ইনচার্জ নিশ্চিত হউন।





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