Embedding Sustainability into Global Supply Chains: Evidence from Bangladeshi Multi-tier Apparel Suppliers

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Abstract

Sustainability and supply management in global supply chains (GSCs) have received much attention over the recent years from industry leaders, academics, and policy makers worldwide. However, scant attention has been paid to investigating the implementation of sustainable supply management (SSM) practices from the perspective of multi-tier suppliers located in a developing country context. To address this knowledge gap, this study examines why and how Bangladeshi multi-tier apparel suppliers implement SSM practices in GSCs. This study is positioned within an interpretivist paradigm and employs qualitative research methodology, drawing on data from interviews with 7 owners and 39 managers of Bangladeshi multi-tier apparel suppliers and their 15 key stakeholders.

This thesis contains three empirical findings chapters. The first chapter investigates the factors that drive or hinder multi-tier suppliers' implementation of SSM practices, drawing on integrative stakeholder theory, institutional theory and contingency theory. The findings suggest that buyers' requirements, increased factory productivity and external stakeholder expectations are key drivers for multi-tier suppliers to embed SSM practices. Conversely, cost and resource concerns, and gaps in the regulatory framework are dominant barriers encountered by multi-tier suppliers in the effective implementation of SSM practices.

The second chapter examines how institutional pressures and mechanisms affect the implementation of SSM practices across multi-tier suppliers, and why these suppliers decouple implementation practices. Drawing on institutional theory, the findings indicate that institutional pressures and mechanisms – coercive, mimetic and normative – vary across multi-tier suppliers, thereby affecting their divergent implementation of SSM practices. However, managers and owners of multi-tier suppliers apply three key decoupling approaches

– avoidance, defiance and manipulation – in response to institutional pressures. Specifically, the findings suggest a multiplicity of logics across multi-tier suppliers, which conflict with or complement each other during the SSM implementation process.

The third chapter investigates how multi-tier apparel suppliers integrate social and environmental issues to improve SSM outcomes. The findings suggest that multi-tier apparel suppliers are implementing various social and environmental practices to improve SSM outcomes. Although the level of implementation of sustainability practices is high within first-tier suppliers, second-tier and third-tier suppliers either adopt specific social practices on an ad hoc basis or symbolically implement environmental practices.

Reflecting on the overall findings, this study contributes to theory by offering a series of research propositions and expounding a holistic SSM implementation framework for multi-tier suppliers. In addition, this study provides significant implications for practitioners including factory owners, managers, and policy makers who seek to implement SSM practices in GSCs. The key limitation of this study concerns generalisability due to context-specific challenges. Future research should therefore focus on a cross-country data set to understand any differences in the emerging framework for multi-tier suppliers' SSM implementation.

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Journal Papers

Nath, S. D., Eweje, G., & Bathurst, R. The invisible side of managing sustainability in global supply chains: Evidence from multi-tier suppliers. *Journal of Business Logistics*. (Under third review)

Eweje, G., Sajjad, A., Kobayashi, K., & Nath, S. D. Multi-stakeholder partnerships: A catalyst to achieve sustainable development goals. *Marketing Intelligence and Planning*. (Under review)

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Nath, S. D., Eweje, G., & Bathurst, R. (2019). Why supply chain sustainability matters for developing countries' apparel suppliers? An integrated framework. In N. Capaldi, S. O. Idowu, R. Schmidpeter, & M. Brueckner (Eds.), *Responsible business in uncertain times and for a sustainable future* (pp. 187–206). Cham, Switzerland: Springer.

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Nath, S. D., Eweje, G., & Bathurst, R. (2018, December). *The invisible side of embedding sustainability into global supply chains: Investigating institutional decoupling and logics across multi-tier apparel suppliers.* Paper presented at the 8th Australasian Business Ethics Network (ABEN) conference, Auckland, New Zealand. (Awarded best paper, followed by the Jan Schapper Scholarship and a book titled "Wisdom, analytics and wicked problems: Integral decision making for the data age" written by Ali Intezari and David Pauleen)

Nath, S. D., Eweje, G., & Bathurst, R. (2018, December). *Challenges for implementing sustainable supply management: Evidence from Bangladeshi multi-tier apparel suppliers.* Paper presented (interactive session) at the 32nd Australian and New Zealand Academy of Management (ANZAM) conference, Auckland, New Zealand.

Eweje, G., Sajjad, A., Nath, S. D., & Kobayashi, K. (2018, December). *Collaborative Multi-stakeholder Partnerships for Sustainable Development Goals: A litmus Test for Business and Global Actors.* Paper presented at the Australasian Business Ethics Network (ABEN), Auckland, New Zealand.

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CHAPTER 1

Introduction

This study examines why and how Bangladeshi multi-tier apparel suppliers implement sustainable supply management (SSM) practices into global supply chains (GSCs), by drawing on data from interviews with owners and managers of Bangladeshi multi-tier apparel suppliers and their stakeholders.

The purpose of this chapter is to provide an overview of the study. First, the background of the study is discussed. The second section presents the justification of the study including the research gaps in the literature. The third section outlines the research objectives, questions and goals of this study. Then, in the next section the philosophical considerations and research methodology are briefly introduced to illuminate how the research was carried out. The last part of the chapter explains the significance of the study, followed by key terms and the structure of the thesis.

1.1 Background of the Study

As globalisation has stressed the importance of global outsourcing, the disaggregation and geographical diffusion of trade and production across many industries has become more evident (Locke, Rissing, & Pal, 2013). Global buying firms' outsourcing from diverse manufacturers in developing countries has prompted the rise of global supply chains (GSCs) (Locke et al., 2013). The upsurge of GSCs has not only brought cost advantages of sourced products and materials for buyers (Steven, Dong, & Corsi, 2014) but also created employment opportunities and export earnings for the developing countries' manufacturers

(Locke et al., 2013). For instance, 80% of world trade passes through GSCs where the share of developing countries' manufacturers almost doubled from 20 to 40% between 1990 and 2010 (United Nations Conference on Trade and Development, 2013). In 2016, developing economies in Asia continued to account for the largest share with 28.4% of the total world merchandise exports of US $15,464 billion (World Trade Organization, 2017). In particular, developing countries in Asia have become the world's apparel manufacturing exports hub. Several factors such as technological improvement, low capital requirements (low labour costs), and most notably, the World Trade Organization's (WTO) withdrawal of quota restrictions helped apparel suppliers in Asia to attain greater access to globalised apparel supply chains (Gereffi & Frederick, 2010). For example, Bangladesh is the second-largest apparel exporter in the world, next to China (Yadlapalli, Rahman, & Gunasekaran, 2018). According to an industry report by McKinsey & Company in 2012, the Bangladeshi apparel industry was being ranked by chief purchasing managers of United States (US) and European brand-owning firms as the most popular for future global apparel sourcing (Ahmed, Greenleaf, & Sacks, 2014). The trends in total Bangladeshi apparel exports and its contribution to the national exports from 1983 to 2018 are presented in Figure 1.1. Bangladeshi apparel suppliers exported apparel worth about US$31 billion in 2017-2018, which accounts about 83.49% of the nation's merchandise exports and employed more than 4 million workers (Bangladesh Garment Manufacturers and Exporters Association (BGMEA), 2018; WTO, 2018).

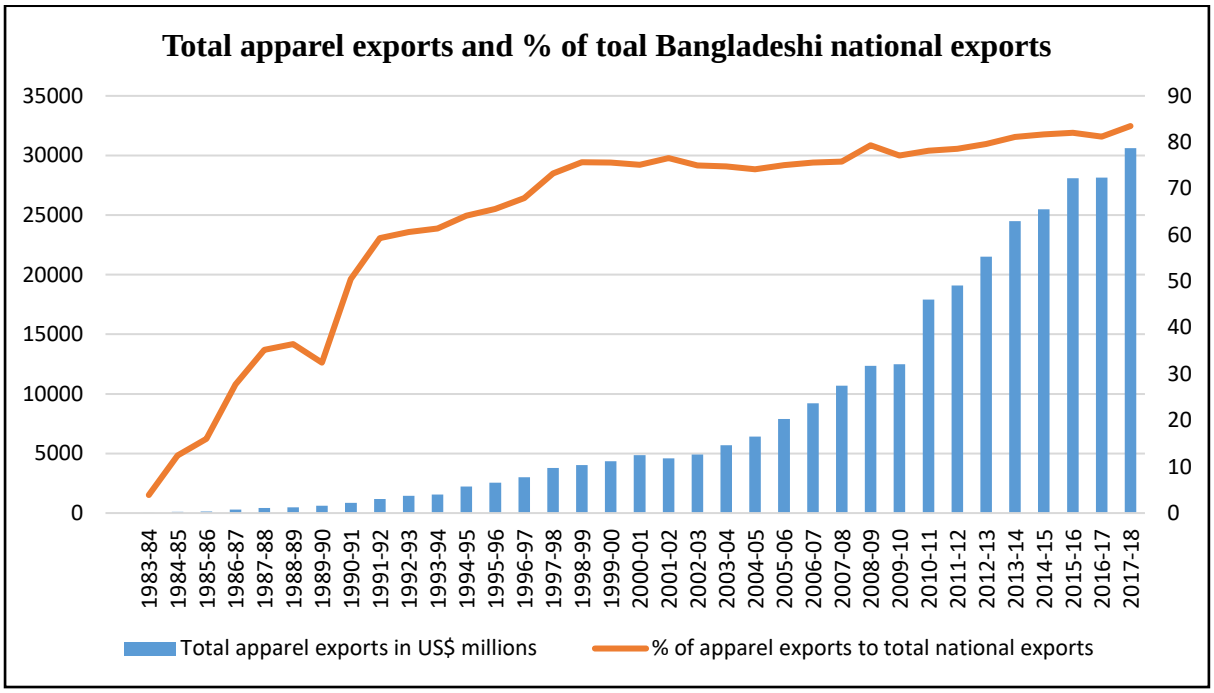


Figure 1.1: Total apparel exports and percentage of total Bangladeshi national exports (Adapted from BGMEA, 2018)

Although benefits certainly exist, global apparel sourcing to developing countries can have many challenges and risks due to social and environmental issues-related misconduct in the supply networks (Lund-Thomsen & Lindgreen, 2014; Yadlapalli et al., 2018). For example, in Brazil, the sub-contractor facilities of AHA, the main supplier of Spanish clothing and accessories brand retailer Zara, were reported for poor working conditions and violation of social sustainability standards (Wilhelm, Blome, Wieck, & Xiao, 2016). Moreover, suppliers of Nike and Gap were accused of using forced and child labour in the spinning and weaving stage of the apparel supply chains in South Asia including India, Pakistan and Bangladesh (Aydin, Cattani, & Druehl, 2014; D'Ambrogio, 2014). Most notably, in 2013, an eight-storey factory building called Rana Plaza collapsed in Bangladesh (D'Ambrogio, 2014). This industrial disaster killed 1,136 workers who were engaged in producing apparel products for at least 27 global brands (Aydin et al., 2014; D'Ambrogio, 2014). This human tragedy due to

poor safety conditions was considered the deadliest incident in the history of the global apparel supply networks (Lund-Thomsen & Lindgreen, 2014).

Consequently, a wide range of powerful institutional actors including governments, non-government organisations (NGOs), activists, media, and buyers consistently exert high levels of institutional pressures on and attention to apparel suppliers' sustainability implementation in Bangladesh (Islam & Deegan, 2008; de los Reyes Jr, Scholz, & Smith, 2017; Lund-Thomsen & Lindgreen, 2014; Reinecke & Donaghey, 2015). A list of factory disasters and their resulting institutional pressures and unintended consequences in the Bangladeshi apparel industry is shown in Table 1.1. The unintended consequences include substantial risks of brand boycotts and campaigns against the suppliers by the pressure groups and reputational damage both in Bangladesh and overseas. For example, in 2013, the US suspended trade benefits such as the Generalized System of Preferences (GSP) for Bangladesh due to inadequate workers' workplace safety (Reuters, 2013), and placed intense pressures on the Bangladeshi government and suppliers to ensure the apparel industry's social and environmental sustainability, with the result that around 1,600 factories were closed after the 2013 Rana Plaza collapse (BGMEA, 2018). Additionally, the apparel industry is accused of contributing to global warming and having a poor record of environmental sustainability implementation (Caniato, Caridi, Crippa, & Moretto, 2012) since it accounts for 10% of global carbon emissions and remains the largest industrial polluter in developing countries (Conca, 2015; McKinsey & Company, 2016). Thus, the above-mentioned economic, environmental and social factors including the Rana Plaza incident have revealed a major challenge around the effective implementation of SSM practices amongst apparel supplier networks situated in Bangladesh, an important outsourcing hub for apparel manufacturing globally, yet an under-researched area (Rahim, 2017; Yawar & Seuring, 2017).

Table 1.1: A list of factory fires and collapses in the Bangladeshi apparel industry (Adpated from Islam & Deegan, 2008; D'Ambrogio, 2014; Reuters, 2017)

Year	Supply Factories	Number of deaths	Institutional pressures and consequences
1990 to 1999	Several factory fires	248	In 1996, International Labour Organization (ILO), United Nations International Children's Emergency Fund (UNICEF) and US government put pressure on BGMEA to eliminate child labour.
2000 to 2004	5 factory fires	94	Increasing pressures from NGOs, trade unions and consumers to ensure basic human rights and adequate health and safety measures in supply factories
2005	2 factory fires, one in Spectrum Sweater	86	
2006	2 factory fires, one in KTS Textile Industries Limited in Chittagong and another in Narayangani	86	Security Exchange Commission in Bangladesh requires 'corporate governance status compliance report' from all the listed companies including garment and textile suppliers.
2007 to 2010	Several factory fires including Ha-Meem Group and Garib & Garib Sweater plant fire in 2010	142	Criticism from International labour groups (International Trade Union Confederation) BGMEA and Bangladeshi government put pressure on factory owners to prevent future fire incidents.
2012	1 factory fire, Tazreen Fashion Ltd.	112	Walmart ended its relationship with the main supplier (the Tuba company) which sub-contracted apparel from Tazreen Fashion. BGMEA announced plans to suspend its 850 member factories.
2013	Factory building collapse (Rana Plaza) on April 24 2 other factory fires in the Tung Hai Group, Mirpur, May 8 and the Aswad garment factory, October 8	1136 18	In 2013, the US suspended trade benefits such as the GSP over inadequate safety and put pressures on government and suppliers to improve working conditions. Brand boycotts and "name and shame" campaigns against the buyers and suppliers by the pressure groups and reputational damage. In the wake of the Rana Plaza disaster, two collaborative institutional platforms – the Accord on Fire and Building Safety in Bangladesh (Europe based) and the Alliance for Bangladesh Worker Safety (North America based) – were formed in 2013 to improve safety in apparel supply factories. Around 1,600 factories were closed after the 2013 Rana Plaza collapse.

The concept of SSM, also known as sustainable sourcing, has been paid significant attention over recent years by industry leaders, academics, and policy makers worldwide. As previously mentioned, this growing attention is mainly driven by the sustainability challenges and complexities of disaggregated GSCs (Gereffi & Lee, 2016; Kim & Davis, 2016) and increasing pressures on supply firms from external stakeholders such as global buyers, NGOs, government and media to act sustainably (Coe & Yeung, 2015; Huq, Stevenson, & Zorzini, 2014). Specifically, SSM focuses on the upstream suppliers' sustainability aspect of supply chain management (SCM), which is a vital aspect of the broader concept of sustainable supply chain management (SSCM) (Ageron, Gunasekaran, & Spalanzani, 2012; Zorzini, Hendry, Huq, & Stevenson, 2015). As a broad concept, Seuring and Müller (2008b) defined SSCM as:

> The management of material, information and capital flows as well as cooperation among companies along the supply chain while taking goals from all three dimensions of sustainable development, i.e., economic, environmental and social, into account which are derived from customer and stakeholder requirements (p. 1700).

While the environmental dimension of sustainability in supply chains has been widely explored, research on social sustainability and also the integration of all dimensions of sustainability is still at a nascent stage (Seuring & Müller, 2008a; Seuring & Müller, 2008b; Sodhi & Tang, 2018). Therefore, understanding all the dimensions of sustainability simultaneously and their inter-relationships is crucial (Montabon, Pagell, & Wu, 2016; Sodhi & Tang, 2018) in the context of upstream suppliers.

Prior research indicates that truly sustainable supply chains increasingly depend on the upstream suppliers' holistic implementation of SSM practices, which occur beyond the boundaries of brand-owning buying firms (Glover, Champion, Daniels, & Dainty, 2014; Krause, Vachon, & Klassen, 2009; Wilhelm et al., 2016). Following this argument, Schneider and Wallenburg (2012, p. 243) claimed "each organisation is only as sustainable as its upstream supply chain" while other scholars argued "sourcing and SCM research can lead the change to truly sustainable supply chains" (Pagell & Shevchenko, 2014, p. 52). This puts the SSM field, particularly the topic of multi-tier suppliers' SSM implementation, in a critical position on the road to achieving true sustainability.

However, several supply chain scholars have claimed that a significant portion of sustainability risks and challenges are generated by the extended supply chains that lie beyond first-tier suppliers (Meinlschmidt, Schleper, & Foerstl, 2018; Tachizawa & Wong, 2014). For example, in the apparel industry, brand-owning global buyers increasingly depend on external partners to outsource different manufacturing activities (milling, dyeing, washing, weaving, finishing, cutting, sewing and accessories) from multiple tiers of suppliers scattered across the world (Caniato et al., 2012). The contextual complexity of these diverse manufacturing activities reduces global buyers' ability to determine multi-tier suppliers' SSM practices (Kim & Davis, 2016). In a similar vein, some other scholars argue that upstream suppliers' SSM practices and performance are "paradoxical" (Busse, Kach, & Bode, 2016, p. 312) and mostly invisible to buying firms and wider stakeholders. More recently, Awasthi, Govindan, and Gold (2018, p. 109) have described social and environmental challenges and risks of multi-tier suppliers (1+n tier suppliers) using the analogy that "the underwater part of the iceberg represents substantial danger" like the Titanic disaster, which can be seen in Figure 1.2.

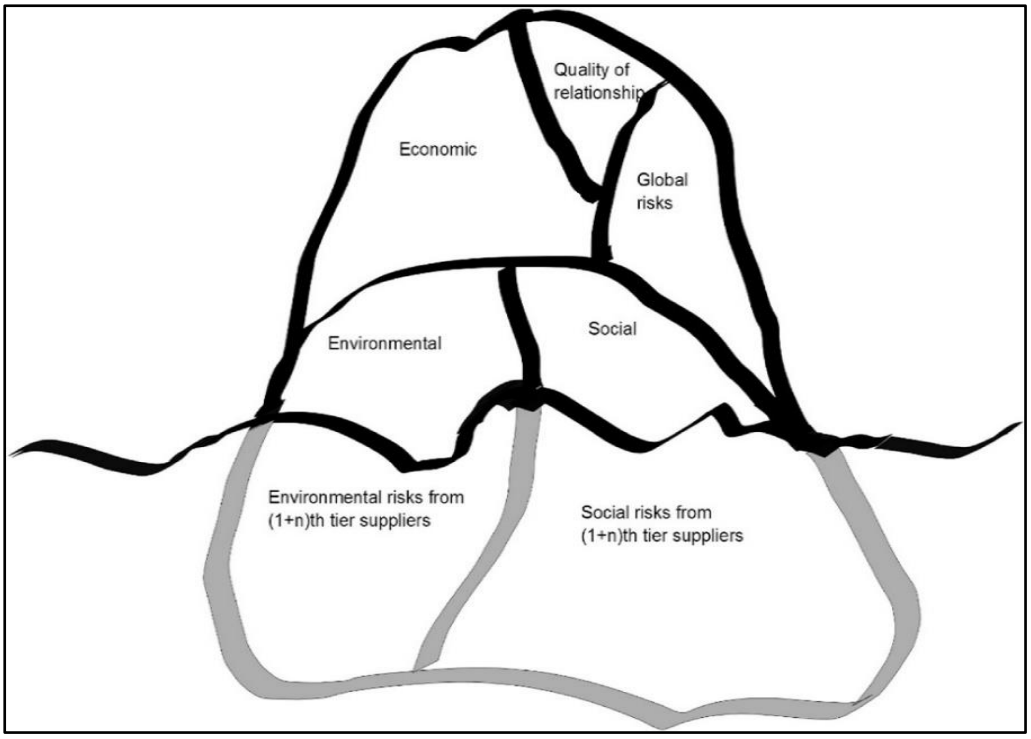


Figure 1.2: The iceberg model conceptualising the multi-tier supplier sustainability risks, adopted from Awasthi et al. (2018)

The above discussion indicates that embedding sustainability into GSCs is challenging since there is limited knowledge and information about the perspectives of the extended suppliers (Kim, Colicchia, & Menachof, 2018; Kim & Davis, 2016), which are situated in an 'opaque institutional field' beyond the first-tier suppliers (Wijen, 2014). Silvestre (2015a) also suggests that the implementation of SSM practices in developing countries is dependent on "context-specific challenges… [that are] difficult to be achieved" (p. 171). Against this background, firms are required to explore "implementation measures…to their own circumstances" (Mamic, 2005, p. 81). Thus, understanding the implementation of SSM practices and outcomes, in this case from the context of Bangladeshi multi-tier apparel suppliers, has become a critical concern due to its significance in GSCs. The following section provides the justification for this study by presenting a summary of knowledge gaps in the literature.

1.2 Justification for the Study

The above background exposition suggests that there is a pressing need for empirical research to investigate why and how Bangladeshi multi-tier apparel suppliers are integrating SSM practices into their supply chains. While the integration of sustainability and supply management frameworks has been acknowledged in the literature (Ageron et al., 2012; Gimenez & Tachizawa, 2012; Sauer & Seuring, 2018), there is a lack of understanding regarding SSM implementation from the empirical perspectives of multi-tier upstream suppliers located in challenging institutional contexts (Grimm, Hofstetter, & Sarkis, 2016; Kim et al., 2018). In particular, there are three key thematic knowledge gaps in the literature where SSM research is lacking: these are expounded in this section.

First, the systematic review of literature (see Chapter 2, section 2.4.2.1) indicates that previous studies have explored drivers and barriers to implementing sustainability practices into supply chains. However, a majority of these studies are biased towards large leading organisations (Sajjad, Eweje, & Tappin, 2015; Walker & Jones, 2012; Wolf, 2011), exemplars (Pagell & Wu, 2009) and global buyers in the context of developed countries (Ageron et al., 2012; Zorzini et al., 2015). As such, prior research may not enable researchers and practitioners to reveal the exact scenario behind the implementation of SSM practices and barriers in supply firms that are not leaders in their industry (Sajjad et al., 2015; Walker, Di Sisto, & McBain, 2008). Thus, there is a knowledge gap in the literature which requires future investigation relating to drivers and barriers to SSM implementation in the context of the developing country supplier perspective beyond the first tier (Alexander, 2018; Huq et al., 2014; Hofmann, Schleper, & Blome, 2018; Kim et al., 2018; Quarshie, Salmi, & Leuschner, 2016).

Furthermore, previous research reveals that different industries have different drivers and challenges to implementing SSM practices into their respective supply chains (Diabat, Kannan, & Mathiyazhagan, 2014; Zhu & Sarkis, 2006). This situation indicates a need to explore firms' SSM practices in depth (single industry view) rather than breadth (multiple industry view). Likewise, some scholars explicitly advocate investigating the drivers and barriers to implementing supply chain sustainability practices in a single industry, for example, Sajjad et al. (2015). Accordingly, this study focuses on the apparel industry. This is because apparel production processes require enormous chemical and non-renewable natural resources (Turker & Altuntas, 2014). According to a joint report of the World Bank and McKinsey & Company, the apparel sector's environmental impact in terms of CO2 emissions, water use, and land use could expand greatly by 2025 in developing countries (McKinsey & Company, 2016). As previously underlined, the 2013 Rana Plaza disaster in Bangladesh, the second largest apparel exporter in the world, flagged issues and challenges in the implementation of global SSM practices (Huq, Chowdhury, & Klassen, 2016). Thus, in this study, an endeavour has been made to understand the drivers and barriers to implementing SSM practices from the Bangladeshi multi-tier apparel supplier perspective.

A second stream of research in the literature has examined the role of institutional pressures and governance mechanisms influencing a firm's supply chain sustainability practices. For example, previous studies have investigated the presence of institutional pressures (coercive, mimetic and normative) and their impact on organisations' implementation of supply chain sustainability practices (Grob & Benn, 2014; Hoejmose, Grosvold, & Millington, 2014; Wu, Ding, & Chen, 2012). Moreover, an increasing number of studies have emphasised a combination of direct (selection, assessment and development) and indirect (third-party certifications) pressures and mechanisms as an effective way of implementing socially and

environmentally sustainable practices in GSCs (Gimenez & Sierra, 2013; Moxham & Kauppi, 2014; Sancha, Gimenez, & Sierra, 2016; Soundararajan & Brown, 2016). However, while the combined approach may allow internal supply chain transparency in terms of traceability and sustainability implementation, it makes external transparency difficult since the SSM implementation of upstream supply chains can be different than the ground-level realities (Egels-Zandén, Hulthén, & Wulff, 2015). For example, several factory disasters, particularly the 2013 Rana Plaza incident in Bangladesh, flagged issues around the effectiveness of these sustainable supply chain governance pressures and mechanisms amongst upstream suppliers in developing countries, calling for further exploration (Egels-Zandén & Lindholm, 2015; Lund-Thomsen & Lindgreen, 2014; Yawar & Seuring, 2017).

Furthermore, several scholars pointed out that SSM implementation research is not objectively defined by the organisations, but is instead socially constructed by the external environment, for example, the institutional field surrounding the supply organisations including government officials, third-party auditors, media, NGOs, workers, industry associations and professional networks (Chkanikova & Mont, 2015; Pagell & Shevchenko, 2014; Perry, Wood, & Fernie, 2015). In line with this argument, New (2015) indicates that there is a need for researchers to take a broader perspective through engaging with social and ethical actors beyond the participating organisations when considering supply chain sustainability issues under investigation. Such triangulated wider perspectives from multiple stakeholders could develop the understanding of the expectation, interpretation and implementation of sustainability holistically within GSCs (Perry et al., 2015). To sum up, the second research stream suggests that there is a growing need to develop a complete understanding of how the collective institutional pressures have an impact on Bangladeshi

multi-tier apparel suppliers' SSM implementation practices, and why multi-tier apparel suppliers decouple these practices.

A third stream of SSM research has examined both social and environmental issues and their linkages with SSM. Although prior studies have extensively examined the environmental issues and practices of supply chain sustainability (Geng, Mansouri, & Aktas, 2017; Gimenez & Sierra, 2013; Sodhi & Tang, 2018), research on suppliers' social issues and practices in GSCs is now emerging (Huq et al., 2014; Soundararajan & Brown, 2016; Yadlapalli et al., 2018). There are a few exceptions (Grimm et al., 2016; Meinlschmidt et al., 2018; Wilhelm, Blome, Bhakoo, & Paulraj, 2016), which examined both aspects of sustainability implementation in the context of buying firms in developed countries. However, scholars also claim that the understanding of implementing sustainability practices in GSCs is contextual, which requires bottom-up empirical exploration in a social context (Lim & Phillips, 2008; Silvestre, 2015a; Yawar & Seuring, 2017). As such, further supply chain research is required to investigate suppliers' social and environmental practices and their relationship with outcomes in the context of a specific developing country (Geng et al., 2017; Gereffi & Lee, 2012; Ghadge, Kidd, Bhattacharjee, & Tiwari, 2019; Kim et al., 2018; Xiao, Wilhelm, van der Vaart, & van Donk, 2019). Accordingly, this study aims to fill this gap by investigating the social and environmental practices and their linkages with SSM in the context of Bangladeshi multi-tier suppliers.

The above discussion suggests several key research gaps in the literature which can be summarised as follows:

- While there is considerable research focusing on drivers and barriers to SSCM implementation, fewer studies have been conducted in the context of developing countries, in comparison to developed countries.

- In comparison to buyers and their direct first-tier suppliers, there has been considerably less focus on sub-suppliers (second-tier suppliers, third-tier suppliers and further upstream suppliers) when investigating the implementation of SSM practices.
- There is a limited number of studies that have incorporated the perspectives of multi-tier suppliers and their pertinent stakeholders to understand how the collective institutional pressures have an impact on multi-tier suppliers' SSM implementation practices.
- Studies on institutional pressures and governance mechanisms have ignored the upstream suppliers' decoupling issues, and the institutional logics behind these suppliers' decoupling of SSM implementation on the production floor are under-researched.
- There has been limited empirical research on the social dimension of sustainability and also the integration of all dimensions (social, environmental and economic) of sustainability in GSCs.
- Despite the greater interest in SSM implementation frameworks, the majority of studies have proposed an integrated SSM framework based on literature reviews and ignored the empirical insights from multi-tier suppliers and their surrounding institutional contexts.

1.3 Research Objective, Goals and Questions

The main objective of this study is to investigate why and how Bangladeshi multi-tier apparel suppliers implement SSM practices into their supply chains. In order to achieve the main objective of this study, a number of research goals were formulated.

The first goal of this study is to systematically review the existing SSCM literature in general and identify the thematic SSM literature gaps in particular. The second goal is concerned with examining the factors that drive and obstruct multi-tier apparel suppliers' implementation of SSM practices. The third goal relates to how institutional pressures and mechanisms have an impact on the implementation of SSM practices across multi-tier apparel suppliers, and why these suppliers' responses to institutional pressures differ on factory production floors.

The fourth goal particularly focuses on social and environmental practices that Bangladeshi multi-tier apparel suppliers are integrating to accomplish SSM. The fifth goal focuses on examining the relevance of integrative stakeholder theory, institutional theory and contingency theory in the implementation of SSM amongst multi-tier apparel suppliers in GSCs. The final goal of this thesis is to incorporate the empirical findings and offer a holistic SSM implementation framework. Table 1.2 outlines the research goals for this study and in which chapter(s) they are addressed.

Table 1.2: The research goals of the study

Goals	Chapter(s)
To explore the thematic gaps within SSCM literature in general and SSM literature in particular	Chapter 2: Literature review
To investigate the drivers of and barriers to the implementation of SSM practices	Chapter 4: Sustainable supply management – drivers and barriers
To examine how institutional pressures and mechanisms affect the implementation of SSM practices across multi-tier apparel suppliers, and why these suppliers' responses to institutional pressures differ on factory production floors	Chapter 5: Multi-tier suppliers' SSM implementation: institutional pressures, decoupling and multiple logics
To identify and examine multi-tier apparel suppliers' social and environmental practices and initiatives and their linkages with SSM	Chapter 6: Multi-tier suppliers' social and environmental supply chain sustainability practices and outcomes
To examine the relevance of integrative stakeholder theory in SSM implementation To examine the role of institutional theory in SSM implementation To investigate the significance of contingency factors that influence the multi-tier suppliers' SSM implementation	Chapter 4: Sustainable supply management – drivers and barriers Chapter 5: Multi-tier suppliers' SSM implementation: institutional pressures, decoupling and multiple logics Chapter 6: Multi-tier suppliers' social and environmental supply chain sustainability practices and outcomes
To develop a holistic SSM framework for Bangladeshi multi-tier apparel suppliers	Chapter 7: Discussion

Based on the consideration of the above primary objective, research goals and the systematic review of literature in Chapter 2, the following research questions have been developed.

1. Why do Bangladeshi multi-tier apparel suppliers embed sustainability practices into their supply chains?
2. What barriers do multi-tier apparel suppliers encounter while embedding SSM practices?
3. How do institutional pressures and mechanisms affect the implementation of SSM practices across multi-tier apparel suppliers, and why do these suppliers' responses to institutional pressures differ on factory production floors?
4. How do multi-tier apparel suppliers integrate social and environmental issues to improve SSM outcomes in supply chains?

1.4 Research Philosophy and Methodology

As is detailed in Chapter 3, this study is conducted from the position of a subjective view of social reality, guided by an interpretivist paradigm. In the subjectivist view, people apply their subjectivity to events and experience reality in diverse ways, and that reality is socially constructed (Cavana, Delahaye, & Sekaran, 2001). Thus, social phenomena are in a constant state of creation and revision through social actors' perceptions and consequent actions (Saunders, Lewis, & Thornhill, 2015). The interpretivist approach plays an important role in this research because investigating multi-tier apparel suppliers' SSM implementation involves the understanding of owners, managers and other stakeholders' subjective perceptions and interactions as social actors. Based on subjective experiences, social actors have their insights and explanations regarding the research questions: why and how multi-tier apparel suppliers' SSM practices are implemented, with their own socially constructed

reality. Within the context of GSCs, Gereffi (1994, p. 2) also argued that apparel supplier inter-organisational "networks are situationally specific, socially constructed, and locally integrated, underscoring the social embeddedness of economic organisation". Thus, positioning this research in the interpretivist paradigm assists the research objectives and focus of this inquiry that investigates why and how multi-tier apparel suppliers are integrating SSM practices into their supply chains.

This research inquiry is exploratory in nature, even though sustainability and supply management are well-established research fields, since the integration between these two fields is little known in the context of a developing country's multi-tier suppliers. Given its explorative-interpretivist nature, this study also employs a qualitative and abductive approach. A qualitative methodology is suitable to explore an unknown problem and interpret the lived experiences and interpretations of relevant actors (Saunders et al., 2015). To understand multi-tier suppliers' SSM implementation, it is necessary to investigate the lived experiences and interpretations of owners and managers. Abductive approach, midway between the deductive and inductive approaches, begins with basic theoretical knowledge, collects and analyses data, continues with theory matching (going back and forth), and concludes with suggesting propositions or expanding the existing theoretical framework (Kovács & Spens, 2005; Spens & Kovács, 2006). This approach was adopted to investigate the under-researched SSM implementation framework for multi-tier suppliers because some suggestion was required from well-established sustainability and SCM literature.

To investigate the perceptions of owners and managers across multi-tier apparel suppliers, this study used qualitative interviewing as the preferred research method. The participants in this study were selected purposively (Patton, 2015), followed by a snowball sampling

technique suggested by Miles and Huberman (1994) to gain access to additional potential participants through interviewee referrals. The data were drawn from semi-structured interviews with a total of 46 purposively selected owners and managers across 33 multi-tier apparel suppliers, who were responsible for dealing with their organisation's sustainability and supply management-related duties. Moreover, data from in-depth interviews were obtained from a total of 15 key representatives of wide-ranging stakeholders. Additionally, to complement and triangulate the views of apparel owners and managers, secondary data sources (documentary data including supply firms' sustainability reports) were used. For data analysis, thematic analysis (Braun & Clarke, 2006; Braun, Clarke, Hayfield & Terry, 2019) was embraced since it offers flexibility to analyse detailed accounts of textual data using a step-by-step framework in supply chain sustainability research (Sodhi & Tang, 2018; Soundararajan & Brown, 2016) and supports the qualitative data analysis using an abductive approach (Graebner, Martin, & Roundy, 2012).

1.5 The Significance of the Study

Supply chain scholars, industry leaders and policy makers have begun to recognise the significance of integrating sustainability in global extended supply chains. Accordingly, over recent years there has been growing practitioner and academic interest in multi-tier suppliers' SSM implementation (Hofmann et al., 2018; Sauer & Seuring, 2018; Wilhelm et al., 2016). In their study, Hartmann and Moeller (2014) argue that the implementation of SSM practices depends not only on global buying firms' engagement with sustainability programmes but also on how multiple tiers of suppliers are addressing sustainability issues in their social contexts. However, managing the sustainability practices of multi-tier supply chains is challenging since the production networks lie further upstream beyond the first-tier suppliers,

such as second-tier suppliers, third-tier suppliers and n-tier suppliers (Awasthi et al., 2018; Meinlschmidt et al., 2018). Nevertheless, scant attention has been paid to empirically investigating the implementation of SSM practices from the perspective of multi-tier suppliers (Kähkönen, Lintukangas, & Hallikas, 2018) located in challenging institutional contexts. This research attempts to fill the gap in the scholarly literature by providing empirical evidence using data from Bangladeshi multi-tier suppliers and their stakeholders. The significance of the study can be summarised in the following ways.

First, this study contributes to filling a knowledge gap in the SSM literature by examining the factors that drive and obstruct multi-tier apparel suppliers' implementation of SSM practices, drawing on integrative stakeholder theory and contingency theory. One finding of this study indicates that managers and owners of first-tier and second-tier apparel suppliers experienced more drivers for than barriers to SSM implementation. This finding may be explained by the fact that in the future more first-tier suppliers and second-tier suppliers will adopt SSM practices in their supply chains. In terms of drivers, owners and managers perceived more instrumental driving factors such as increased factory productivity, risk and resource management and cost reduction than normative driving factors such as top management commitment that propel multi-tier apparel suppliers to embed SSM. In terms of barriers, the findings also demonstrate that internal barriers including cost and resource concerns, and gaps in values, learning and commitment, seem to be more visible than external barriers such as gaps in regulatory frameworks, the complexity involved in sustainability standards, and power and trust gaps. This may be because most owners and managers of multi-tier suppliers perceive the expenses of improving health and safety at the workplace as costs, not investments. However, drivers for and barriers to multi-tier apparel suppliers' SSM implementation are influenced by contingency factors such as supplier size, suppliers' types

of business activities, power asymmetries, supply chain complexity, financial resources, knowledge resources and capabilities of sustainability management. Therefore, it is expected the findings of the study may enhance academic and managerial understanding of drivers for and barriers to SSM implementation in GSCs. For instance, being aware of the key drivers including increased factory productivity, and risk and resource management, might help Bangladeshi apparel owners/managers embed SSM practice into their supply chains.

Second, the systematic review of literature identifies that relatively little is known about how institutional pressures, decoupling and logics vary across multi-tier suppliers, thereby affecting their SSM implementation practices (Hofmann et al., 2018; Sayed, Hendry, & Zorzini, 2017; Wilhelm et al., 2016). Drawing on institutional theory, the findings of the present study suggest that institutional pressures and mechanisms – coercive, mimetic and normative – vary across upstream multi-tier suppliers, thereby affecting their divergent implementation of SSM practices. For instance, the identified key collective coercive pressures stem from selection and assessment requirements of direct buyers, followed indirectly by third-party auditor assessment requirements, buyers' consortia requirements and government legal obligations (see Chapter 5). As such, it is suggested that both direct and indirect governance pressures and mechanisms have been used to implement SSM practices of multi-tier suppliers. However, the findings suggest three kinds of institutional logic – social, environmental and economic – that are perceived to be conflicting and complementary regarding multi-tier suppliers' adoption of SSM practices. Accordingly, managers and owners of multi-tier apparel suppliers have applied several decoupling (Oliver, 1991) approaches – avoidance, defiance and manipulation – in response to institutional pressures for SSM implementation. One of the key distinctive findings, related to suppliers' decoupling responses, is that a range of institutional actors such as auditors, inspectors, media, trade

union leaders and even buyers play a counterproductive role hindering upstream suppliers' SSM practices. Thus, the findings of this study suggest that there is a critical need for policy makers including government, trade unions, and NGOs to build trust with multi-tier apparel suppliers to overcome the defiant attitudes.

Third, one of the key findings of this study contributes by responding to the recent call to address the under-researched issue of how environmental practices have an impact on social outcomes in the context of developing countries (Geng et al., 2017). Prior research has suggested the significance of investigating the relationships, trade-offs and synergies amongst three dimensions of sustainability (Haffar & Searcy, 2017; Hutchins & Sutherland, 2008). However, it is very difficult for firms to achieve true sustainability simultaneously (Pagell & Shevchenko, 2014), which may require a paradigm shift from "instrumentally dominant logic" to "ecologically dominant logic" (Montabon et al., 2016, p. 11). Interestingly, the findings of this study also confirm that environmental practices in terms of investing resources for building Leadership in Energy and Environmental Design (LEED)-certified green factories offered the opportunity to improve economic, environmental, and more importantly, social outcomes. However, the managerial decision to implement SSM by means of taking green factory initiatives is influenced by context-dependent factors such as supply firm-specific assets, supplier size, types of suppliers' business operations, and buying firms' sustainability requirements. As such, these findings clearly provide strong support for contingency theory. Reflecting on these findings, this study has significant implications for practitioners including Bangladeshi apparel factory owners and managers who seek to implement SSM practices in global apparel supply chains.

1.6 Working Terms

This section defines terms frequently used in this study to confirm consistency, clarification, and common meaning of these terms.

Sustainability

The term ‘sustainability’ has been defined and applied in various ways in the literature after the 1987 Brundtland Commission report on sustainable development (Gimenez & Tachizawa, 2012). In the sustainability literature, Steurer, Langer, Konrad, and Martinuzzi (2005, p. 274) defined sustainability as “a corporate guiding model, addressing the short- and long-term economic, social and environmental performance of corporations”. Indeed, three dimensions of sustainability – economic, environmental and social performance – build on the term ‘3Es (economic, environment and equity)’ (Winter & Knemeyer, 2013) and the ‘triple bottom line (TBL)’ concept of profit, planet, and people in practice (Elkington, 1998). Despite these varying terms and contextual interpretations of sustainability in the literature, a number of supply chain and business ethics scholars claim that sustainability, TBL and 3Es are highly linked and overlapping (Ahi & Searcy, 2013; Bansal & DesJardine, 2014; Bondy, Moon, & Matten, 2012; Quarshie et al., 2016). Thus, to be aligned with the TBL concept, this study adopts the definition of sustainability as a holistic concept, embracing the idea of both short-term and long-term economic, social and environmental practices and performance aspects of organisations with the purpose of satisfying present and future stakeholder needs.

Purchasing and Supply Management

The terms ‘purchasing’ and ‘supply management’ are functional parts of integrated supply chains. According to Lysons and Farrington (2006), purchasing is defined as:

> The process undertaken by the organisational unit that, either as a function or as part of an integrated supply chain, is responsible for producing or assessing users to procure, in the most efficient manner, required supplies at the right time, quality, quantity and price and the management of suppliers, thereby contributing to the competitive advantage of the enterprise and the achievement of corporate strategy (pp. 8–9).

The above definition is consistent with the definition of purchasing by Monczka, Handfield, Giunipero, and Patterson (2015), who acknowledge purchasing as a functional group as well as functional activity (for example, procuring goods and services). While some stakeholders such as unionists perceive purchasing as part of supply chain management (SCM) (Monczka et al., 2015), others consider that SCM has replaced purchasing (Larson & Halldórsson, 2002). In his seminal work, Kraljic (1983, p. 109) also argued that “purchasing must become supply management”. In a similar vein, a group of scholars (Monczka et al., 2015; Wisner, Leong, & Tan, 2009) view the term ‘purchasing’ as part of ‘supply management’ whilst others classify ‘supply management’ as a part of global SCM (Hult, 2004). For example, Monczka et al. (2015, p. 11) have defined ‘supply management’ as “a strategic approach to planning for and acquiring the organisation’s current and future needs through effectively managing the supply base”. Within an industrial context, the public sector mostly applies the term ‘procurement’ in preference to ‘purchasing’ or ‘outsourcing’ (Miemczyk, Johnsen, &

Macquet, 2012). According to Egels-Zandén et al. (2015, p. 97) "outsourcing means relying on the resources of others, which leads to interdependencies among the firms in the supply network". Although definitions of the terms purchasing, procurement, outsourcing and supply management vary in scope, several supply chain scholars have grouped these terms together for practical reasons as well as for simplicity of discussion (Miemczyk et al., 2012; Monczka et al., 2015). Following this augment, this study uses these terms interchangeably in the context of GSCs.

Sustainable supply management

Most scholars use the term 'sustainable supply management' with a broad scope that incorporates all dimensions of TBL (Ageron et al., 2012; Giunipero, Hooker, & Denslow, 2012; Kähkönen et al., 2018; Koplin, Seuring, & Mesterharm, 2007). For example, the definition of SSM offered by Giunipero et al. (2012, p. 206) refers to "the extent to which supply management incorporates environmental, social and economic value into the selection, evaluation and management of its supply base". This research adopts the definition of SSM provided by Giunipero et al. (2012) to understand the interaction and integration between multiple suppliers and their surrounding institutional actors that have an impact on the SSM implementation in the GSC context.

Global Supply Chains

Gereffi (1994, p. 96) introduced the significant aspect of global value chains, also recognised as GSCs (Gereffi & Lee, 2012), while he differentiated two outsourcing arrangements: "producer-driven commodity chains" and "buyer-driven commodity chains". Producer-driven

commodity chains are characterised by the focus of capital and technological expertise permitting manufacturers to lead and control the supply chains such as automobiles, electronics, and shipbuilding (Gereffi, 1999). In contrast, buyer-driven commodity chains are characterised by labour-intensive supply industries such as apparel, toys and footwear where low cost is a major driver, and brand-owning retail buyers govern how the chains work (Gereffi, 1999). As such, the term GSC is defined as the complex production network of relationships between buyers and their multiple tiers of suppliers across diverse countries, which are driven by global brand-owning buying firms as lead firms (Gereffi, 1994; Rahim, 2017).

Multi-tier Apparel Suppliers

The term multi-tier suppliers originated from the concept of a "multi-tier supply chain" which consists of a buyer and their extended supplier network such as "supplier and supplier's supplier" (Mena, Humphries, & Choi, 2013, p. 58). More recently, within the context of GSCs, Alexander (2018, p. 263) defined an extended supplier network as integrating all organisations, including manufacturers and multiple tiers of suppliers "directly involved in the creation of a final product". As such, multi-tier apparel suppliers are first-tier suppliers, second-tier suppliers and third-tier suppliers, who produce apparel products and facilitate production processes such as milling, dyeing, washing, weaving, finishing, cutting, sewing, checking and packing for brand-owning buying firms in GSCs (Soundararajan & Brown, 2016; Tachizawa & Wong, 2014).

1.7 Thesis Structure

This section presents the structure of this thesis, which comprises eight chapters. Chapter 1 set out the background of the research and identified the justification for this study. The objectives, key goals and research questions were then outlined. The next section highlighted the significance of the study, followed by definitions of the terms used in this thesis. Finally, this chapter concludes with the structure of the thesis.

Chapter 2 provides a critical review of the existing literature in the fields of sustainability, SCM, SSCM and SSM. This chapter begins with an outline of three dimensions of sustainability literature, followed by the current state of sustainability practices in Bangladesh. Then, an overview of the terms SCM and 'extended supplier network' is presented, followed by a brief discussion of global apparel supply chains. Finally, to identify the existing research gaps addressed by this study, previous research on embedding sustainability into multi-tier suppliers is systematically and thematically reviewed.

Chapter 3 discusses the study's philosophical and methodological considerations and theoretical framework. First, this chapter introduces the research philosophy for this study. This is followed by a discussion of the qualitative research methodology and abductive approach applied in this study. The next section presents the basic theoretical framework, drawing on three established theories – integrative stakeholder theory, institutional theory and contingency theory. Then, criteria for participant selection, data collection and analysis methods are discussed. Finally, issues related to research quality and ethical considerations are presented.

Chapter 4 presents findings from the analysis of empirical data concerning the drivers for and barriers to SSM implementation. In particular, the findings relating to a range of internal and external drivers for implementing SSM practices in multi-tier apparel suppliers are examined.

The next section investigates the internal and external barriers that inhibit multi-tier apparel suppliers' implementation of SSM into their supply chains.

Chapter 5 presents findings from the analysis of empirical data that relate to SSM implementation pressures and mechanisms. In particular, one section of this chapter examines the findings relating to the institutional pressures and mechanisms affecting the implementation of SSM practices across multi-tier apparel suppliers. The next two sections investigate decoupling and the role of institutional logics in the implementation of multi-tier apparel suppliers' SSM practices.

Chapter 6 presents findings from the analysis of empirical data concerning multi-tier apparel suppliers' SSM practices and outcomes. In particular, one section of this chapter examines the implementation of social sustainability practices and its linkage with SSM outcomes. Then, the other section examines the implementation of environmental sustainability practices and its linkage with SSM outcomes.

Chapter 7 integrates the findings of Chapters 4, 5 and 6 and suggests a series of research propositions in parallel with the empirical findings. The key themes revealed in the findings chapters of this study are assimilated and theoretically matched in view of integrative stakeholder theory, institutional theory and contingency theory to propose a holistic SSM framework.

Chapter 8 provides the conclusions of the study. This chapter briefly revisits findings in relation to research questions. Next, the theoretical contributions, managerial and policy implications of this study are highlighted. Then, it identifies the shortcomings of the study as well as future research directions. Finally, the researcher's reflection in this research is presented.

CHAPTER 2

Literature Review

2.1 Introduction

This chapter reviews the existing literature on sustainable supply management (SSM) in GSCs. To identify the relevant studies on SSM and frame research questions for the empirical research, a systematic literature review was performed on two distinct but related broad research fields: sustainability and SCM. Reviewed studies suggest that SSCM, as an integrated field, is relatively well-explored. However, there is a dearth of empirical research that investigates the integration of sustainability and supply management in GSCs. In particular, it appears that the SSM field from upstream multi-tier suppliers' perspectives has remained relatively unexplored (Hofmann et al., 2018).

This chapter begins with a brief overview of three dimensions of sustainability, followed by the current state of sustainability practices in Bangladesh. In the second section, an overview of the concepts SCM and 'supply management' is presented, followed by a brief discussion of global apparel supply chains and the Bangladeshi apparel industry. Finally, to identify the research gaps inspiring this study, a thematic landscape connecting sustainability to multi-tier suppliers is systematically reviewed. Thus, the objectives of this chapter are to:

- Present the conceptualisation of the terms 'sustainability', SCM and 'extended supply chain'
- Present the conceptualisation of the terms SSCM and SSM

- Categorise the thematic knowledge gaps through systematically analysing the existing SSM literature

2.2 Sustainability

The term ‘sustainability’ has become a word commonly used worldwide after the 1987 Brundtland Commission report on sustainable development (Gimenez & Tachizawa, 2012). The United Nations’ Brundtland Report of the World Commission on Environment and Development (WCED) defined sustainable development as “development that meets the needs of the present, without compromising the ability of future generations to meet their own needs” (WCED, 1987, p. 43). However, this definition offers an ambiguous perspective due to its surrounding complexities and implicitness while attempting to utilise the principles of sustainability in practice (Ahi & Searcy, 2013; Carter & Rogers, 2008).

For the purpose of operationalisation, a number of studies have attempted to define and identify the appropriate measures for the terms ‘sustainability’ and ‘sustainable development’ (Searcy, 2012; Winter & Knemeyer, 2013). One of the best-known approaches of operationalisation is the Triple Bottom Line (TBL) concept developed by Elkington (1998) which comprises the balance of three pillars of sustainability, namely, economic, social, and environmental performance (Carter & Rogers, 2008). To be more explicit, the TBL perspective is commonly applied in supply chain-related business practice (Awasthi et al., 2018). It can also be observed that some studies use different terms such as the 3 P’s (profit, planet and people) and 3 E’s (economics, environment and equity) to reflect similar standpoints to that of the TBL perspective (Winter & Knemeyer, 2013). As such, sustainability departs from the traditional business standpoint that Friedman (1970) argued was to pursue only economic performance, particularly business profit maximisation. Instead,

the sustainability paradigm as depicted in Figure 2.1 promotes integration of social and environmental welfare in addition to economic performance issues (Carter & Rogers, 2008). Indeed, the concept of sustainable development, or sustainability, assumes a "holistic, balanced and integrated perspective on development" (ILO, 2007, p. vi), which means that it is more than just economic or environmental issues. Accordingly, the following discussion briefly outlines the key dimensions of sustainability.

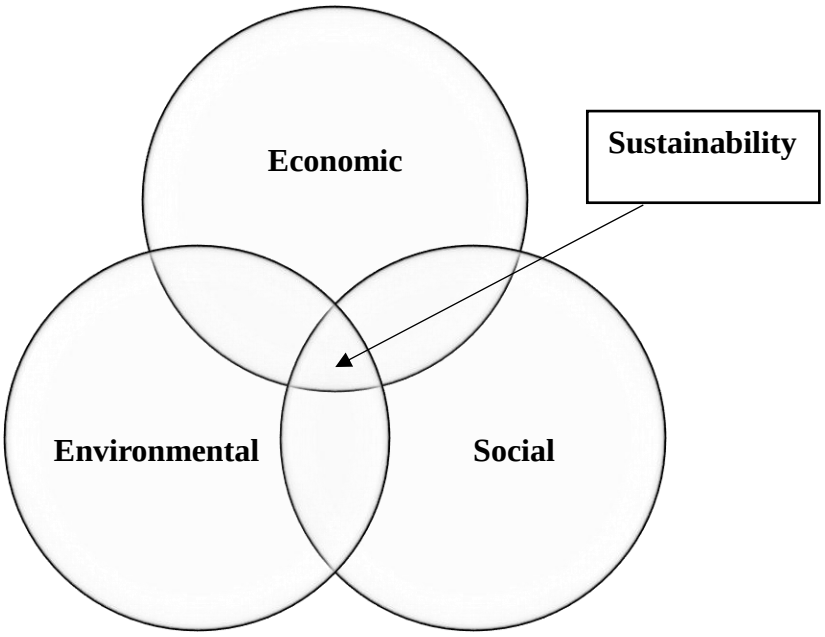


Figure 2.1: Sustainability: The triple bottom line, adapted from Carter and Rogers (2008, p. 365)

2.2.1 Economic Dimension of Sustainability

The economic dimension of sustainability is fundamentally quantitative in nature (Winter & Knemeyer, 2013) and deals with efficiently managing scarce resources, achieving economic growth, and attaining macroeconomic stability (Steurer et al., 2005). Achieving economic growth deals with the total value of production in an economy while attaining

macroeconomic stability deals with low unemployment rates, the positive balance of trade and other favourable fiscal and monetary circumstances at the macro-level (Steurer et al., 2005; Winter & Knemeyer, 2013). However, these macro level issues are not applicable on the microeconomic level, particularly in an organisational context (Steurer et al., 2005). At the organisational level, the economic dimension of sustainability includes several aspects such as sustained financial performance, its long-term competitiveness, and a firm's economic impact on stakeholder groups (Steurer et al., 2005; Winter & Knemeyer, 2013). The key identified aspects of the economic dimension for organisational contexts have been presented in Table 2.1. Interestingly, according to Carroll (1991), economic responsibilities provide the foundation for an organisation to carry out other arrangements of greater responsibilities, including its legal, ethical and philanthropic commitments that relate to social welfare and environmental protection.

Table 2.1: Economic dimension of sustainability, adapted from Steurer et al. (2005, p. 270)

Aspects	**Outlines of dimension and issues**
Economic sustainability	Do business in a way that enables the company to continue for an indefinite time
Financial performance	Exhibit sufficient cash-flow and persistent return to shareholders
Long-term competitiveness	Maintain or improve future competitiveness and company performance
Economic impact	Deal with the impact of the corporation on particular stakeholder groups

2.2.2 Environmental Dimension of Sustainability

As exhibited in Table 2.2, environmental sustainability refers to the protection of the natural environment at a certain level which includes three aspects: using resources accountably, avoiding emissions, and avoiding environmental damage (Steurer et al., 2005, p. 270). Environmental sustainability deals with the increasing environmental impacts and challenges

in business operations. Some of the key global environmental challenges and concerns are pollution, global warming and climate change (George, Howard-Grenville, Joshi, & Tihanyi, 2016). These growing sustainability challenges and concerns have attracted renewed attention by industry leaders and policy makers (Geissdoerfer, Savaget, Bocken, & Hultink, 2017). Accordingly, as an effective way to protect against negative impacts of business operations on the natural environment, government and even supranational bodies including the United Nations have endorsed new regulations addressing these sustainability concerns (Geissdoerfer et al., 2017). However, some business practitioners perceive environmental protection in the form of regulations as opposed to business interests which may hinder firms' competitiveness alongside increasing initial manufacturing costs (Wilkinson, Hill, & Gollan, 2001). In contrast, progressive organisations proactively seek ways to improve their environmental performance to appease their multiple stakeholders, and achieve a better reputation and competitive advantage in the marketplace (Epstein, 2018; Porter & Van der Linde, 1995).

Table 2.2: Environmental dimension of sustainability, adapted from Steurer et al. (2005, p. 270)

Aspects	**Outlines of dimension and issues**
Environmental sustainability	Maintain natural capital to a certain degree
Resources	Use non-renewable and renewable (energy) resources responsibly
Emissions	Avoid emissions into water, air, soil and neighbourhoods (noise) to a certain degree
Environmental damage and risks	Avoid environmental damage and risks to a certain degree

2.2.3 Social Dimension of Sustainability

The final dimension of sustainability is social sustainability. Like the terms 'corporate social responsibility' (CSR) and 'corporate social performance' (CSP), the origin of the social dimension of sustainability is subject to argument and often a contested topic amongst academics (Carroll & Shabana, 2010; Okoye, 2009). According to Carroll (1979), CSP encompasses a basic meaning of social responsibility, a list of diverse social issues for which a social responsibility exists, and a philosophy of social responsiveness under one rubric. Moreover, Carroll (1979, p. 500) defined CSR as integration of "economic, legal, ethical, discretionary responsibilities" by an organisation that is expected by the local community and a greater part of the society. Some other scholars have categorised and conceptualised social sustainability as the issues concerned with basic needs, social welfare, quality of life, social justice, poverty, social cohesion, cultural diversity, democratic rights, gender issues, workers' rights, broad participation, development of social capital and individual capabilities (Boström, 2012; Vallance, Perkins & Dixon, 2011). In spite of variation in conceptualisation, the terms CSP, CSR and 'social sustainability' are often used interchangeably to describe the same phenomenon (Andersen & Skjoett-Larsen, 2009; Carroll, 1999; Okoye, 2009). In particular, social sustainability deals with the management of various human capital (for example, skills, motivations, and loyalty of the workforce) and societal capital (good employment conditions, safety and rights at work) issues (Dyllick & Hockerts, 2002; Zorzini et al., 2015).

Although it is difficult to pinpoint human and social capital issues commonly used in measuring the social dimension of sustainability, Yawar and Seuring (2017) have broadly identified seven social sustainability issues in the CSR and SCM literature. As shown in

Table 2.3, these social issues include labour conditions, child labour, human rights, health and safety, minority development, disabled people inclusion and gender (Yawar & Seuring, 2017). Within the supply chain sustainability research, the management of social sustainability issues is considered a latent way of reducing risk and improving economic performance (Klassen & Vereecke, 2012).

Table 2.3 Social dimension of sustainability, adapted from Yawar and Seuring (2017, p. 625)

Social issue	**Definition**	**Sources**
Labour conditions	Working conditions of the employees include low wages, extended hours of working, right to form unions, contract labour and exploitation of the employee.	Klassen & Vereecke (2012); Lindgreen & Swaen (2010); Park-Poaps & Rees (2010); Preuss (2009)
Child labour	Child labour concerns work by children under the age of 15 that prevents school attendance and work by children under the age of 18 that is hazardous to the physical or mental health of the child.	Kolk & Van Tulder (2002); Lund-Thomsen, Nadvi, Chan, Khara & Xue (2012); Nadvi (2008)
Human rights	Human rights are rights inherent to all human beings, irrespective of nationality, place of residence, sex, national or ethnic origin, colour, religion, language or any other status. Equal rights entitlement without discrimination is the core of human rights.	Carter & Jennings (2002b); Preuss & Brown (2012); Welford (2002)
Health and safety	It includes physical and mental health which are directly related to safety and hygiene at work. It also describes hazardous working conditions which could have long-term effects on the personal health of the worker.	Carter & Jennings (2002b); Ciliberti, de Groot, de Haan, & Pontrandolfo (2009); Klassen & Vereecke (2012); Welford & Frost (2006)
Minority development	Minority development is the development of those populations who are considered minorities in terms of population by the virtue of their religion, race and ethnicity.	Carter & Jennings (2002b); Maignan, Hillerbrand & McAlister (2002)
Disabled/marginalised people inclusion	Those groups who are mostly neglected in societies due to physical inabilities and those who are left out or neglected by the government. The population living below the poverty line is considered marginal.	Carter & Jennings (2002a, 2002b, 2004); Hall & Matos (2010)
Gender	Gender equality refers to the equal treatment of women and transgender people, catering to their special needs and assigning equal rights in the workplace.	Preito-Carron (2008); Tallontire, Dolan, Smith & Barrientos (2005)

2.2.4 Sustainability Practices in Bangladesh

In the wake of recurring industrial disasters, the sustainability perspective has recently attained much interest within the Bangladeshi private sector and government policy (Rahim, 2017; Siddiqui & Uddin, 2016). Nevertheless, the progress in the implementation of sustainability practices has been slow in both sectors (Siddiqui & Uddin, 2016). At the government level, the major Bangladeshi laws (the Company Act 1994, the Bangladesh Labour Law 2006, and the Environmental Conservation Act 1995) have inadequate emphasis on the policies to develop sustainability practices (Rahim, 2012). For example, the Company Act 1994 does not provide the essential attention to sustainability and CSR practices (Khan, Muttakin, & Siddiqui, 2013; Rahim, 2012). However, the government issued a statutory regulatory order (SRO) in 2011 that allowed companies to claim a 10% tax rebate on the total income the companies spent on specific CSR and sustainability activities (Khan et al., 2013). Furthermore, the Bangladeshi government amended some new policies such as the Bangladesh Labour (Amendment) Act, 2013 and minimum wage board laws in 2010 to promote sustainability practices in major export-oriented private sectors (Ahmed et al., 2014).

In the Bangladeshi private sector, there is evidence in the literature that both service and manufacturing companies are integrating and disclosing CSR and sustainability practices (Haque & Azmat, 2015; Huq et al., 2016; Uddin, Siddiqui, & Islam, 2018). For example, in their study based on secondary data, Haque and Azmat (2015) have identified several common sustainability practices of export-oriented apparel manufacturing companies which include occupational health and safety, social welfare, fair pay, labour rights, legal aspects, fair trade, gender issues and the environment. By examining annual reports of 23 banking service companies over the period 2009-2012, Uddin et al. (2018) found that corporate

philanthropic activities such as disaster relief, health, sports, arts and culture were disclosed and promoted in CSR reports. However, these disclosures are "inextricably linked to powerful leaders' personal projects and the ruling party's agendas" (Uddin et al., 2018, p. 409).

Furthermore, the CSR initiatives are still limited to philanthropic activities such as donations to various charitable organisations, religious and academic institutions, and hospitals (Haque & Azmat, 2015; Nasrullah & Rahim, 2014). As such, a majority of private organisations do not disclose their CSR practices on specific social sustainability issues such as child labour, equal opportunities and poverty alleviation due to the fear of bad publicity (Belal & Cooper, 2011; Naeem & Welford, 2009). While some companies attempt to make voluntary disclosures, in most cases, they are purely descriptive statements giving favourable news only (Belal & Cooper, 2011). Thus, the presence of CSR and sustainability practices in Bangladesh is fragmented and politically affiliated.

However, Bangladeshi export-based industries are facing consistent institutional pressures and challenges to adopt sustainable practices. In particular, the economic, social and environmental costs of not addressing the institutional demands and pressures for sustainability implementation in the apparel industry are rising. As shown in Figure 2.2, the apparel industry in Bangladesh employed over 4 million workers consistently from 2012 to 2018, among which more than 80% were women (BGMEA, 2018). Since 1985, the number of apparel factories has been consistently increasing and reached its peak with 5,876 in 2012. However, it is clear that after the 2013 Rana Plaza apparel factory collapsed, around 1,600 factories were closed and consequently the total number of apparel factories declined significantly. While in 2018 about 4,560 apparel factories were actively producing and

supplying apparel products and services for global buyers worldwide, many workers in the Bangladeshi apparel industry have lost their jobs (BGMEA, 2018).

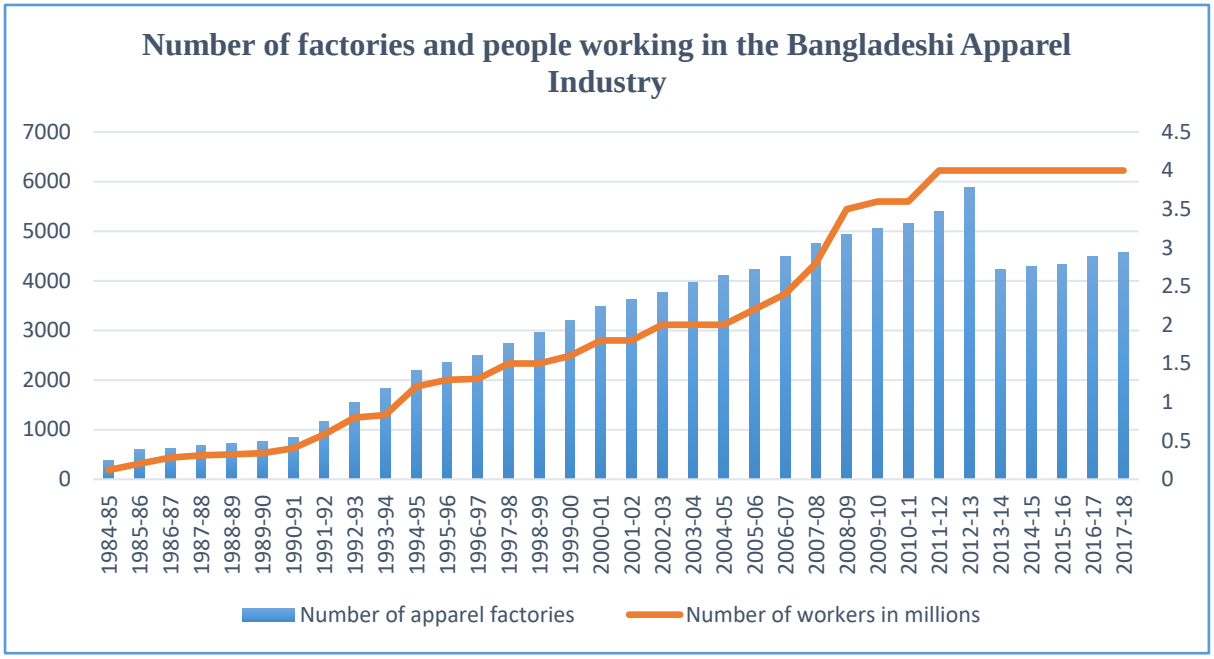


Figure 2.2 Number of factories and workers in the Bangladeshi Apparel Industry

In the Bangladeshi export-based apparel manufacturing industry, the necessity for the adoption of sustainability practices is coming from the two powerful stakeholders: global buyers' pressures as well as industry associations' expectations (Islam & Deegan, 2008; Haque & Azmat, 2015; Huq et al., 2014). In 1992, the Bangladeshi apparel suppliers faced the threat of boycott from the USA and EU buyers based on the allegation of child labour (Nasrullah & Rahim, 2014). In 1995, a Memorandum of Understanding was signed between the BGMEA, the ILO, and UNICEF in Bangladesh with a view to complying with international social codes of conduct and the elimination of child labour (Nasrullah & Rahim, 2014). Furthermore, after the 2013 Rana Plaza incident, newly emerged buyers' consortia platforms, in particular the Accord's strict monitoring regarding building safety, pressured the non-compliant factories to close their operations (Reinecke & Donaghey, 2015).

Nevertheless, this platform is narrowly focusing on improving some specific social sustainability issues such as fire and building safety of buyers' direct supply factories, and it ignores the holistic sustainability of readymade garment and textile industries beyond direct suppliers (Reinecke & Donaghey, 2015). As such, this kind of compliance model has acted as a promotional instrument or mere tick-box exercise with regard to expansion of export-oriented businesses in the overseas market (Belal & Cooper, 2011; Rahim, 2017).

To summarise, the current CSR practices in Bangladesh still take the form of promotional disclosures and politically affiliated philanthropic activities as discussed above. While research on social responsibility issues is emerging (Huq et al., 2014; Rahim, 2017), the implementation of all aspects of sustainability in the context of Bangladeshi multi-tier apparel supply chains remains unexplored (Zorzini et al., 2015). Notably, after the Rana Plaza disaster in Bangladesh, while there are mounting global and local stakeholder pressures, the way Bangladeshi multi-tier apparel suppliers face this challenge merits particular attention. Thus, there is still a need to explore a systematic, holistic approach regarding the implementation of sustainability practices into global apparel supply chains in the context of Bangladeshi multi-tier apparel suppliers.

2.3 Supply Chain Management and Global Apparel Supply Chains

This section outlines the development of the SCM concept and global apparel supply chains in the literature. First, the terms 'supply chain', and 'extended supplier network' are defined. Next, the origin and conceptualisation of the term SCM is discussed. Finally, the current status of global apparel supply chains with a focus on the Bangladesh apparel industry is briefly discussed.

2.3.1 Conceptualising the terms 'Supply Chain' and 'Extended Supplier Network'

The notion of 'supply chain' refers to "not linear chain, but rather complex relationship network" (Winter & Knemeyer, 2013, p. 19). Mentzer, DeWitt, Keebler, Min, Nix, Smith, & Zacharia (2001, p. 4) identified this complex relationship network as an "extended supply chain" which encompasses "suppliers of the immediate supplier and customers of the immediate customer, all involved in the upstream and/or downstream flows of products, services, finances, and/or information" (see Figure 2.3). However, managing an extended supply chain is challenging due to its "extended supplier networks" which lie beyond the first-tier suppliers (Alexander, 2018). More recently, within the context of GSCs, Alexander (2018, p. 263) defined an extended supplier network as "integrating all businesses, including producers and intermediaries, directly involved in the creation of a final product" (see Figure 2.4). This study also adopted this definition since the key unit of analysis is three tiers of upstream suppliers (first-tier, second-tier and third-tier suppliers). The following section outlines the origin and conceptualisation of the term SCM.

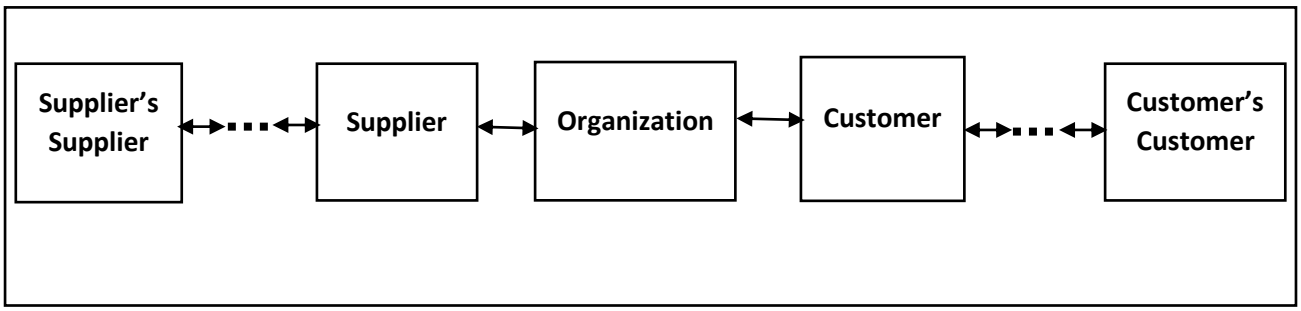


Figure 2.3: Extended supply chain, adopted from Mentzer et al. (2001, p. 4)

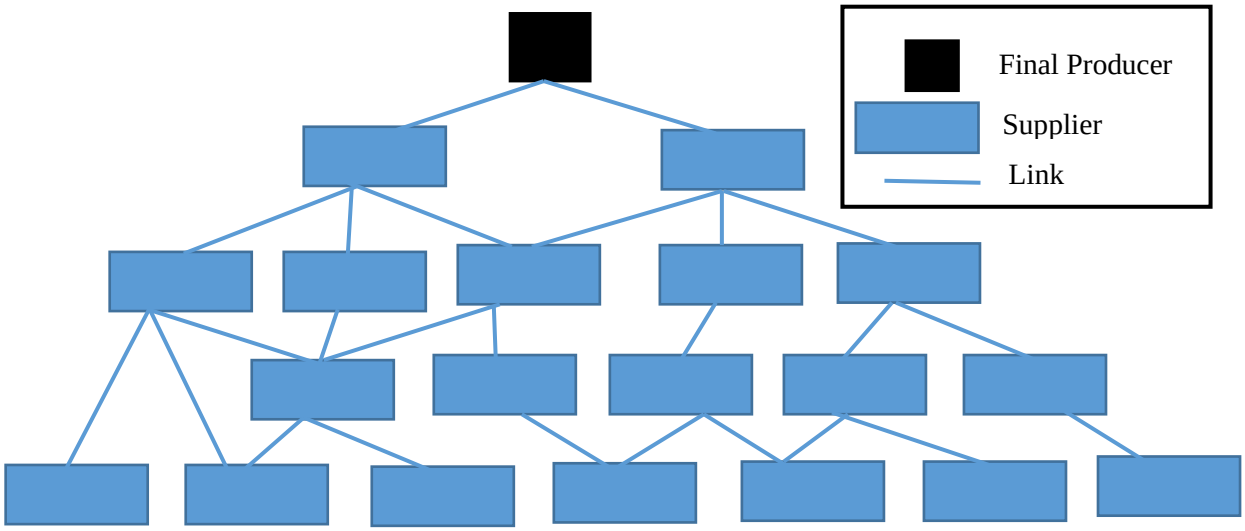


Figure 2.4: An extended supplier network, adopted from Alexander (2018, p. 263)

2.3.2 The Origin and Conceptualisation of the Term SCM

Although it is difficult to pinpoint the origin of the SCM concept, the beginning of the discussion could be traced back to Forrester's (1958) seminal research on industrial dynamics in the 1960s (Cooper, Lambert, & Pagh, 1997; Oliver & Webber, 1982). In particular, Forrester (1958, p. 41) explained the phenomena of demand intensification through "the organization of production-distribution system" upstream in the supply chain. Forrester (1958, p. 52) also claimed that the organisation "will come to be recognized not as a collection of separate functions but as a system in which the flows of information, materials, manpower, capital equipment, and money" may potentially determine the change in organisational performance (growth and decline). While the fundamental assumptions of SCM are much older, Oliver and Webber (1982) used the term 'supply chain management' for the first time in the literature in the early 1980s (Christopher, 1992; Cooper et al., 1997). Since then, many avenues of research have been pursued under the umbrella concept of SCM (Ahi & Searcy, 2013; Mentzer et al., 2001).

Initial SCM conceptualisations focused primarily on two dimensions of operations management: organisational integration and flow coordination both within and across organisations (Ahi & Searcy, 2013; Lee & Ng, 1997). Over time, various interpretations of SCM elements and constructs have continued to widen in focus (Burgess, Singh, & Koroglu, 2006) through review of existing SCM definitions. By examining 13 previous SCM definitions, Cooper et al. (1997) identify business processes, management components, and supply chain structure as the aspects that differentiate SCM from logistics. Burgess et al. (2006, p. 709) identify a list of SCM constructs: for example, "intra- and inter-organisational relationships", "logistics", and "business results and outcomes". Furthermore, Ahi and Searcy (2013) have rigorously examined 8 well-known definitions in order to understand the characteristics of SCM and reported seven elements of focus: flow, coordination, stakeholders, relationships, value, efficiency, and performance.

All previous conceptualisations of SCM clearly indicate that the field of SCM is multi-disciplinary in nature and relatively broad in scope. As such, there is a lack of agreement among researchers and practitioners regarding the conceptualisation of SCM (Burgess et al., 2006; Gibson, Mentzer, & Cook, 2005). In this sense, "the term SCM is defined as a disparate set of definitions" (Gibson et al., 2005, p. 17). However, based on examining 166 definitions of SCM, Stock and Boyer (2009) offered a consensus definition of SCM as a management philosophy, which has been adopted in this study:

> The management of a network of relationships within a firm and between interdependent organisations and business units consisting of material suppliers, purchasing, production facilities, logistics, marketing, and related systems that facilitate the forward and reverse flow of materials, services, finances and information

> from the original producer to final customer with the benefits of adding value, maximizing profitability through efficiencies, and achieving customer satisfaction (p. 706).

The above definition is very useful for this study because an investigation of the embedding of sustainability in SCM concerns not only different business initiatives and practices within a single organisation, but also collaboration between multiple tiers of suppliers and other partners across the global network of relationships that form a supply chain. Although the above definition suggests SCM is a wide-ranging field that links various functions and disciplines, the focus of this study is limited to the purchasing and supply management function as previously defined in Chapter 1. The following discussion focuses on global apparel supply chains through highlighting the Bangladeshi apparel industry.

2.3.3 Global Apparel Supply Chains – A Spotlight on the Bangladeshi Apparel Industry

The emergence of the global marketplace necessitates that SCM should be more focused on the GSCs context (Cohen & Mallik, 1997; Gereffi & Lee, 2012). Accordingly, global apparel supply chains are connected to multiple countries, and buyer-driven in nature (Gereffi, 1999). In particular, global apparel supply chains are globally dispersed, with products designed in one country, raw materials sourced from a different country, products manufactured in a third country, and finally, sales spanning various countries (Gereffi & Memedovic, 2003). As illustrated in Figure 2.5 by Gereffi and Memedovic (2003, p. 5), global apparel supply chains are complex networks of relationships which encompass multiple channels of retail outlets (department store, specialty stores and discount stores), export networks (brand-name apparel

companies, overseas buying houses and trading companies), apparel manufacturers (original manufacturers, contractors and sub-contractors for cutting, sewing, trimming, embroidery, printing, and washing facilities), textile companies (fabric weaving, knitting, dyeing and finishing suppliers, yarn spinning suppliers, and other accessories and components suppliers), and raw material suppliers (natural and synthetic fibres).

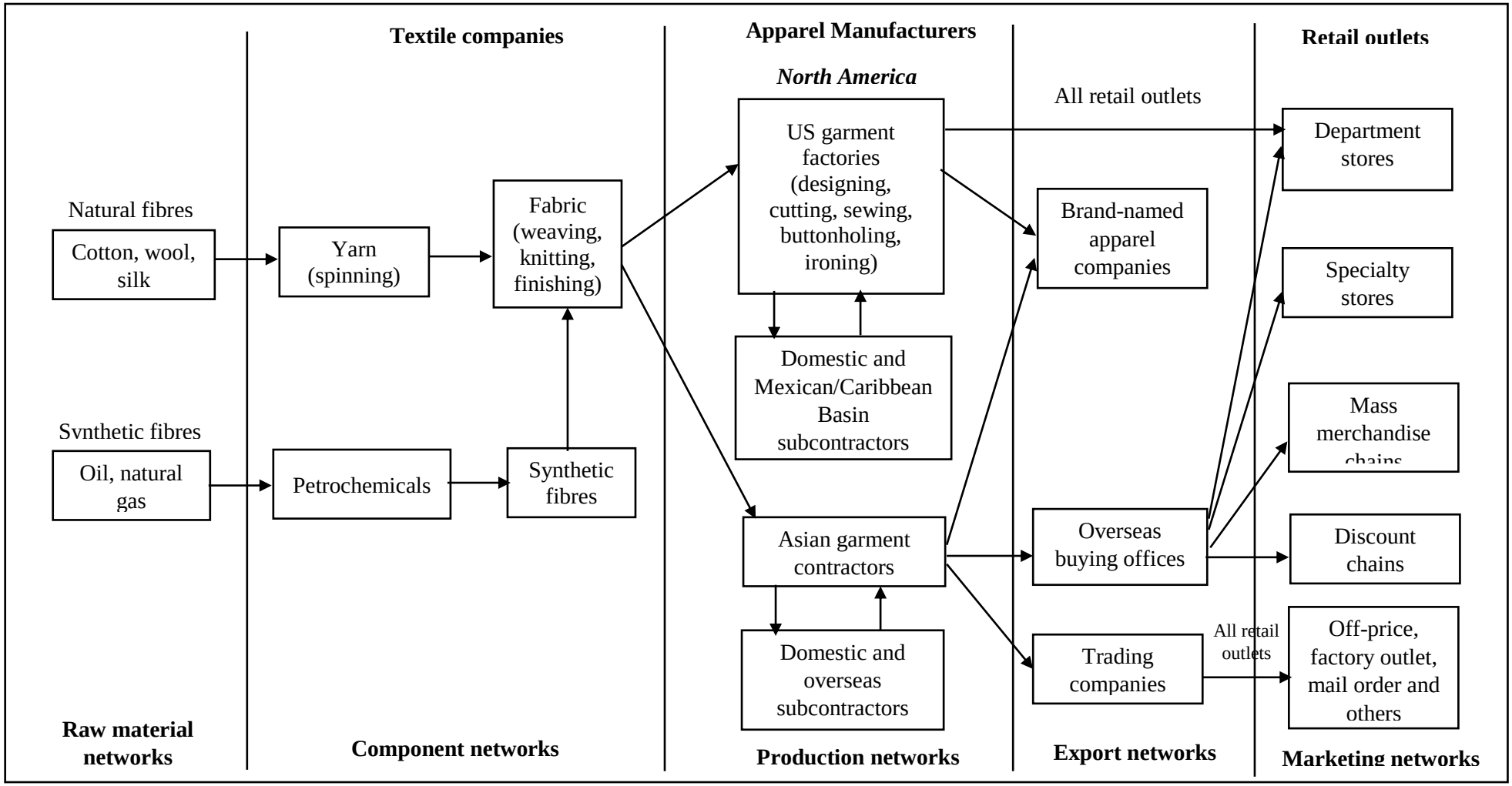


Figure 2.5: The global apparel supply chains, adopted from Gereffi and Memedovic (2003, p. 5)

While the above framework by Gereffi and Memedovic (2003) provides an improved understanding of global apparel supply chains, the management of apparel production networks varies depending on the market characteristics such as volatile markets, short product lifecycles, high product variety and quick response (Bruce, Daly, & Towers, 2004). Additionally, some other challenging factors such as product quality, supplier flexibility, transparency, visibility and high levels of price competition have facilitated global trade shifts in the apparel production and exporting networks in Asia (Bruce et al., 2004; Gereffi, 1999; Gereffi & Frederick, 2010).

The initial movement of the apparel trade took place from North America and Western Europe to Japan in the 1950s and early 1960s (Gereffi, 1999). Since then, global brand-owning buying firms and retailers have been using offshore global apparel production facilities from developing countries in Asia to address increased challenges for price decreases (Gereffi, 1999; Gereffi & Frederick, 2010). As a result, most of the steady growth in apparel exporters was in developing countries in the Asia-Pacific region, particularly China, Bangladesh, Vietnam, India, Indonesia and Cambodia, from the early 1990s to now (Gereffi & Frederick, 2010; WTO, 2018). According to a recent analysis by the WTO (2018), even the rate of the increase is greater in the Asia-Pacific region, which largely exports manufactured apparel products to the rest of the world (see Figure 2.6).

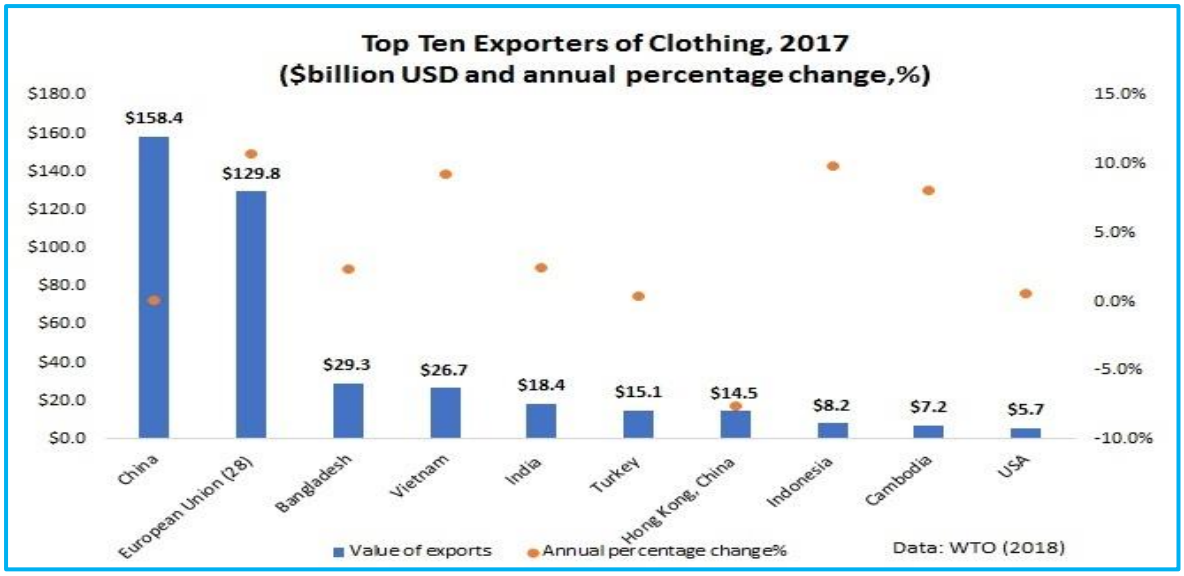


Figure 2.6: Top ten exporters of clothing 2017

The Bangladeshi apparel industry, an important global outsourcing hub, comprised 6.4% of worldwide exports (WTO, 2018). Interestingly, it can be observed from the preceding decade's export statistics presented in Figure 1.1 (see Chapter 1) that the global financial crisis in 2008-2009 did not have a negative impact on Bangladeshi apparel exports to the global market. Rather the Bangladeshi apparel industry experienced a significant increase in export share by 20 and 15.4% in 2008 and 2009 respectively. Two major factors behind this paradoxical positive export growth have been identified. The first one is the "political settlement of Bangladesh" which refers to the government's commitment to non-intervention in existing favourable industrial policies in the apparel industry despite it being considered weak (Ahmed et al., 2014, p. 258). Another factor is the "Walmart effect" which refers to a shift in consumer demand for low-end apparel products (Gereffi & Frederick, 2010; Keane, 2012, p. 793). Bangladesh largely produces low-end apparel products which has made it a desirable outsourcing location for apparel discounted brand retailers such as Walmart (Gereffi & Frederick, 2010). Thus, several characteristics such as stable industrial policies, low labour costs and price competitiveness are identified as the key factors that have helped

Bangladeshi exports' expansion in the global apparel markets (Ahmed et al., 2014; Yadlapalli et al., 2018).

As shown in Figure 2.7, the majority of global apparel buyers (around 64%) are from the European Union, followed by around 21% from North America (the United States of America and Canada) and the rest of them from non-traditional markets such as Russia, Japan and Australia in the 2017-18 financial year. Global European and North American brands such as Walmart, Nike, Gap, PVH, Tommy Hilfiger, Tesco, Inditex (Zara), H&M and Marks & Spencer are some of the key buyers that outsource apparel from Bangladesh (Yadlapalli et al., 2018). Despite the economic significance, consecutive environmental and social failures including the 2013 Rana Plaza industrial disaster have raised serious ethical and social concerns about the SSM implementation in Bangladeshi multi-tier apparel supply chains (Lund-Thomsen & Lindgreen, 2014; Lund-Thomsen, Lindgreen, & Vanhamme, 2016). Thus, to mitigate these sustainability challenges, multi-tier apparel suppliers in Bangladesh comprise an appropriate research context for investigating, analysing and understanding the SSM implementation in GSCs.

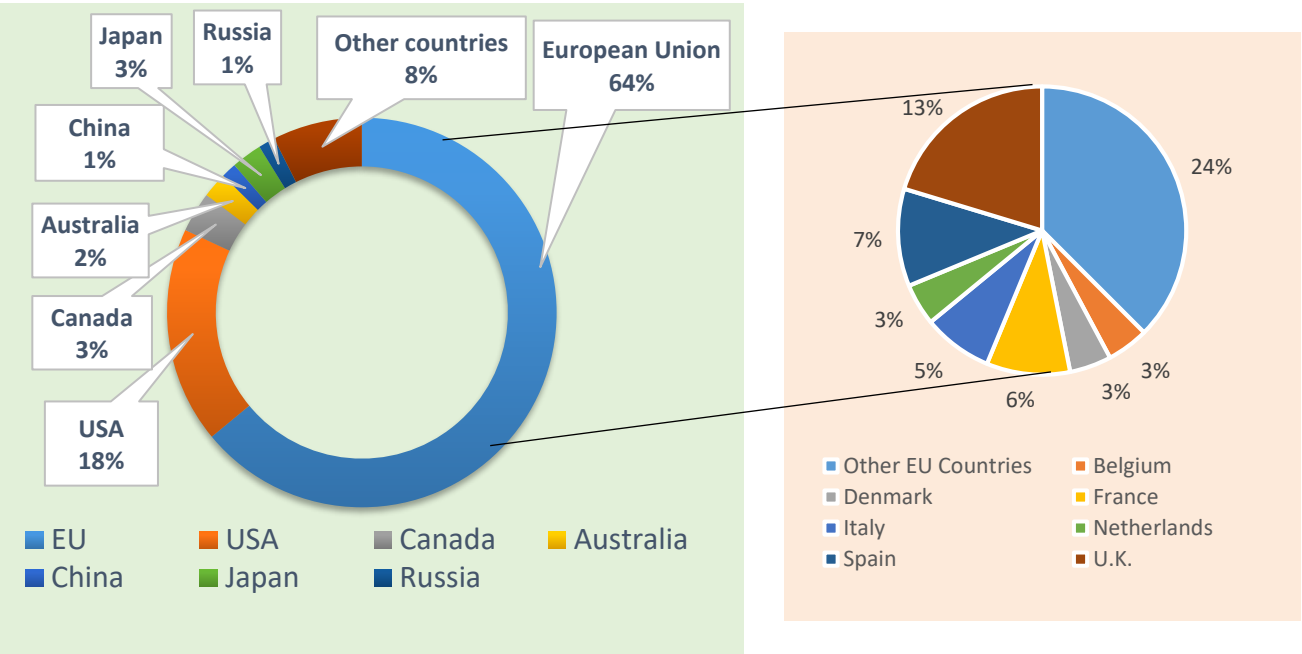


Figure 2.7: Global buyers of Bangladeshi Apparel Suppliers (BGMEA, 2018)

2.4 Connecting Sustainability and SCM in the Global Supply Chain Context

This section first introduces the theoretical development of SSCM and SSM in the literature. This is followed by a systematic review of literature focusing on the intersection of sustainability and SCM within the GSC context. In particular, the current state of research on the diffusion of sustainability to multi-tier suppliers is presented under three key themes, namely drivers and barriers, implementation mechanisms and pressures, and SSM practices and outcomes. The conclusions are presented at the end of the chapter.

2.4.1 Conceptualising SSCM and SSM

The concepts of SSCM and SSM in GSCs have been merged within SCM research under the umbrella concept TBL. Table 2.4 presents the numerous definitions that have been identified in SSCM literature through aligning some or all aspects of TBL. On the one hand, there have been abundant conceptualisations of SSCM in the SCM and logistics literature (Ahi & Searcy 2013). Among them, two highly cited definitions of SSCM by Carter and Rogers (2008) and Seuring and Müller (2008b) can be viewed as the foundation of initial conceptualisations of SSCM. For instance, Carter and Rogers (2008, p. 368) defined SSCM as "the strategic, transparent integration and achievement of an organization's social, environmental, and economic goals in the systemic coordination of key inter-organizational business processes for improving the long-term economic performance of the individual company and its supply chains". Thus, the underlying philosophy of the SSCM concept emphasises the holistic consideration of TBL dimensions within supply chain operations alongside deeper collaboration of GSC partners and other concerned stakeholders to improve sustainability outcomes.

On the other hand, sustainability issues relating to the terms ‘purchasing’, ‘procurement’, ‘sourcing’, and ‘supply management’ have been defined and applied in diverse ways. Several terms and definitions in Table 2.5 that refer to both social and environmental dimensions of TBL include: ‘socially and environmentally responsible procurement’ (SERP) (Hoejmose & Adrien-Kirby, 2012), ‘purchasing social responsibility’ (PSR) (Carter & Jennings, 2004; Maloni & Brown, 2006) and ‘ethical sourcing’ (Roberts, 2003). Conversely, most scholars use other terms such as ‘sustainable supply management’ (SSM) (Ageron et al., 2012; Giunipero et al., 2012; Kähkönen et al., 2018; Koplin et al., 2007; Krause et al., 2009), ‘sustainable sourcing’ (Pagell, Wu, & Wasserman, 2010; Schneider & Wallenburg, 2012) , and ‘sustainable procurement’ (Grob & Benn, 2014) with a broad scope that incorporates all dimensions of TBL. For example, the definition of SSM offered by Giunipero et al. (2012, p. 206) refers to “the extent to which supply management incorporates environmental, social and economic value into the selection, evaluation and management of its supply base”. More recently, Kähkönen et al. (2018) have adopted that definition and argued that it is holistic and more comprehensive for understanding the SSM practices of multi-tier apparel suppliers. Therefore, this research adopts the definition of SSCM of Carter and Rogers (2008) as well as that of SSM of Giunipero et al. (2012) to understand the interaction and integration between multiple suppliers and their surrounding institutional actors that have an impact on SSM implementation in the GSC context.

Table 2.4: Conceptualisations of SSCM and SSM under different terms

Concept or Terminology	Relevant papers and author(s)	Definition	Align with TBL concept
Sustainable supply chain management (SSCM)	Seuring and Müller (2008b, p. 1700)	SSCM as "the management of material, information and capital flows as well as cooperation among companies along the supply chain while taking goals from all three dimensions of sustainable development, i.e., economic, environmental and social, into account which are derived from customer and stakeholder requirements".	All dimensions
	Carter and Rogers (2008, p. 368)		All dimensions
Sustainable sourcing	Pagell et al. (2010, p. 58)	"Managing all aspects of the upstream component of the supply chain to maximise TBL performance".	All dimensions
	Schneider and Wallenburg (2012)	Explicitly adopted the definition by Pagell et al. (2010, p. 58)	All dimensions
Sustainable supply management (SSM)	Koplin et al. (2007, p. 1053)	Integration of "environmental and social standards into supply policy and supply management".	Two dimensions
	Krause et al. (2009)	Not provided	Two dimensions
	Giunipero et al. (2012, p. 206)	"The extent to which supply management incorporates environmental, social and economic value into the selection, evaluation and management of its supply base".	All dimensions
	Ageron et al. (2012)	Not provided	All dimensions
	Kähkönen et al. (2018)	Explicitly adopted the definition by Giunipero et al. (2012)	All dimensions
Ethical sourcing	Roberts (2003)	Not provided – but referring to both green and social issues in sourcing decisions	Two dimensions
	Kim et al. (2018, p. 1)	"Managing all processes of supplying the firm with required materials and services from a set of suppliers in an ethical and socially responsible manner".	One dimension
Socially and environmentally responsible procurement (SERP)	Hoejmose and Adrien-Kirby (2012)	Not provided – but referring to social and environmental issues in sourcing decisions	Two dimensions
Sustainable procurement	Grob and Benn (2014)	Not provided – but referring to social, economic, and environmental issues in procurement decisions	All dimensions
Purchasing social responsibility (PSR)	Carter and Jennings (2004, p. 151)	"Purchasing activities that meet the ethical and discretionary responsibilities expected by society".	Two dimensions
	Maloni and Brown (2006)	Not provided	Two dimensions
Source: adapted from Zorzini et al., 2015			

2.4.2 Embedding Sustainability in Multi-tier Suppliers in GSCs - A Thematic Landscape

To identify the themes in the literature on extending sustainability to multi-tier suppliers in GSCs, a systematic literature review (SLR) was initially conducted in October 2016 and further updated in December 2018. A SLR has two purposes: first, combining search findings in a specific thematic area by mapping, assessing and synthesising distinct pieces of literature in a structured and transparent way, and second, developing the scope of further opportunities through identifying key research gaps in the existing body of literature (Tranfield, Denyer, & Smart, 2003). The literature search was executed in Scopus, using a set of the following keywords in combination: 'sustainable' OR 'green' OR 'social' OR 'sustainability' OR 'environmental' OR 'sustainable sourcing' OR 'sustainable purchasing' OR 'sustainable procurement' OR 'sustainable supply chain management' OR 'sustainable supply management' AND 'global supply chain' OR 'global supply network' OR 'global value chain' OR 'multi-tier supply chain'. Scopus was chosen for the search process since "it provides integrated results from a variety of databases, including Science Direct, Emerald Insight, Springer Link, Wiley Online Library, etc." and has been widely adopted for the systematic review of SSCM literature (Roy, Schoenherr, & Charan, 2018, p. 1094).

As portrayed in the following Figures 2.8 and 2.9, a total of 605 articles were found by the keyword search through Scopus. After removing duplications and filtering for peer-reviewed management-focused scholarly journal publications, 188 relevant articles remained for assessment. Then, 9 additional relevant articles that were not on the shortlist were added based on abstract analysis of highly cited articles' cross-references. Consistent with the procedures of a systematic review recommended by Tachizawa and Wong (2014), two

criteria were used to review 197 full papers: 1) Did the article analyse SSM practices in GSCs (or contribute to one of the research questions)? and 2) Was it based on empirical data? As a result, 101 articles were finally considered for analysing multi-tier suppliers' SSM practices in GSCs.

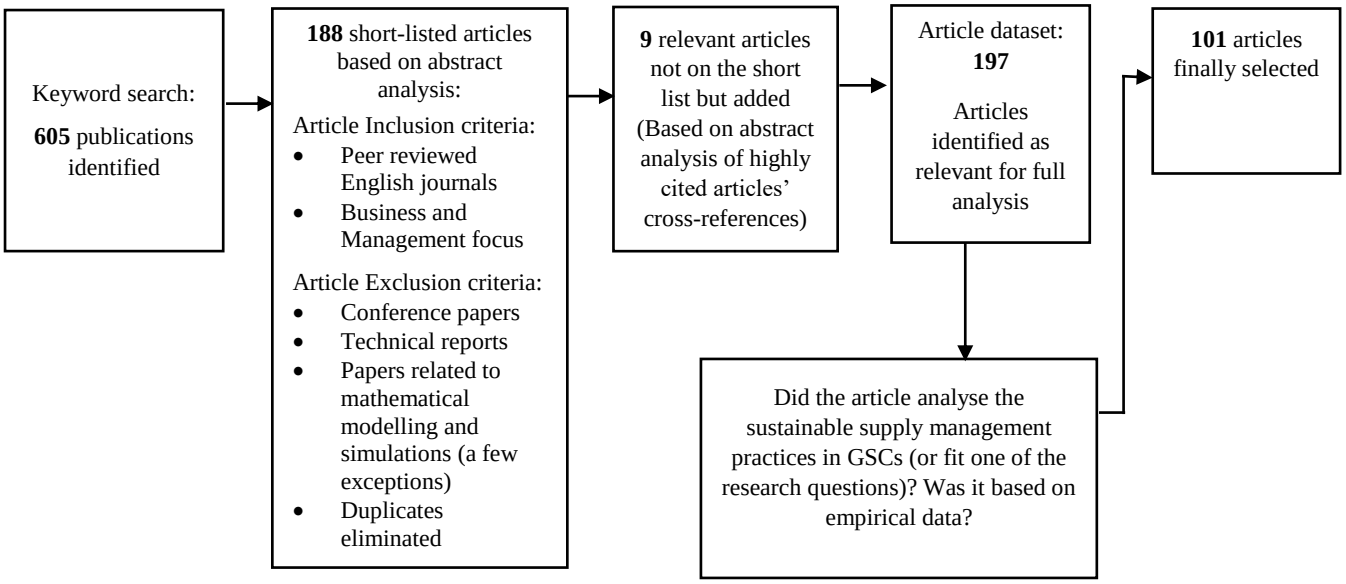


Figure 2.8: A systematic article search, assessment and exclusion process

Figure 2.9: A sample screen shot of keyword search through Scopus

The distribution of reviewed articles per year is presented in Figure 2.10. In line with the previous literature reviews, it appears that supply chain sustainability research increases after the year 2000 although there were a few studies beforehand (Seuring & Müller, 2008b). Compared with published studies over the previous decade, interest in SSM research in GSCs was consistently evolving from 2008 onwards, and increased rapidly from 2014. This may be

because the 2013 Rana Plaza apparel supply factory disaster and human tragedy in GSCs have received significant academic attention in a growing number of top-tier published journals over the last few years (Huq et al., 2016; Jacobs & Singhal, 2017; Rahim, 2017).

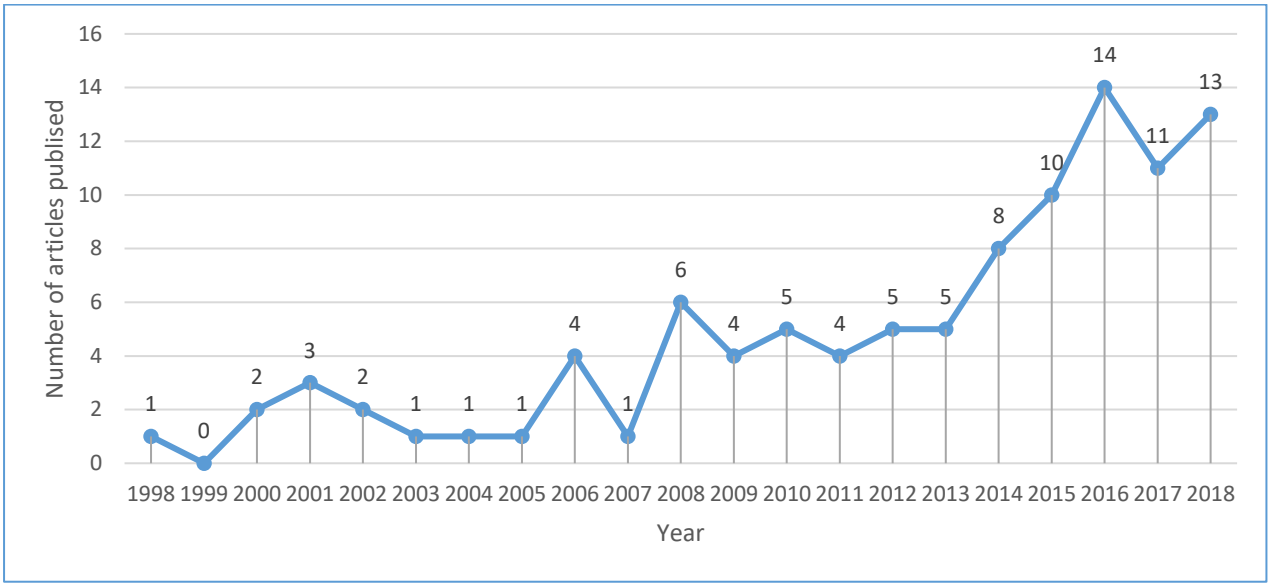


Figure 2.10 Articles distribution across reviewed timeframe per year

Further, supply chain sustainability literature identified by the systematic review was examined to identify key themes based on the research questions of this study (for example, Tachizawa & Wong, 2014). Accordingly, several common themes appearing in the reviewed literature are drivers for and barriers to SSM implementation, implementation mechanisms and pressures, SSM practices and outcomes. A brief description of the themes and their sub-themes is presented with relevant sources in Table 2.5 and further discussed in detail in the following sub-section.

Table 2.5: A thematic classification of supply chain sustainability literature in GSCs

Key thematic area		Description and aim of these studies	References
Drivers and Barriers	Drivers	Organisations consider diverse internal and external factors that drive them to implement SSCM practices in GSCs. These driving factors in the SSCM literature are identified and grouped under the synonymous terms drivers, enablers, motivators.	Walker et al. (2008), Walker and Jones (2012), Sajjad et al. (2015), Chkanikova and Mont (2015), Huq et al. (2014), Giunipero et al. (2012), Ciliberti, Pontrandolfo, and Scozzi (2008)
	Barriers	Barriers are a set of internal and external factors that inhibit a firm's attempt to effectively embed SSCM practices into GSCs.	
Implementation Mechanisms and Pressures	Governance Mechanisms	Within a supply chain sustainability context, governance mechanisms relate to those direct and indirect institutional pressures and approaches (assessment, collaboration, and competition) applied by buying firms to coordinate and maintain relationships with their suppliers with the purpose of SSCM implementation.	Soundararajan and Brown (2016), Grimm et al. (2016), Li, Zhao, Shi, and Li (2014), Gimenez and Sierra (2013), Gimenez and Tachizawa (2012)
	Supply Chain Structures	Within a global supply chain context, studies on governance mechanisms also integrate supply chain structures, which explain the structural arrangements of supply chain institutional actors and the linkages among them in a multi-tier supply chain.	Tachizawa and Wong (2014), Mena et al. (2013), Esfahbodi, Zhang, Watson, and Zhang (2017)
Supply Chain Sustainability Practices and Outcomes	SSM Practices	Adoption of various socially and environmentally responsible supply chain practices and initiatives	Perry et al. (2015), Turker and Altuntas (2014), Hollos, Blome, and Foerstl (2012), Kähkönen et al. (2018)
	SSM Outcomes	Improvement of social, environmental and economic outcomes or the impact of implementation mechanisms and pressures on SSM	

2.4.2.1 Drivers for and Barriers to Implementing SSM Practices

The first common thematic landscape appearing in the reviewed literature is 'drivers and barriers' to SSM implementation (see Tables 2.6 and 2.7). The following discussion of sub-sections highlights these drivers and barriers of sustainability implementation in supply chains.

2.4.2.1.1 Drivers for Implementing SSM Practices

Organisations consider diverse factors that drive them to implement SSM practices. These driving factors in the broader SSCM literature are recognised as either enablers (Walker & Jones, 2012) or motivators (Sajjad et al., 2015). This study also applies these terms (drivers, enablers and motivators) synonymously. Previous empirical studies have divided drivers for implementing SSCM practices into two groups: *internal drivers* and *external drivers* (Walker et al., 2008; Walker & Jones, 2012). Previous research on internal drivers and external drivers for implementation of SSM in supply chains is summarised in Table 2.6.

Internal Drivers

On the one hand, *internal drivers* are the organisational factors relating to people, strategic, and purchasing and supply function issues (Walker & Jones, 2012). In terms of internal drivers, a number of studies have found that the commitment and values of owners and top management is a dominant factor in the effective implementation of an organisation's socially and environmentally sustainable business practices in supply chains (Ageron et al., 2012; Hofmann et al., 2018; Sajjad et al., 2015; Walker & Jones, 2012). As such, "managerial values", particularly owners/managers' personal desire and commitment to 'do the right thing' are recognised as "both the driver and implementer of" pro-environmental or social

programmes within their organisations (Jenkins, 2006, p. 250). Furthermore, a number of studies have reported several potential internal drivers for implementing SSM practices which include cost savings and improved revenues related to operational, energy use and material efficiencies (Chkanikova & Mont, 2015; Nidumolu, Prahalad, & Rangaswami, 2009; Rao & Holt, 2005; Sajjad et al., 2015), and effective management of social and environmental risks through reducing carbon emissions (Giunipero et al., 2012). For example, some social and environmental risks remain structural problems within different industries, particularly human rights violations (Hofmann et al., 2018) and environmental degradation (Eweje, 2006) in industries extracting natural resources, and inadequate health and safety working conditions in the textile and apparel industry (Locke et al., 2013). However, an organisation with strong resources successfully manages its social and environmental sustainability risk in the supply chain to retain its competitiveness (Carter & Rogers, 2008). Thus, perceived sustainability values, awareness and commitment of owners and top management, risk management, cost reduction and increased efficiency have been identified as some important internal drivers for implementing SSM practices.

External Drivers

On the other hand, *external drivers* are the factors beyond the organisational internal environment that propel firms to successfully implement SSM practices (Walker & Jones, 2012). Previous empirical research on external drivers for implementation of SSM in supply chains is also listed in Table 2.6. In terms of external drivers, a significant body of research has found that market drivers (for example, competition, reputation, and requirements from customers and buyers) and government (regulations) play a dominant role in driving organisations to adopt SSM practices (Chkanikova & Mont, 2015; Diabat et al., 2014; Sajjad et al., 2015). However, different industrial sectors have different drivers, even within the

same country (Zhu & Sarkis, 2006). For example, the food retailing sector in Sweden experiences regulations (food labelling requirements) as one of the main drivers to adopting sustainability practices (Chkanikova & Mont, 2015) while the textile industry in India identifies government regulations as the least encouraging factor for SSM implementation in supply chains (Diabat et al., 2014). Additionally, in response to major environmental tragedies, social actors' activism such as intense pressure from civil society, NGOs, and media drive organisations to change their health and safety standards towards better workforce and environmental protection (Chkanikova & Mont, 2015; Silvestre, 2015a; Wolf, 2014). For instance, in the wake of the 2013 Rana Plaza disaster in Bangladesh, global and local NGOs and human rights activists enforced brand-owning buying firms to establish a new multiple-stakeholder platform (for example, the Accord) to improve safety standards in supply factories (Reinecke & Donaghey, 2015). Therefore, requirements from buyers and customers, competition, enhanced reputation, government regulations, the public and NGO pressures have been identified as key important external drivers to implement SSM practices.

To sum up, many studies have been explored drivers that propel organisations to integrate strategies and practices for enhancing social and environmental sustainability. Researchers have also identified internal and external drivers in the context of multiple industrial settings and countries. However, a majority of these studies are focused towards large buying firms and exemplars in the context of developed countries (Ageron et al., 2012; Pagell & Wu, 2009; Sajjad et al., 2015), which may not permit researchers and practitioners to gain a complete understanding about the SSM implementation. As such, there is a knowledge gap in the literature which requires future investigation on why multi-tier suppliers embed sustainability practices into their supply chains in the context of the developing country multi-tier supplier perspective (Huq et al., 2014; Hofmann et al., 2018; Kim et al., 2018).

Table 2.6: A summary of drivers to implementing SSM reported in the literature

Authors	Drivers/Enablers/Motivators (key findings)		Application/ Scope	Theory used	Unit of Analysis, Perspective, and research context	Industry
	Internal	External				
Hofmann et al. (2018)	Internal management support, awareness and commitment of management	External tools and support systems particularly international material data system, power and trust	Social	Institutional theory and three stages model of adaptive behaviour	Buyers and suppliers' perspective, In the context of the United Kingdom (UK), Germany and France	Multiple industries
Sajjad et al. (2015)	Moral/ethical obligation, sustainability values of top management, risk management, brand differentiation benefits, long-term orientation, increased new business, reputational risk, strengthened employer brand, increased efficiency and costs reduction	Customers and community expectations, enhanced reputation and brand value, NGOs' pressure, good media publicity tool	Sustainable (Both social and environmental)	Stakeholder theory	Large buying firms' perspective New Zealand	Multiple industries
Chkanikova and Mont (2015)	Costs savings associated with operational and material efficiencies, industrial norms (standards and voluntary industry agreements)	National and international regulations, customer demand and expectations, bringing retail company to court, brand and reputation, scientific alerts, increased investor appeal, NGO campaign, competitors' strategies	Sustainable	Institutional theory	Retailers' perspective, Sweden	Food industry
Huq et al. (2014)	Owner characteristics, economic benefits	Stakeholder pressure, competition for skilled labour, supplier development, common code of conduct, regulations	Social	Transaction cost economics	Buyers and First-tier Suppliers' perspective, Bangladesh and UK	Garments Industry
Ageron et al. (2012)	Top management vision, supply chain risk management	Government regulatory requirements, customer expectations, competitor actions, other stakeholders such as NGOs	Sustainable	Not specified	Buyers perspective, France	Multiple industries
Caniato et al. (2012)	Corporate values of the owners, inspiration of the top management, reduction of brand and retail costs	Growing relevance for the final customer Requirements of a new market niche	Environmental	Not specified	Buyers and manufacturers' perspective, The USA and Italy	Multiple fast fashion industries

Giunipero et al. (2012)	Top management initiatives, reduction of carbon emission, cost savings, increased resource utilisation	Compliance with laws and regulations, customer requirements, International Standards Organization (ISO) 14000, government incentives, competitors adopted, competitive differentiator	Sustainable	Not specified	Supply chain experts' perspective, The USA	Multiple industries
Walker and Jones (2012)	Top management commitment, employee involvement, culture, alignment of company strategy with purchasing, company SSCM strategy, firm's competitiveness, reputational and environmental risk, Environmental management system (EMS) adoption, improve quality	Government policy, competitors, customers, pressure from investors, influence of NGOs	Sustainable	Contingency theory	Buying firms' perspective, The UK	Multiple industries
Wolf (2011)	Leadership commitment, organisational structure, risk management	Interaction with NGOs, interaction with other stakeholders, supplier relationship management	Sustainable	Stakeholder theory	Buying firms' perspective, In the context of Germany	Multiple industries
Walker et al. (2008)	Organisation's values, value champions, costs reduction, risk minimisation	Access to environmental information, regulatory compliance, monitor external environmental performance, pressure by customers, regeneration of local areas, gaining competitive advantage	Environmental	Not specified	Buying firms' perspective, The UK	Multiple industries
Zhu and Sarkis (2006)	Companies' environmental mission and internal policies, cost and potential liability for disposal of harmful materials	Central government environmental regulations, import countries' environmental regulations, foreign customer requirements, competitors' green strategies, suppliers' advances in providing environmentally friendly packages	Environmental	Not specified	Chinese firms' perspective	Multiple industries
Source: Author's construct based on systematic review of literature						

2.4.2.1.2 Barriers to Implementing SSM Practices

Barriers are a variety of internal and external factors that inhibit a firm's attempt to effectively embed supply chain sustainability practices into supply chains (Walker & Jones, 2012). As such, previous empirical studies have divided barriers to implementing SSM practices into two groups: *internal barriers* and *external barriers*. A brief review of literature on the internal and external barriers to implementation of SSM in supply chains is provided in Table 2.7.

Internal Barriers

Internal barriers refer to the organisation-related factors that obstruct the endeavours of factory management to successfully implement supply chain sustainability practices (Walker et al., 2008). Previous studies have reported a variety of internal factors that may hinder organisations from embedding SSM practices in global supply chains. These internal hindering factors include high initial costs and lack of financial resources (Giunipero et al., 2012; Hofmann et al., 2018), lack of sustainability-related awareness, learning, and expertise amongst owners and managers (Chkanikova & Mont, 2015; Grimm, Hofstetter, & Sarkis, 2014), lack of underlying values of owners/managers (Soundararajan & Brown, 2016), and lack of top management commitment and support (Ageron et al., 2012; Giunipero et al., 2012). For example, in their study of 21 top-level supply chain managers of US-based private companies, Giunipero et al. (2012) reported the high initial investment costs for suppliers and economic uncertainty as leading barriers to sustainable purchasing and supply management implementation. Likewise, based on a survey of top-level managers of multiple buying firms across diverse industries in France, Ageron et al. (2012) revealed financial costs and the

difficulty of perceiving the return on green investment as significant instrumental barriers to implementing SSM practices in their supply chains. Conversely, it has also been reported that normative issues such as lack of awareness and understanding of management about how to integrate sustainability practices into supply chains prevent firms from adopting SSM practices (Chkanikova & Mont, 2015; Sajjad et al., 2015).

External Barriers

External barriers refer to the factors beyond the organisation's internal environment that may obstruct the efforts of factory management to successfully implement SSM practices (Walker et al., 2008). Like internal barriers, previous studies have also reported various external barriers that may hinder organisations from embedding SSM practices in supply chains. These external barriers include gaps in regulatory frameworks (Hofmann et al., 2018; Soundararajan & Brown, 2016), lack of supplier competencies and production facilities (Ageron et al., 2012; Grimm et al., 2014), consumer desire for lower prices (Ciliberti et al., 2008; Sajjad et al., 2015), as well as trust and power gaps between actors (Grimm et al., 2014; Huq et al., 2014). For example, in their study on large New Zealand-based firms, Sajjad et al. (2015) have identifed a range of barriers such as lack of suppliers' capability to deliver desired services/products, lack of customer interest and lack of government leadership that obstruct buying firms from integrating SSCM. Moreover, some scholars have provided a taxonomy of barriers based on empirical evidence (Chkanikova & Mont, 2015; Walker & Jones, 2012). However, these earlier studies have developed the taxonomy of barriers to SSCM in the context of firms in developed countries only.

Furthermore, it can be observed that most research on barriers to sustainability implementation in supply chains is specific to the context of buying firms (Kim et al., 2018), in comparison to upstream supply firms (Huq et al., 2014; Zorzini et al., 2015).

For example, in their study, Huq et al. (2014) identified the confrontational relationships between first-tier suppliers and third-party auditors as one of the key external barriers to implementing social sustainability practices within supply chains. In a similar vein, Grimm et al. (2014) argued that lack of trust between supply chain partners (between buyers and direct suppliers or between direct suppliers and sub-suppliers) was identified as a significant barrier to implementing sustainability practices in food supply chains. Furthermore, gaps in regulatory frameworks, in particular corrupt government authorities, are a fundamental barrier to implementing proper sustainability practices in developing country suppliers (Belal, 2016; Hamilton-Hart & Stringer, 2016; Silvestre, 2015b; Soundararajan, Spence, & Rees, 2018). Nevertheless, empirical studies on barriers to SSM implementation did not capture the perceptions of the extended upstream suppliers (Tier 2 and 3 apparel suppliers) in the context of developing countries (Huq et al., 2014; Kim et al., 2018; Wilhelm et al., 2016). Thus, the systematic review of literature suggests that further research is greatly needed to explore what barriers multi-tier apparel suppliers encounter while embedding SSM practices.

Table 2.7: A summary of barriers to implementing SSM reported in the literature

Authors	Barriers/Challenges (key findings)		Application/ Scope	Theory used	Unit of Analysis, Perspective, and research context	Industry
	Internal	**External**				
Hofmann et al. (2018)	Resources and costs	Gap in regulation framework, market structure, complexity of tracing raw materials and parts	Social	Institutional theory and three stages model of adaptive behaviour	Buying firms and suppliers' perspective, In the context of the UK, Germany and France	Multiple industries
Soundararajan and Brown (2016)	Lack of underlying assumptions and values such as creating fake or duplicate records	Corrupt government authorities, disassociating occurrence of harmful effects and consequences, creates negative image of institutional actors expecting compliance, accumulating autonomy and political strength	Social	Stakeholder theory	Multi-stakeholder perspective, India	Ready-made garment Industry
Chkanikova and Mont (2015)	Lack of financial resources, conflict of interests between product sustainability policy and free trade provisions, lack of knowledge and expertise, complexity of supply chain configuration, lack of scientific framework to identify the most profound sustainability impacts	Lack of governmental leadership and initiatives, lack of power over supplies, higher prices of sustainable products, tradition of established supplier relationship, customer confusion due to high number of labelling schemes, lack of availability of supply, lack of consumer awareness and interest about sustainability	Sustainable	Institutional theory	Retailers' perspective, Sweden	Food Industry
Sajjad et al. (2015)	Lack of awareness and understanding, behavioural barriers, negative perception about sustainability	Lack of suppliers' capability to deliver desired services/products, higher prices by suppliers, lack of customer interest, lack of government leadership	Sustainable	Stakeholder theory	Large buying firms' perspective, New Zealand	Multiple industries
Silvestre (2015b)	Insufficient economic benefits, informality such as inadequate training, lack of infrastructure and resources supply such as power, water, healthcare and sanitation	High level of corruption, lack of transparency and trust, high degree of complexity, environmental turbulence, absence of institutional regulations, lack of quality and environmental certification	Sustainable	Institutional theory, evolutionary theory and complexity theory	Multiple stakeholder perspective, Brazil	Upstream Oil and gas industry

Huq et al. (2014)	Pressure to reduce prices, lack of cost sharing	Overlooking supplier violations by buyers, lack of government support, lack of enforcement of labour laws, confrontational relationships	Social	Transaction cost economics	Buyers' and First-tier Suppliers' perspective, Bangladesh and UK	Ready-made garment Industry
Grimm et al. (2014)	Lack of financial resources, lack of competencies and skills, lack of personnel commitment	Lack of commitment and trust between supply chain partners, lack of supplier competencies, lack of information and transparency, cultural and language differences	Sustainable	Theory of critical success factors	Buyers' and suppliers' perspective, Switzerland and India	Food Industry
Ageron et al. (2012)	Financial costs, green investments, return on investments, company human skills, top management commitment	Lack of supplier competencies and production facilities, green induced changes, supplier's size and location, supplier's organisational culture, increased dependency between supply chain partners	Sustainable	Not specified	Buyers' perspective, France	Multiple industries
Walker and Jones (2012)	Lack of management commitment, cost and resource constraints, small organisational size, traditional accounting methods, lack of training, lack of understanding how to incorporate in purchasing and other SCM priorities, lack of corporate structures and processes	Regulation, competitive pressures, consumer desire for lower prices, poor supplier commitment, less regulated industries, greenwashing	Sustainable	Contingency theory	Buying firms' perspective, The UK	Multiple industries
Giunipero et al. (2012)	Initial costs and investment, economic uncertainty, little top management support, difficulty to balance between short-term profit goal and long-term sustainability goal	Lack of sustainability standards, lack of regulations, policy change difficult, external awareness	Sustainable	Not specified	Supply chain experts' perspective, The USA	Multiple industries
Wolf (2011)	Costs, lack of clear sustainability goals and direction, limited communication between functions, limited availability of data and information on sustainability, lack of additional human resources	Limited integration of supply chain partners	Sustainable	Stakeholder theory	Buying firms' perspective, Germany	Multiple industries
Walker et al. (2008)	Costs, local nature of project, lack of resources	Exposing poor environmental performance, lack of information, confidentiality concerns, lack of industry-wide consistent environmental criteria, procurement legislation, suppliers reluctant to change	Environmental	Not specified	Buying firms' perspective, The UK	Multiple industries
Source: Author's construct based on systematic review of literature						

2.4.2.2 Implementation Mechanisms and Pressures to Embed SSM Practices

Implementation mechanisms and pressures in GSCs was the second thematic area in the papers under systematic examination. As evident in Table 2.8, a number of studies in the literature investigated implementation mechanisms in supply chains, discussing issues concerning governance mechanisms, institutional pressures, and structural arrangements. As such, the review of literature revealed two key sub-themes: sustainable supply chain governance mechanisms and pressures, and sustainable supply chain structural arrangements.

2.4.2.2.1 Sustainable Supply Chain Governance Mechanisms and Institutional Pressures

Supply chain governance mechanisms are "those practices used by firms to manage relationships with their suppliers with the aim of improving sustainability performance" (Gimenez & Sierra, 2013, p. 191). Within the earlier studies, the most common supply chain governance mechanisms used to govern relationships as well as achieve sustainability performance were categorised into two mechanisms – direct and indirect mechanisms (Gimenez & Sierra, 2013). Direct governance mechanisms, also known as hands-on approaches, require the buying firms to devote time and resources to managing relationships with suppliers (Gimenez & Tachizawa, 2012). In contrast, indirect mechanisms, also known as hands-off approaches, are based on standards, voluntary requirements, certification from third parties, and non-traditional supply chain stakeholders, while the buying firms are not directly involved in managing relationships with suppliers (Gimenez & Sierra, 2013; Meinlschmidt et al., 2018). Although previous research highlighted the importance of direct and indirect mechanisms, some studies also acknowledged selection, assessment and

collaboration as key supply chain governance mechanisms (Gimenez & Sierra, 2013; Sancha et al., 2016; Vachon & Klassen, 2006; Yadlapalli et al., 2018).

First, supplier selection is the initial phase of forming relations between suppliers and buying firms (Koufteros, Vickery, & Dröge, 2012; Yadlapalli et al., 2018). As such, supplier selection can be referred to as a gatekeeper tool, which selects suppliers that fulfil the buying firms' requirements (Yadlapalli et al., 2018). While operational requirements such as price, quality, flexibility, speed and delivery commitment are traditionally considered common supplier selection criteria, environmental and social requirements have recently been emphasised by buying firms as important supplier selection criteria (Sancha et al., 2016; Turker & Altuntas, 2014; Yadlapalli et al., 2018).

Second, supplier assessment was identified as one of the most common governance mechanisms. Supplier assessment mechanisms are buying firms' codes of conduct alongside third-party certification with the purpose of monitoring, auditing, and evaluating suppliers' sustainability practices and performance (Jiang, 2009a, 2009b; Turker & Altuntas, 2014). Codes are "defined as written documents" (Stevens, 2008, p. 601) which comprise important philosophical parts of "ethical sourcing, and often undertake issues central to sustainable business" (Blowfield, 2000, p. 191). As such, codes of conduct are used by buying firms as direct governance mechanisms to manage suppliers (Soundararajan & Brown, 2016; Yu, 2008).

On the other hand, third-party certification can be described as suppliers' compliance with social or environmental standards, for example Social Accountability (SA) 8000, that is audited and validated by a third independent party (Ciliberti et al. 2009; Klassen and

Vereecke 2012). Some of these recognised social or environmental certifications and standards include: Supplier Ethical Data Exchange (SEDEX), Global Organic Textile Standards (GOTS), LEED, United Nations Global Compact (UNGC), Business Social Compliance Initiatives (BSCI), ISO 14001 EMS, OEKO-TEX Standard 100 and Worldwide Responsible Accredited Production (WRAP) (Epstein, 2018; Kauppi & Hannibal, 2017; Turker & Altuntas, 2014). Although codes of conduct and standards vary by industry, most common principles of codes and standards as compliance assessment mechanisms are developed on the basis of international accounting standards (for example, ILO Conventions) (Egels-Zandén & Lindholm, 2015; Turker & Altuntas, 2014).

Within the context of institutional influences, prior research on SSM further acknowledged the role of supplier selection and assessment mechanisms (buyers' codes of conduct and third-party certification) as the main coercive pressures used by buying firms as conditions for obtaining production orders (Hofmann et al., 2018; Sayed et al., 2017; Wilhelm et al., 2016). While auditors from certification bodies and third parties regularly assess sustainability-related codes of first-tier suppliers (Ciliberti et al.2009), first-tier suppliers on behalf of buyers also play a facilitating role in monitoring the implementation of sub-suppliers' sustainability practices (Wilhelm et al., 2016). Moreover, some studies suggested that assessment and enforcement mechanisms from several institutional actors such as governments (Esfahbodi et al., 2017; Hamilton-Hart & Stringer, 2016; Luken & Stares, 2005), industry associations (Lund-Thomsen & Nadvi, 2010), and industry-based assessment regulators (Kauppi & Hannibal, 2017; Reinecke & Donaghey, 2015) exerted coercive pressures on suppliers to implement sustainability practices. In addition, a few studies indicated that there is a mimetic tendency to adopt the third-party certification logos and competitors' best practices among peer manufacturers and retail buyers (Kauppi & Hannibal,

2017; Sayed et al., 2017). Thus, to effectively extend sustainability to their supply bases, buying firms and other institutional actors apply a range of supplier selection and assessment mechanisms such as self-assessment questionnaires, factory visits, certification, inspections, and interviews with factory workers (Gimenez & Sierra, 2013; Grimm et al., 2016).

Finally, supplier collaboration was considered another common governance mechanism, involving communication, knowledge sharing, education, training and other support provided by the buying firms to enhance suppliers' ability to embed sustainability performance (Formentini & Taticchi, 2016; Grimm et al., 2016; Huq et al., 2016). In cases of collaboration for supplier development, buying firms also seek assistance from other institutions such as consortium platforms (Huq et al., 2016), NGOs and industry (Rodríguez, Giménez Thomsen, Arenas, & Pagell, 2016), government agencies (Luken & Stares, 2005), academic institutions and trade unions (Campbell, 2007). Within the context of institutional influences, universities, business schools, industry associations, trade unions, and networks of sustainability experts provide awareness-raising training, workshops and education and other capacity-building support, which exert changing normative pressures on suppliers to manage sustainability practices (Campbell, 2007; Kauppi & Hannibal, 2017). As such, multiple stakeholder collaboration and alliances amongst suppliers, buyers and other third-party actors such as NGOs and trade associations play a positive role in implementing sustainability practices in GSCs (Gereffi & Lee, 2016; Liu, Zhang, Hendry, Bu, & Wang, 2018; Tsoi, 2010). However, the SSM implementation mechanisms and transparency issues of upstream supply chains can be different than the ground-level realities (Egels-Zandén et al., 2015; Lund-Thomsen & Lindgreen, 2014). For example, in their study on a Swedish apparel brand, Egels-Zandén et al. (2015) have argued that institutional pressures for supply chain transparency may lead to counterproductive outcomes since there is a possibility of suppliers

using deceptive practices “to avoid negative exposure, and such deceptions severely undermine buyers’ sustainability work in supply chains”. Against this backdrop, there is an urgent need to develop an improved understanding of how the institutional pressures have an impact on multi-tier apparel suppliers’ SSM implementation practices, and why multi-tier apparel suppliers decouple these practices.

Table 2.8: A summary of implementation mechanisms and pressures to embed SSM practices into multi-tier supply chains

Authors	Implementation Mechanisms and Pressures (Key findings concerning governance mechanisms, institutional pressures, and structural arrangements)	Application/ Scope	Theory used	Unit of Analysis, Perspective, and research context	Industry
Hofmann et al. (2018)	Compliance-oriented approaches (peer pressures, competitive pressures, regular monitoring, and severe sanctions based on strict principles and regulations), commitment-oriented approaches (learning, collaboration, incentives and mutual respect) and analytical approaches (assessment)	Social	Institutional theory and three stages model of adaptive behaviour	Buying firms' and suppliers' perspective, In the context of the UK, Germany and France	Multiple industries
Meinlschmidt et al. (2018)	Direct approach (buyers' own selection and assessment), indirect approach (selection, assessment, and supplier development through three approaches: multiplier-based, alliance-based, and compliance-based), neglect approach (only evaluate, select and develop first-tier suppliers)	Sustainable	Transaction cost economics	International buying firms' perspective	Multiple industries
Kauppi and Hannibal (2017)	Normative pressure exerted (dialogue with members, diffusion of standards through networks of audit firms and producers, education), coercive pressure exerted (de-certification as a result of non-compliance, multiple stakeholder involvement during audit cycle, on-going verification of audit data), mimetic pressure (adoption of the certification logo by retailers and producers)	Social	Institutional theory	Regulators' perspective, Latin America, USA and Europe	Voluntary assessment relating to multiple industries
Esfahbodi et al. (2017)	Institutional governance pressures, particularly coercive pressures (government agencies and national or international regulators) are the main mechanisms.	Sustainable	Institutional theory	Buyers' perspective, The UK	Multiple industries
Sayed et al. (2017)	Coercive pressures, mimetic pressures, normative pressures, institutional heterogeneity (buyer resistance, contractor resistance, client resistance, costs and affordability, customer sluggishness, local supplier capabilities), institutional logics (conflicts among different logics such as financial, sustainability and time logics)	Sustainable	Institutional theory	Consumers, buyers, and suppliers, The UK	Food and catering supply chains of UK Universities
Wilhelm et al. (2016)	Coercive pressures (external regulatory pressures for sustainability, lead firms' pressures for sustainability requirements), normative pressures (technical and managerial skills to train and assess the sustainability of the suppliers), decoupling of primary/secondary agency role (T1 was making only cosmetic changes regarding the management of sustainability in its own and/or its suppliers' operations)	Sustainable	Institutional theory, agency theory, contingency theory	Buying firms' and first-tier suppliers' perspective, multiple countries	Multiple industries
Soundararajan and Brown (2016)	Shared value through buyer-supplier collaboration, commitment and mutual trust, third-party certifications, monitoring system, pressures from buyers' CSR officer and buying agents	Social	Stakeholder theory	Multi-stakeholder perspective, India	Ready-made garment Industry
Sancha et al. (2016)	Supplier assessment, supplier collaboration	Social	Transaction cost economics and RBV	Buying firms' perspective, Spain	Multiple industries

Formentini and Taticchi (2016)	Collaboration (shared-collaborative versus non-collaborative governance style) and formalisation (formal mechanisms characterised by control and reporting systems versus informal additional coordinating mechanisms characterised by relationships)	Sustainable	Contingency theory, strategic alignment and RBV perspective	Buying firms' perspective, Italy	Multiple industries
Huq et al. (2016)	Auditing, collaboration, innovation	Social	Stakeholder theory	Buyers and first-tier suppliers, The UK and Bangladesh	Ready-made garment Industry
Grimm et al. (2016)	Assessment of sub-suppliers, collaboration with sub-suppliers, sub-suppliers' compliance with corporate sustainability standards, public attention on the mediating first-tier supplier, perceived risk of sub-supplier's non-compliance with corporate sustainability standard, firm's channel power and business partner involvement	Sustainable	Institutional theory	Global buyers' perspective	Retailing, Information and communication technology
Glover et al. (2014)	Institutional logics (cost reduction, profit orientation, power of supermarkets), aligning competing logics (environmental versus financial), normative isomorphic drivers (new rules stem from social obligations), coercive isomorphic drivers (large retailers/supermarkets exerting pressure on other smaller organisations), mimetic (imitate the actions of successful competitors)	Environment	Institutional theory	Multi-tier supply chain perspective, The UK	Food and dairy industry
Turker and Altuntas (2014)	Compliance system, monitoring, and auditing concerning code of conduct, improving suppliers (training, workshops, seminars, knowledge transfer), communicating with suppliers (visits, personal cooperation, value chain conferences, in-house communication platform, research)	Sustainable	Seuring and Muller's (2008b) SSCM framework	Buyers' perspective (based on buyers' corporate reports)	Fast fashion industry
Gimenez and Sierra (2013)	Supplier assessment, collaboration with suppliers	Environmental	Transaction cost economics, RBV	Buyers' perspective, Spain and Germany	Multiple industries
Ageron et al. (2012)	Supplier selection, supplier collaboration	Sustainable	Not specified	Buyers' perspective, France	Multiple industries
Lund-Thomsen and Nadvi (2010)	Global value chain pressures, collective monitoring, social auditing, industry-based local monitoring	Social	Global value chain (GVC) theory	Supply firms' cluster perspective	Multiple industries
Pagell and Wu (2009)	Assessment such as supplier certification, non-traditional supplier development, monitoring approach, collaborative relationships with biggest and most strategically important suppliers, collaboration with NGOs, competitors and local government	Sustainable	Not specified	Mainly buyers' perspective	Multiple industries
Lim and Phillips (2008)	Assessment (CSR codes of conduct, monitoring), collaborative partnerships	Social	Institutional theory, GVC theory	Buyers' perspective	Footwear Industry
Source: Author's construct based on systematic review of literature					

2.4.2.2.2 Sustainable Supply Chain Structural Arrangements

Within the sustainable supply chain context, several studies on governance mechanisms also discussed supply chain structures, which explain the structural arrangements of supply chain institutional actors and the linkages among them in a multi-tier supply chain (Mena et al., 2013; Tachizawa & Wong, 2014; Wilhelm et al., 2016). Among these studies, Mena et al. (2013, p. 61) were the first to distinguish between three types of governance structures – "open", "closed", and "transitional" triads – to extend sustainability to first-tier (Tier 1) and second-tier suppliers (Tier 2). An "open" triad is a traditional supply chain where there is no direct relationship between the buying firm (B) and second-tier suppliers (Tier 2). As such, the buying firms make efforts to extend sustainability to their first-tier suppliers who, in turn, may be authorised to extend sustainability to second-tier suppliers (Wilhelm et al., 2016). In a similar vein, Tachizawa and Wong (2014) have also recognised this open triad as an indirect governance mechanism. In contrast, a closed triad is characterised by a situation where the buying firm has an established and direct connection with second-tier suppliers (Mena et al., 2013). Tachizawa and Wong (2014) have also recognised this closed triad as a direct governance mechanism. On the other hand, a transitional triad is characterised by covering the middle ground between closed and open triads where the buying firm reaches out to second-tier suppliers to establish relationships with a view to becoming a closed triad (Mena et al., 2013). Different types of sustainable supply chain structural arrangements are displayed in Figure 2.11.

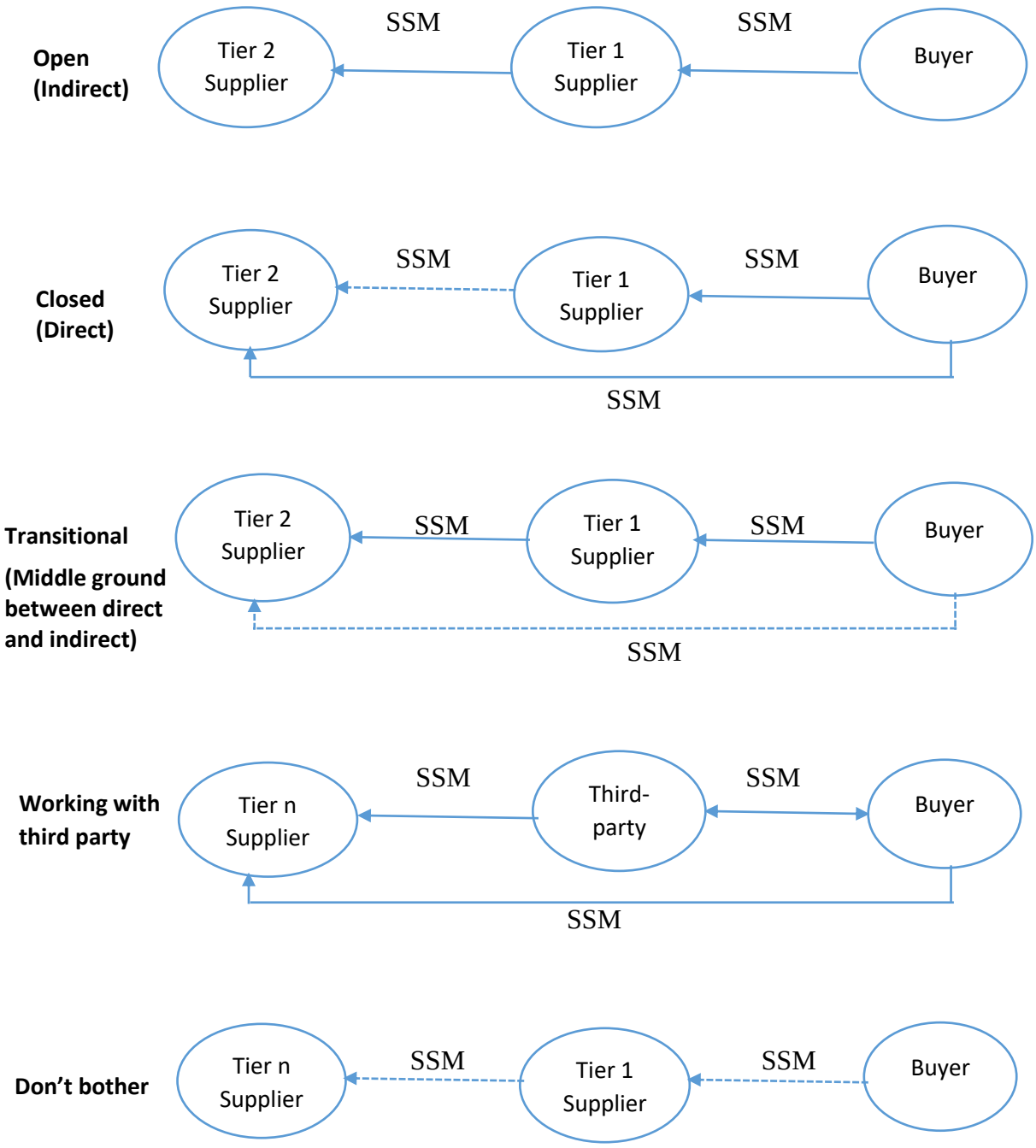


Figure 2.11: Sustainable supply chain structural arrangements, adapted from Mena et al. (2013) and Tachizawa and Wong (2014)

Furthermore, Tachizawa and Wong (2014, p. 651) proposed two additional types of governance structures: first, "working with third parties" including NGOs, government, competitors, third-party auditors and standardisation institutions with the aim of extending sustainability to beyond second-tier suppliers (further lower-tier suppliers) and second, a "don't bother" governance approach where buyers have only focused on their own functions or first-tier suppliers' sustainability practices in GSCs. Despite the increasing research interest on extending sustainability practices to multi-tier suppliers over the last few years, most prior studies are mainly limited to investigating the perceptions of buyers (Grimm et al., 2016; Meinlschmidt et al., 2018) and first-tier suppliers (Huq et al., 2014; Wilhelm et al., 2016). In the relational context within the supply network, several scholars have argued the importance of extended suppliers' relationships as the fundamental building block for understanding sustainability issues of upstream supply networks that include not only first-tier suppliers (Tier 1) and second-tier suppliers (Tier 2) (Bhakoo & Choi, 2013; Choi & Wu, 2009; Mena et al., 2013; Wu & Choi, 2005) but also the third-tier suppliers (Tier 3) and beyond (Tachizawa & Wong, 2014). As such, the opaque institutional fields concerning supply network structures (Choi & Krause, 2006; Wijen, 2014), as a result of missing insights and perceptions from Tier 2 and Tier 3 suppliers, often challenge the sustainable supply chain governance in GSCs (Busse, Meinlschmidt, & Foerstl, 2017). Hence, further deep insights of multi-tier suppliers (Gereffi & Lee, 2012; Grimm et al., 2016) in the research setting of a developing country institutional context (Alexander, 2018; Wilhelm et al., 2016) are required to unpack a holistic understanding of managing sustainability practices to multiple tiers of suppliers in GSCs.

2.4.2.3 SSM Practices and Outcomes in Global Supply Chains

SSM practices and outcomes in GSCs is the third thematic area in the papers under systematic examination. As evidence shows in Table 2.9, a significant body of studies in the literature have investigated sustainability initiatives and practices and their impact on performance in supply chains. Accordingly, the review of literature revealed two key sub-themes – SSM practices and sustainability outcomes.

2.4.2.3.1 Sustainable Supply Management Practices

Recent supply chain sustainability literature has identified multidimensional conceptualisations and measures of SSM practices (Kähkönen et al., 2018; Marshall, McCarthy, Heavey, & McGrath, 2015). However, a significant number of papers have categorised SSM practices based on the two major dimensions of sustainability – social and environmental practices (Ageron et al., 2012; Hollos et al., 2012; Kähkönen et al., 2018; Turker & Altuntas, 2014). For example, Hollos et al. (2012) categorised sustainability practices and initiatives into social and green practices. On the one hand, social practices are defined as "[…] the buying firm's efforts to induce socially responsible behaviour, such as good working conditions, avoidance of child labor, appropriate and fair wages and high safety standards in its own operations and the operations of its suppliers" (Hollos et al., 2012, p. 2974). While Pedersen and Andersen (2006) identify child labour, discrimination, long working hours, and abuse of human rights as the major social practices of a Swedish home furnishing firm, Ciliberti et al. (2009) have included these practices as Social Accountability 8000 in the context of the Italian textile and garment industry. Based on content analysis of nine European fast fashion buying firms' sustainability reports, Turker and Altuntas (2014) have also identified a variety of social practices including fair wages, gender equality,

workers' rights, human rights, reduced overtime, good working conditions, and lack of child labour and discrimination.

On the other hand, environmental or green practices are defined as "the buying firm's efforts for waste reduction and preservation of natural resources in its own operations and the operations of the members of its supplier base" (Hollos et al., 2012, p. 2974). As presented in Table 2.9, many researchers have used case studies and qualitative interviews to investigate what types of environmental practices are implemented in supply chains. For example, Winter and Lasch (2016) have identified three environmental practices and their associated indicators – waste water treatment system, use of environmentally friendly material, and carbon and hazardous substance management – in the cases of six fast fashion branded retailers. However, the identification of environmental practices by Caniato et al. (2012) in the empirical domain of the USA and Italian fast fashion industries differs from that of Winter & Lasch (2016). This is because Caniato et al. (2012) have categorised all initiatives of environmental sustainability under three practices, namely product practices (for example, natural raw materials, sustainable packaging and recyclable products), process practices (low energy consumption facilities and clean production), and supply chain practices (environmental certification of suppliers, transport optimisation and green projects with suppliers). Regardless of this difference in categorisation of practices, the majority of SSM practices have been developed in accordance with the guidelines of the United Nations Global Compact, ILO conventions and GRI (Caniato et al., 2012; Turker & Altuntas, 2014).

2.4.2.3.2 SSM Implementation Outcomes

SSM outcomes in supply chains is another sub-theme which describes the improvement of social, environmental and economic outcomes or the impact of implementation on SSM.

While several papers measure outcomes of SSM implementation quantitatively through surveys (Esfahbodi et al., 2017; Hollos et al., 2012; Yadlapalli et al., 2018; Zailani, Jeyaraman, Vengadasan, & Premkumar, 2012), other papers qualitatively identify linkages between social or environmental sustainability practices and their SSM outcomes (Caniato et al., 2012; Hofmann et al., 2018; Huq et al., 2014; Perry et al., 2015). Some findings show that firms with SSM practices outperform their competitors economically (Huq et al., 2014; Luken & Stares, 2005; Yu, 2008) and report outcomes such as higher productivity and larger production orders (Huq et al., 2014; Yu, 2008) and reduced worker absence rates due to less sickness and fewer accidents in the workplace (Huq et al., 2014). However, it is unclear whether SSM initiatives and practices have a positive or negative impact on economic outcomes (Kim et al., 2018; Zorzini et al., 2015). Some scholars argue that SSM practices have a direct impact on the firm's economic performance (Zailani et al., 2012). Other scholars argue that only environmental practices have positive significant effects on economic outcomes, not social practices (Hollos et al., 2012; Luken & Stares, 2005). In their study of 146 UK manufacturing managers, Esfahbodi et al. (2017) have found that even SSM implementation does not necessarily lead to enhanced financial outcomes (Esfahbodi et al., 2017). In a similar vein, Yadlapalli et al. (2018, p. 144) argue that "implementation of social and environmental aspects at supplier manufacturing facilities could incur financial costs to the firm, thus affecting economic performance negatively". Nevertheless, research evidence suggests that the investment in SSM practices and initiatives could generate improved economic outcomes and stakeholder trust in the long run (Carter & Jennings, 2002a; Carter & Rogers, 2008).

Beyond economic outcomes, implementing SSM practices can generate positive outcomes in terms of improved social outcomes in supply chains. In particular, implementing social

practices by suppliers is one of the effective ways to improve working conditions and reduce absenteeism in factories (Huq et al., 2014; Perry et al., 2015), increase workers' satisfaction and loyalty (Perry et al., 2015; Wright & Bonett, 2007), be in a better position to bargain with buyers (Huq et al., 2014), and gain legitimacy and respect as a socially responsible corporate citizen within the society in which they operate (Hutchins & Sutherland, 2008; Perry et al., 2015). However, other research argues that social sustainability practice has no linkage to improvement of overall social conditions, particularly the core labour issues in global production networks where industrial suppliers are located (Jamali, Lund-Thomsen, & Khara, 2017; Lund-Thomsen & Pillay, 2012).

In terms of environmental outcomes and impact in supply chains, a number of studies have indicated that implementing environmental practices is another effective way to reduce pollution, material usage, waste, and environmental degradation and improve reputation (Caniato et al., 2012; Geng et al., 2017; Zailani et al., 2012). For example, by investigating three environmental practices in the context of the USA and Italian fast fashion industries, Caniato et al. (2012) identified a wide range of environmental performance measures such as recycled materials, product waste, water consumption, water pollution, CO2 emissions, organic fibres, limited use of chemicals, energy consumption, renewable energy and environmental certifications. In their study, Zailani et al. (2012) indicate that specific practices such as sustainable packaging and green purchasing have been linked to positive environmental outcomes. More recently, in an empirical analysis of the UK manufacturing industry, Esfahbodi et al. (2017) argue that supply chain sustainability implementation by means of governance mechanisms provides environmental improvements. Despite the positive conditions for environmental improvements, developing country suppliers face a dilemma of whether there is an adequate business rationale for implementing environmental

practices and initiatives (Goger, 2013b), which needs further empirical exploration. Against this thematic gap, this research attempts to examine how multi-tier apparel suppliers integrate social and environmental issues to improve SSM outcomes in their supply chains.

Table 2.9: A summary of SSM implementation initiatives, practices and outcomes reported in the literature

Authors	SSM Implementation Initiatives, Practices and Outcomes	Application/ Scope	Theory used	Unit of Analysis, Perspective, and research context	Industry
Hofmann et al. (2018)	Market performance (compliance and transparency), financial performance (meeting customer requirements and reducing risk exposure), and relational assets (increased awareness and new strategic partnerships)	Social	Institutional theory and three stages model of adaptive behaviour	Buyers' and suppliers' perspective, In the context of the UK, Germany and France	Multiple industries
Yadlapalli et al. (2018)	Social performance (health and safety, workers' rights and community development), environmental performance (energy efficiency, risks, compliance and reputation), economic performance (return on investment, profit margin, sales volume, market share)	Social	Transaction cost economics and agency theory	First-tier suppliers' perspective, Bangladesh	Apparel industry
Winter and Lasch (2016)	Environmental practices and performance (pollution control and prevention such as carbon and hazardous substance management, EMS, environmental design, resource consumption, environmental image), social criteria (health and safety, local communities aspects, and employment practices such as no child and forced labour, working hours, no discrimination, freedom of association, and compensation)	Sustainable	Not specified	Buyers' perspective	Fashion and apparel industry
Turker and Altuntas (2014)	Social (wages, gender equality, workers' rights, human rights, reduced overtime, child labour, discrimination, migrant workers, buyers' sustainable supplier programme), environmental (product and environmental safety, hazardous chemicals, water management) , economic (contributing to the local economy, jobs and stability)	Sustainable	Seuring and Muller's (2008b) SSCM framework	Buyers' perspective (based on buyers' corporate reports)	Fast fashion industry
Zailani et al. (2012)	Environmental purchasing, sustainable packaging, sustainable supply chain performance (social performance, economic performance, operational and environmental performance)	Sustainable	Transaction cost perspective	Buyers' perspective, Malaysia	Multiple industries
Hollos et al. (2012)	Social practices (good working conditions, avoidance of child labour, appropriate and fair wages and high safety standards) and green practices (waste reduction and preservation of natural resources)	Sustainable	Resource dependence theory and RBV	Buyers' perspective, Germany and UK	Multiple industries

Caniato et al. (2012)	Recycled materials, product waste, water consumption, water pollution, CO2 emissions, organic fibres, limited use of chemicals, energy consumption, renewable energy, environmental certifications	Environmental	Not specified	Buyers' and manufacturers' perspective, The USA and Italy	Multiple fast fashion industries
Ageron et al. (2012)	Social responsibility issues, waste reduction, savings from packaging, ISO 140001 certification, eco-design, lean management, clean programmes, reducing carbon footprint, production resources system, product life cycle management, economic dependency, confidence and long-term relationships	Sustainable	Not specified	Buyers' perspective, France	Multiple industries
Klassen and Vereecke (2012)	Supplier human rights, supplier labour practices, supplier codes of conduct, and supplier social audits	Social	Not specified	Plant-level managers' perspective, North America	Multiple industries
Ciliberti et al. (2009)	Social Accountability 8000 (child labour, forced labour, health and safety, discrimination, disciplinary practices, working hours, compensation, freedom of association and the right to collective bargaining)	Social	Information theory and transaction costs economics	Suppliers' perspective, Italy	Textile and garment industry
Lim and Phillips (2008)	Labour (forced labour, child labour, compensation and benefits), environment, safety and health, community development programmes	Social	Institutional theory, and global value chain theory	Buyers' perspective,	Footwear Industry
Maloni and Brown (2006)	Animal welfare, biotechnology, community support, environment (conservation, pollution and waste disposal), fair trade, health and safety, labour and human rights (compensation and illegal labour), procurement (behaviour, purchasing process, legal and supplier diversity)	CSR	Not specified	In the context of the USA food supply chains	USA food industry
Pedersen and Andersen (2006)	Child labour, discrimination, long working hours, abuse of human rights, environmental pollution	CSR	Agency theory	Buying (Swedish) firms' perspective	Home furnishing industry
Preuss (2005)	Recycling waste, chemicals and paints, timber, waste disposal, replaced solvents with water, product take-back at end of life, assembly substances dangerous to employee health and safety, clear cutting, biodiversity, effluents, reduce landfill, returnable packaging, use of eco-labelled goods, fuel efficiency	Environmental	Not specified	Buyers' perspective, The UK	Multiple industries
Source: Author's construct based on systematic review of literature					

2.5 Conclusion

This chapter has reviewed the extant literature in two broad research streams: sustainability and SCM. The first section of this chapter provided a brief literature review on sustainability under the umbrella concept TBL and its current status in Bangladesh. Then, the conceptualisation of the term SCM and the development of global apparel supply chains with an explicit focus on the Bangladeshi apparel industry were presented. Through focusing on the intersection of sustainability and supply management, multi-tier suppliers' SSM implementation was reviewed systematically under three key thematic landscapes, namely drivers and barriers, implementation mechanisms and pressures, and SSM practices and performance.

The systematic review of literature has identified several thematic knowledge gaps. First, although thematic issues such as drivers for and barriers to SSM implementation are widely explored in the existing literature, most prior studies have been conducted in the context of brand-owning buying firms in Europe and North America. While research focusing on first-tier suppliers' SSM practices in the context of developing countries is emerging, there is limited understanding of what drivers and barriers multi-tier apparel suppliers encounter while embedding SSM practices. Second, the review indicated that previous studies have investigated the presence of institutional influences on buyers' and first-tier suppliers' SSM implementation. However, little is known about how institutional pressures, decoupling and logics vary across upstream extended suppliers (Tier 2 and 3 apparel suppliers) situated in a challenging institutional context, thereby affecting their implementation of SSM practices. Third, although prior studies have extensively examined the environmental supply chain issues and practices, research on SSM practices and outcomes has scarcely explored the

context of multi-tier suppliers in Bangladesh, an important outsourcing hub for apparel manufacturing globally, yet an under-researched area. Fourth, while the adoption of theory in SSM research has recently been evolving, only a few previous studies have explicitly focused on the use of theory. Further research is required to interpret and enhance understanding of empirical evidence through the use of theoretical lenses. Accordingly, research scholars have suggested the need for more theory-grounded research which develops a holistic SSM implementation framework drawing on multi-tier suppliers' perspectives. More particularly, there is a paucity of empirical research on why and how Bangladeshi multi-tier apparel suppliers are implementing SSM in the GSC context. Thus, the objective of this study is to fill these knowledge gaps in the literature and expand theoretical contributions to the SSM field by providing new insights using the perspectives of participants in the context of Bangladeshi multi-tier apparel suppliers. Therefore, the next chapter (Chapter 3) provides a discussion of the adopted theories and presents the theoretical framework and methodology used in this study.

CHAPTER 3

Research Methodology

3.1 Introduction

This chapter presents the research philosophy, methodological choices, approach, theoretical framework, research methods and data analysis for this study (see Figure 3.1). As previously discussed in Chapters 1 and 2, the development of research questions was informed by a systematic review of literature related to multidisciplinary research concepts: sustainability and supply management (the dotted circle). Specifically, research suggests that little is known about the implementation of multi-tier suppliers' SSM practices in the context of developing countries. Thus, the primary research objective of this study is to examine why and how Bangladeshi multi-tier apparel suppliers implement SSM practices into their supply chains.

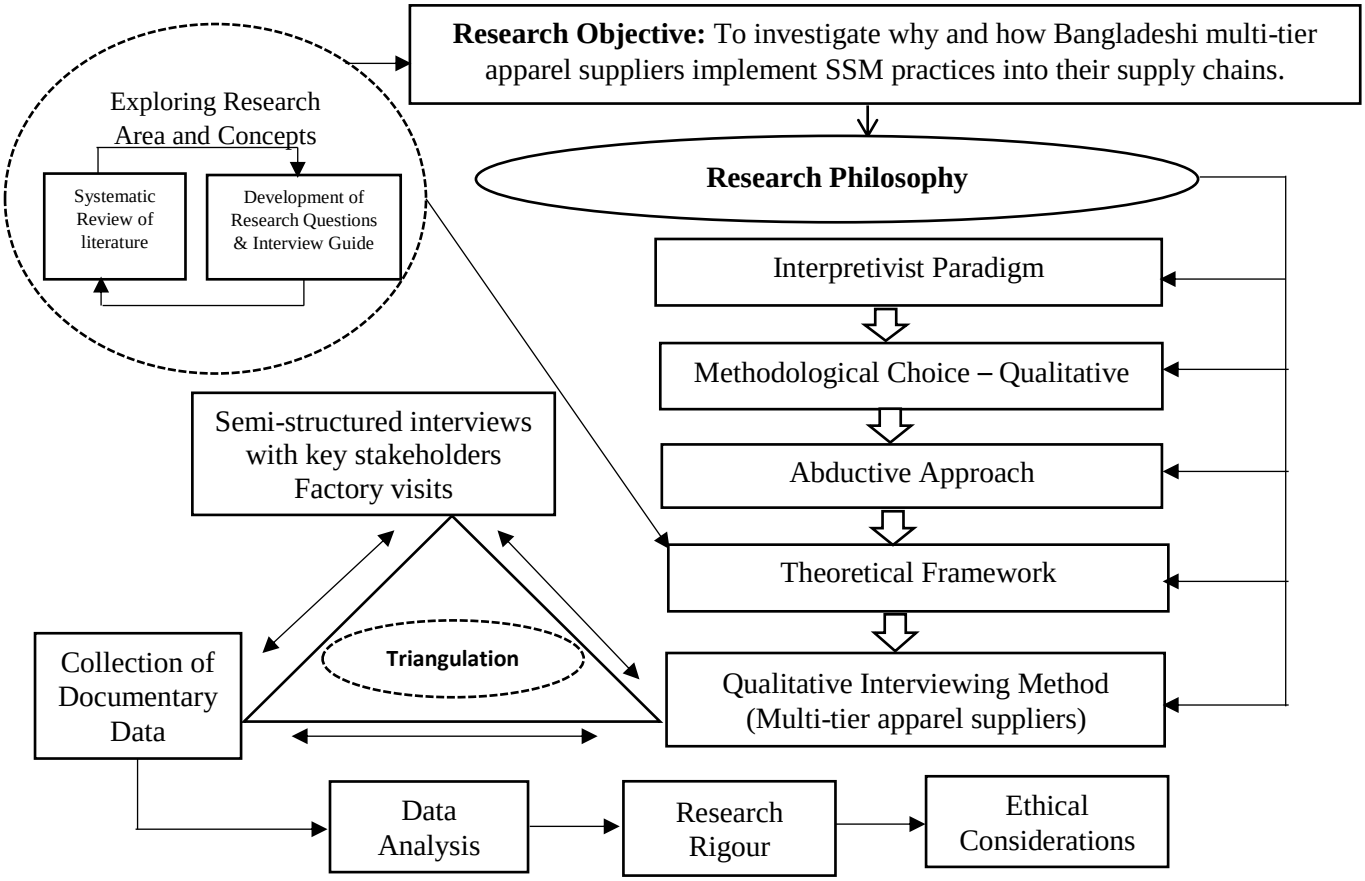


Figure 3.1: Mind-mapping the research process

As displayed in Figure 3.1, the exploratory nature of this study makes it suitable for an interpretivist qualitative research methodology. To investigate the perceptions of the owners and managers, a qualitative interviewing method was adopted as a framework for data collection. In this regard, individual semi-structured interviews with senior-level managers and business owners from multi-tier apparel suppliers are the main source of data collection. In particular, CSR managers, sustainability managers, human resource and compliance managers, relevant senior-level managers and business owners were purposively selected to discuss their sustainability practices, experiences, perceptions, and interpretations relating to supply management issues. Thus, this chapter introduces the research philosophy for this study, which is followed by a discussion of methodological choices, the approach to theory development, the basic theoretical framework and the research methods. Then, the data collection methods, criteria for participant selection and data analysis are discussed. Finally, issues related to research rigour and ethical considerations are explained.

3.2 Research Philosophy

Understanding the research philosophy is critical for designing and implementing a study. Research philosophy, also known as a research paradigm (Guba & Lincoln, 1994), is an all-encompassing term related to the nature and development of knowledge (Saunders et al., 2015). A research paradigm establishes a comprehensive set of beliefs or worldviews that guides the investigation, and leads the choice of research methods (Guba & Lincoln, 1994). In other words, the philosophical assumptions of ontology and epistemology have considerable influence on the selection of suitable theoretical perspectives and research methodology, including research design and data collection methods (Creswell, 2014; Saunders et al., 2015).

Ontology focuses on the nature of reality (Crotty, 2003) and highlights what exists (Huff, 2009). In this sense, ontology emphasises the nature of reality, whether objective or subjective. The ontology of the current research is that reality is subjective, and social phenomena and their meaning are continually influenced by the subjective perceptions of owners and managers. On the other hand, epistemology takes into account what is considered as acceptable knowledge in a field of study (Bryman & Bell, 2007) and emphasises what we can know about what exists (Huff, 2009). Thus, the epistemology of this research focuses on the owners and managers' opinions, narratives, interpretations and consequent actions that convey social realities. Management and business research comprises different alternative philosophies that can be acknowledged as the researcher's position such as positivism and interpretivism (Saunders et al., 2015). Indeed, these research philosophies or paradigms can be defined in terms of where their assumptions fall on the objectivism–subjectivism continuum (Saunders et al., 2015).

This research is conducted from the perspective of a subjective view of social reality, guided by an interpretivist paradigm. The subjective view contrasts with the objectivist view, which sees social entities as existing separately from social actors. Bryman and Bell (2007) argue that the objective view deals with finding general laws to anticipate human behaviours by utilising natural science approaches and measures to investigate a social reality. In contrast to the natural science measurement of social phenomena, the subjectivist view claims that people and their institutions apply their subjectivity to events and experience reality in different ways (Bryman & Bell, 2007). Accordingly, an interpretivist paradigm follows a humanistic technique and takes a subjective view of the social reality experienced by social actors (Cavana et al., 2001).

This study is guided by an interpretivist paradigm for several reasons. First, this study aims to investigate the implementation of SSM practices, which involves the interpretation of managerial perceptions and interactions of apparel supply firms and their relevant stakeholders as social actors. Based on subjective experiences, social actors have their own insights and explanations regarding the key research questions: why and how multi-tier apparel suppliers' SSM practices are implemented into their supply chains, with their own socially constructed reality. For example, discovering what experiences and perceptions managers have regarding the factors that encourage or hinder the implementation of SSM practices involves subjective judgments of reality. This is consistent with the perspective that it is human experiences and insights that characterise reality (Denzin & Lincoln, 2011). Second, each apparel supplier functions in a unique socially embedded setting and thus is often influenced by a wide range of institutional actors and forces while embedding its supply chain sustainability practices. To this end, "the interpretive research presents a rich and complex description of how people think, react, and feel under certain contextually specific situations" (Cavana et al., 2001, p. 9). Third, the researcher interacted with Bangladeshi apparel suppliers and managers in searching for multiple views, lived experiences and realities held by them, and tried to construct a comprehensive understanding of the implementation of sustainability practices from those conversations. Finally, the interpretivist paradigm can be viewed as an all-embracing umbrella that guides the selection of a suitable research methodology, approach and research design aligned with the research aims and inquiry. This is because the research philosophy including the research approach and methodology cannot be disconnected from the matters concerning the conduct of social research (Creswell, 2014). Thus, an interpretivist paradigm fits the focus of this research as it drives the research questions and philosophical considerations of the researcher. More importantly, the nature of the philosophical position directly guides the selection of the

specific research methodology, approach, theoretical perspectives, data collection and analysis methods; this is discussed in the following section.

3.3 Methodological Choice – Qualitative

Methodology is a general approach to studying a research area or topic (Silverman, 2013). The research area of this study is explorative in nature. While the research areas of sustainability and SCM have been much studied, little is known about the implementation of sustainability practices held by multi-tier apparel suppliers and their relevant stakeholders. An exploratory approach is suitable when a phenomenon is at a progressive phase and the concept such as SSM in multi-tier supply chains is yet to be clearly known and delineated (Eisenhardt & Graebner, 2007; Huq et al., 2016). Thus, the embryonic state of the literature on socially and environmentally sustainable practices of upstream multi-tier suppliers in GSCs (Kim et al., 2018; Soundararajan & Brown, 2016), especially in the developing country multi-tier supplier context, calls for exploratory research (Saunders et al., 2015).

Given its explorative-interpretivist nature, a qualitative methodology is deemed appropriate for conducting this research. Qualitative methodology is suited to exploring unknown problems and interpreting the lived experiences and interpretations of relevant actors (Saunders et al., 2015). According to Denzin and Lincoln (2011), qualitative research involves a commitment to an interpretivist approach which enables the researcher to present a detailed, in-depth understanding of the complex contextual issues through seeking the varied participants' views. In a similar vein, Graebner et al. (2012) argue that the key advantage of qualitative data is in understanding complex issues involving temporal dynamics, tensions and multiple levels of analysis in a comprehensive and sophisticated way. Investigating

sustainability in multi-tier supply chains is a complex matter due to the multiple actors, as well as multi-tiered and geographically dispersed phenomena (Quarshie et al., 2016; Wilhelm et al., 2016). Thus, governed by interpretivist philosophy, the adoption of a qualitative research methodology is appropriate to better understand the complex matter of this research inquiry.

3.4 Research Approach – Abductive Approach

There are three main research approaches used in social sciences, including management research, for theory development: deductive, inductive and abductive (Saunders et al., 2015; Spens & Kovács, 2006). Based on Spens and Kovács (2006), a framework for examining these three research approaches in the context of logistics and SCM research is depicted in Figure 3.2. The deductive research approach scans theory, develops hypotheses, and designs a research strategy to test these hypotheses (Saunders et al., 2015). The main logic of the deductive approach is that "when the premises are true, a conclusion must also be true" (Saunders et al., 2015, p. 145). In contrast with the deductive approach, the inductive approach collects empirical data through real-life observations, and develops theory through the data analysis (Saunders et al., 2015). Accordingly, the main logic of inductive inference is that "known premises are used to generate untested conclusions" (Saunders et al., 2015, p. 145).

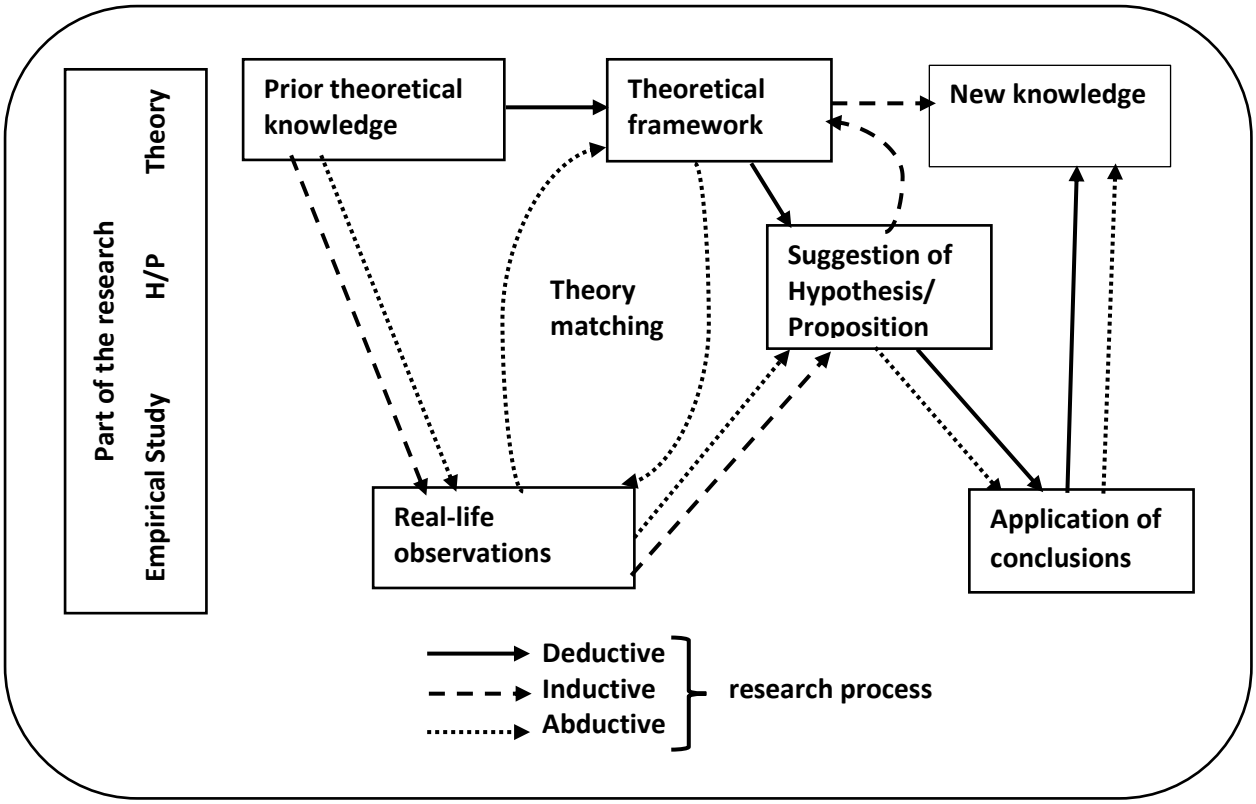


Figure 3.2: The three research approaches (Adopted from Spens & Kovács, 2006, p. 376)

Furthermore, it is observed that quantitative studies tend to use a deductive approach, and qualitative studies tend to use an inductive approach (Strauss & Corbin, 1998).
However, deduction can be assessed because of potential theory falsification or verification whereas inductive reasoning is difficult to prove because of its commitment to letting theories emerge inductively (Alvesson & Kärreman, 2007; Peirce, 1878; Timmermans & Tavory, 2012). As Timmermans and Tavory (2012, p. 167) asserted, "induction does not logically lead to noble theoretical insights". As such, both approaches have shortcomings in creating systematic discovery of knowledge (Timmermans & Tavory, 2012) and theory construction in SSM (Touboulic & Walker, 2015).

However, the adductive approach, introduced by Peirce (1878), takes a third way between deductive and inductive approaches which leverages the benefits of both approaches, and enables the logical exploration of knowledge (Kovács & Spens, 2005; Spens & Kovács, 2006). As Timmermans and Tavory (2012, p. 167) put it, "abduction refers to a creative inferential process aimed at producing new hypotheses and theories based on surprising research evidence" (p. 167). In other words, the inquiry of abductive reasoning logic begins with some theoretical awareness in the literature before collecting empirical data, continues with theory matching, and concludes with a new theory or extension of the existing framework (Kovács & Spens, 2005; Spens & Kovács, 2006).

Given its explorative-interpretivist nature, the abductive reasoning approach is suitable for conducting this qualitative research for several reasons. First, "abductive analysis arises from actors' social and intellectual positions but can be further aided by careful methodological data analysis" towards theory construction in qualitative research based on empirical data (Timmermans & Tavory, 2012, p. 167). Second, there are some common features found in both inductive and abductive approaches. For instance, similar to induction, abduction is applied predominantly by research based on the interpretivist paradigm (Andreewsky & Bourcier, 2000). Like the abductive approach, Miles and Huberman (1994) argue that even the inductive approach begins with some basic theoretical knowledge. This study also begun with a basic conceptual framework, developed from a systematic review of literature to guide the research procedures. Finally, the abductive reasoning approach is useful for SSCM as it borrows theories from other disciplines to guide the inquiry and identify unknowns in a specific empirical context for a relatively unexplored area (Kovács & Spens, 2005; Touboulic & Walker, 2015). This research also borrowed pertinent theoretical knowledge from other disciplines – integrative stakeholder theory, institutional theory and contingency theory – to

guide the study of the relatively unexplored issue of sustainability and multi-tier supplier management. The following section presents a discussion of these three theories, followed by a basic theoretical framework developed for this study.

3.5 Theoretical Framework

In this section, the theoretical framework of this study is displayed, drawing on three perspectives – integrative stakeholder theory, institutional theory and contingency theory – that relate to the implementation of SSM practices by multi-tier apparel suppliers (see Figure 3.3). As asserted by Miles and Huberman (1994, p. 18), a theoretical framework represents "either graphically or in narrative form, the main things to be studied – the key factors, constructs or variables – the presumed relationships among them". The theoretical framework in a study reflects the researcher's theoretical orientation, which plays the role of a filter for focusing and interpreting the data in a qualitative study (Kilbourn, 2006; Van Maanen, Sørensen, & Mitchell, 2007). Indeed, prior knowledge about the literature review and theoretical framework permits a researcher have some direction in investigating the research problem, which leads to refining, justifying, and developing the research questions and the chosen methodology. Towards this end, it is vital to illustrate the theoretical framework of this study and present the key assumptions applied to guide the research procedure, empirical findings and discussion of the thesis.

According to Seuring and Müller (2008b), empirical examination based on a strong theoretical background has been viewed as an opportunity to build theory in the research streams of sustainability and SCM. As identified in the systematic literature review (see Tables 2.6-2.9, Chapter 2), previous studies have applied diverse theoretical perspectives

such as TCE, stakeholder theory and contingency theory to understand the SSCM implementation issues in supply chains. However, theoretical perspectives linking the concepts of sustainability and multi-tier supply chain management are few and still in their infancy (Sauer & Seuring, 2018; Tachizawa & Wong, 2014). While supply chain scholars have emphasised the necessity to use multiple theoretical perspectives to better comprehend the notions of sustainability and multi-tier supply chains (Quarshie et al., 2016; Sauer & Seuring, 2018; Touboulic & Walker, 2015), very few empirical studies have utilised multiple theoretical perspectives to explain their research findings (for example, Kähkönen et al., 2018; Silvestre, 2015b and Wilhelm et al., 2016). Moreover, sustainability and global multi-tier supply chains have been recognised as multi-actor, highly complex, interdisciplinary, and geographically dispersed phenomena (Quarshie et al., 2016; Soundararajan & Brown, 2016). No single theory is adequate to potentially explain the complexity involved in multi-tier suppliers' SSM implementation; instead "using a broader range of theories would help bring new insight as the field moves forward" (Quarshie et al., 2016, p. 90). A similar argument has also been made in the critical review study of a conceptual map for SSCM theories (Touboulic & Walker, 2015). Following this argument, this study applied three theories – integrative stakeholder theory, institutional theory, and contingency theory – to understand the implementation of multi-tier apparel suppliers' SSM practices.

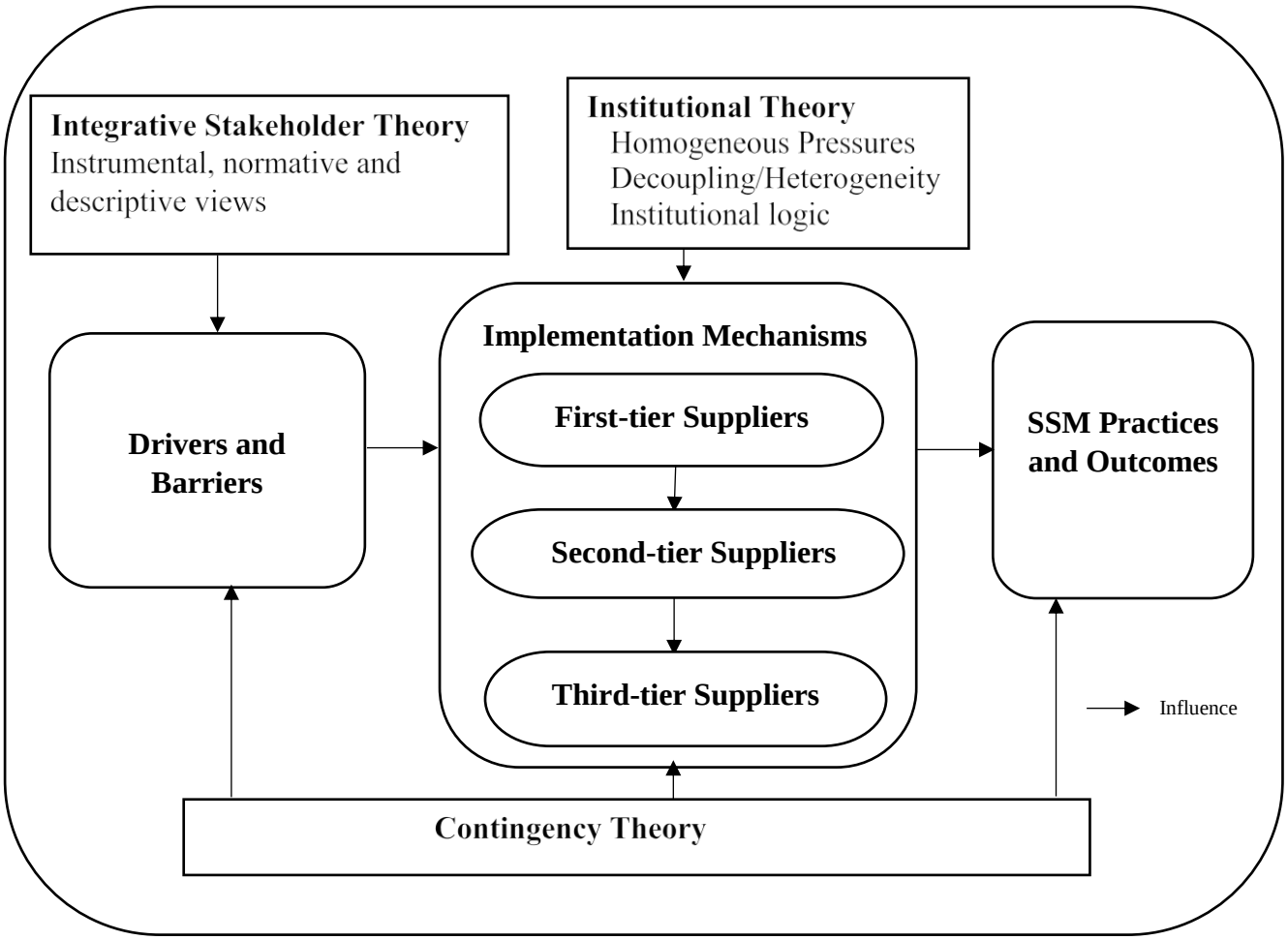


Figure 3.2: The basic theoretical framework (Source: Author's construct)

A basic theoretical framework for integrating sustainability practices into multi-tier apparel suppliers is displayed in Figure 3.2. Based on the review of substantive literature in relation to the research objectives and questions, three common thematic landscapes appearing in the literature are drivers and barriers, implementation mechanisms, and SSM practices and outcomes (see Chapter 2). For the purpose of developing a basic SSM framework, integrative stakeholder theory is expected to provide instrumental, descriptive and ethical reasons to understand drivers for and barriers to SSM implementation. Moreover, the key reason behind the adoption of institutional theory is to understand the mechanisms and pressures placed upon suppliers at different levels of the apparel supply chain as they affect the effective

implementation of SSM practices. However, there exist implementation dilemmas, conflicts and trade-offs within multi-tier supply networks located in the challenging institutional contexts, which lead to decoupling of formal SSM practices. As such, the implementation of SSM practices and performance is fragmented across multi-tier apparel suppliers but institutional theory and contingency theory can help to provide an understanding of the institutional logics and specific context-dependent factors behind these variations (Sauer & Seuring, 2018). Based on the adopted theories and findings of this study, this basic theoretical framework is used to develop a new holistic SSM framework in Chapter 7. In the following sections, each theoretical perspective and its relation to the multi-tier apparel suppliers' implementation of sustainability practices is explained in detail.

3.5.1 Integrative Stakeholder Theory

This section explores how the integrative stakeholder theory can be utilised to explain the implementation of SSM practices within multi-tier apparel suppliers. First, integrative stakeholder theory and its key assumptions are briefly outlined. This is followed by discussion of how integrative stakeholder theory relates to the present study.

According to Hörisch, Freeman, and Schaltegger (2014, p. 341), "stakeholder theory and sustainability management share a lot of ideas and thus stakeholder theory can be purposefully applied in the context of sustainability management". In particular, they propose that integrative stakeholder theory is a major theoretical perspective for studying sustainability management and other related concepts. The key development of this perspective is that it has acknowledged not only the popular version of stakeholder theory by Freeman (1984) but also the significance of the existing parallel advancements of stakeholder theory by Donaldson and Preston (1995) (see Table 3.1).

Table 3.1: Different types of stakeholder theory, adopted from Hörisch et al. (2014, p. 330)

Types of Stakeholder Theory	Focus	Exemplary literature
Descriptive/empirical stakeholder theory	Description of how companies are managed; identification of relevant stakeholders	Donaldson & Preston (1995); Sangle & Ram Babu (2007)
Instrumental stakeholder theory	Effects of stakeholder management on the achievement of corporate objectives	Donaldson & Preston (1995)
Normative stakeholder theory	Discussion of the purpose of business; moral justifications of stakeholder theory	Donaldson & Preston (1995); Freeman (1984)
Integrative stakeholder theory	Considers the descriptive, instrumental and normative aspects of stakeholder theory to be inextricably linked	Horisch, Freeman, & Schaltegger (2014); Jones & Wicks (1999)

Freeman (1984) developed a theory of stakeholder management in his milestone book *Strategic Management: A Stakeholder Approach*. He defines stakeholders as "any group or individual who can affect or is affected by the achievement of an organisation's objectives" (Freeman, 1984, p. 46). This definition is widely cited and facilitated to re-conceptualise the nature and boundaries of the organisation, and by doing so, inspired the consideration of new and silent stakeholders of the organisation beyond the primary stakeholder groups (Clarkson, 1995; Maignan & Ferrell, 2004).

On the one hand, primary stakeholder groups are composed of shareholders, investors, employees, customers and suppliers (Clarkson, 1995). Traditionally, scholars have argued that primary interest groups of an organisation were limited only to shareholders. For example, Friedman (1972) presents a conventional argument that the primary role of an organisation is doing business to benefit and maximise shareholders' wealth within the legal framework and the ethical customs of the country. In contrast, Freeman (1984) claimed managers bear a fiduciary duty to all stakeholders directly or indirectly influenced by the

organisation's actions, not exclusively shareholders. Thus, the survival of an organisation mostly relies on the continuous satisfaction of all primary stakeholder groups (Clarkson, 1995).

On the other hand, secondary stakeholders are "those who influence or affect, or are influenced or affected by the corporation, but they are not engaged in transactions with the corporation and are not essential for its survival" (Clarkson, 1995, p. 106). These secondary stakeholder groups include non-governmental organisations (NGOs), local communities, the media, environmentalists and other special interest groups within society (Clarkson, 1995). Likewise, Maignan and Ferrell (2004) argued that stakeholder theory views an organisation as an open and flexible system of networks made up of not only primary and internal stakeholders but also various other external stakeholders such as communities and the environment. As a corporate citizen, an organisation has a duty of care and obligations towards this wider range of external stakeholder groups (Freeman, 1984). The urgency to acknowledge this extended obligation arises from the fact that an organisation often produces social and environmental externalities during its manufacturing process that have a negative impact on these external stakeholder groups (Freeman, 1984). Although secondary stakeholder groups are not engaged in transactions with the organisation, this wider range of external interest groups has silent power that shapes public opinion towards the organisation's sustainability practices and performance (Clarkson, 1995; Silvestre, 2015a).

Freeman (1984) further indicates that while the views of secondary stakeholder groups may be less pertinent today, if disregarded they could become a powerful group and have a direct influence on an organisation's operations. Mitchell, Agle, and Wood (1997) argue that managing relationships with all stakeholder groups is challenging because of their diverse

levels of power, social acceptability, and urgency. In this regard, an organisation must create mutual sustainability interests based on the particular sustainability interests of single stakeholder groups (Hörisch et al., 2014). Therefore, stakeholder theory argues that long-term survival of an organisation depends on the extent to which it builds favourable relationships with internal and external stakeholder groups (Donaldson & Preston, 1995).

Donaldson and Preston (1995) differentiate stakeholder theory into three categories – descriptive/empirical stakeholder theory, instrumental stakeholder theory, and normative stakeholder theory. Although the philosophical assumptions of these stakeholder theories differ, normative rationality sets the bridging foundation for descriptive and instrumental stakeholder theories (Donaldson & Preston, 1995; Hörisch et al., 2014). The key purpose of descriptive stakeholder theory is to help describe how organisations are managed or more particularly to identify pertinent stakeholders and their expectations related to sustainability (Mitchell et al., 1997; Sangle & Ram Babu, 2007). While normative stakeholder theory attempts to provide the ethical reason why the organisation should take into account stakeholder interests, instrumental stakeholder theory attempts to determine whether it is beneficial for the organisation to do so (Donaldson & Preston, 1995). In contrast with Donaldson and Preston (1995), Jones and Wicks (1999) propose convergent stakeholder theory, which aims to converge instrumental and normative stakeholder theories. Like convergent stakeholder theory, Hörisch et al. (2014) suggest applying integrative stakeholder theory in sustainability management, as it aims to intimately integrate descriptive/empirical and instrumental aspects with normative cores of stakeholder theory for managing stakeholder relationships (see Table 3.1). Thus, SSM as an innately integrative lens appears to align well with integrative stakeholder theory.

To sum up, integrative stakeholder theory is useful to examine why multi-tier apparel suppliers adopt all aspects of SSM (social, economic and environmental) into their supply chains. In particular, normative and instrumental aspects of integrative stakeholder theories are relevant to extend the understanding of what managerial motives induce multi-tier apparel suppliers to adopt, and barriers that impede them from embracing, SSM practices into their supply chains. According to Hörisch et al. (2014, p. 332), the key underpinning of integrative stakeholder theory for sustainability management is that "business and ethics are not perceived as conflicting but as fundamentally interlinked". Accordingly, several studies have applied descriptive, instrumental and normative aspects of the stakeholder theory to investigate the implementation of supply chain sustainability practices (Klassen & Vereecke, 2012; Sajjad et al., 2015; Silvestre, 2015a). For example, in an empirical study on multiple industries, Sajjad et al. (2015) have identified various instrumental and normative drivers that propel large organisations to implement SSCM practices. Moreover, Klassen and Vereecke (2012) argue that the descriptive aspect of integrative stakeholder theory explains how organisations identify their internal and external stakeholder groups and interested individuals including regulators, NGOs, buyers and suppliers when addressing sustainability issues in supply chains. As such, integrative stakeholder theory, as a holistic multiple-stakeholder and multilevel perspective, embraces suppliers in every definition of stakeholders (Borgatti & Li, 2009; Hörisch et al., 2014). However, the drivers for and barriers to SSM implementation from the multi-tier suppliers' perspective have barely been acknowledged in SCM research (Borgatti & Li, 2009; Ghadge et al., 2019; Huq et al., 2014). Therefore, this study makes use of integrative stakeholder theory, given the relevance of the internal and external stakeholders to investigating why apparel multi-tier suppliers integrate SSM practices into their supply chains.

3.5.2 Institutional Theory

This section explores how institutional theory can be used to examine and understand how institutional norms and pressures affect sustainability implementation among multi-tier apparel suppliers. First, the fundamental assumptions of institutional theory and its three dominant constructs – institutional pressures, heterogeneity and institutional logic – are briefly outlined. This is followed by discussion of how institutional theory relates to the present study.

Institutional theory is steadily emerging as a useful theoretical framework to explain why organisations behave in environmentally and socially responsible ways (Brammer, Jackson, & Matten, 2012; Campbell, 2007). Institutional theory was originally developed by sociologist Philip Selznick, who discovered that organisations adapt to the expectations of not only their internal actors but also their external actors (Selznick, 1957). Some seminal contributors (DiMaggio & Powell, 1983; Scott, 1987) accepted Selznick's description of organisational adaptation to the expectations of external parties and sought to further explain how this process actually works. For example, DiMaggio and Powell (1983) asserted that an organisation's action is obstructed by a variety of external pressures. They also argued that institutional theory provides a useful theoretical frame that aids in understanding how firms progressively respond to a combination of pressures from powerful factors and actors within their institutional field (DiMaggio & Powell, 1983).

The firms' responses to the pressures in their field converges a set of isomorphic business practices, which become the legitimate, that is, socially acceptable, way to organise within a social context (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). As a notion,

isomorphism refers to a homogenisation process that occurs when organisations structurally conform to other organisations in their environment (DiMaggio & Powell, 1983). The legitimacy-seeking process of the institutional field is shaped by three types of isomorphic pressures: coercive, mimetic, and normative isomorphic pressures (DiMaggio & Powell, 1983).

The first kind of institutional isomorphism is coercive pressures. DiMaggio and Powell (1983) assert that coercive pressures come from the influence of regulatory authorities through conformity with visibly codified laws. The underlying assumption of this concept suggests that two classes of coercive isomorphism exist: one that results from social and cultural expectations (Meyer & Rowan, 1977), and the other arising as a function of interdependencies among organisations for compliance (DiMaggio & Powell, 1983). For example, regulatory authorities, particularly government agencies, can influence the social behaviour of suppliers through explicit conformity with regulations and laws (Huq et al., 2016; Lim & Phillips, 2008). Therefore, organisations attempt to become isomorphic with the legislation and policies, obligations and views of the regulatory authorities upon which they find themselves dependent.

The second kind of institutional isomorphism is mimetic pressures. Mimetic pressures occur when organisations seek legitimacy through copying the best practices of successful competitors because of "standard responses to uncertainty" (DiMaggio & Powell, 1983, p. 67). Under conditions of uncertainty, organisations look to other successful organisations that are considered role models. For instance, apparel suppliers may feel pressured to copy sustainability practices of other successful suppliers when social and environmental failures are reported in the media worldwide.

The third kind of institutional isomorphism is normative pressures. Normative pressures come from educational and professional experts, through which norms and behaviours are accepted as legitimate and transferred to individuals (DiMaggio & Powell, 1983). For example, a given industry is progressively professionalised due to greater similarity among organisational behaviours and practices as a result of personnel transfer, standardised training and education of workers. To this end, universities, business schools, and networks of CSR and sustainability experts exert changing normative pressures.

Within the context of multi-tier sustainable supply chains, the institutional pressures construct of institutional theory has been used to explore inter-organisation systems along the multi-tier healthcare supply chain (Bhakoo & Choi, 2013) and to unpack the views of global buyers to manage sub-suppliers' sustainability practices (Grimm et al., 2016). Some scholars have argued that coercive, mimetic and normative isomorphism may happen concurrently (Sayed et al., 2017; Scott, 2008). However, relatively few studies have explicitly examined the role of institutional pressures and governance mechanisms on the implementation of multi-tier sustainable supply chains beyond the perspective of first-tier suppliers (Glover et al., 2014; Sayed et al., 2017).

Previous studies also suggest that institutional pressures do not continuously lead to diffusion (Bhakoo & Choi, 2013; Meyer & Rowan, 1977). Instead, heterogeneous responses, also recognised as decoupling, may occur. According to Oliver (1991), outward institutional pressures could encourage not only compliance and compromise (homogeneous response) but also avoidance, defiance and manipulation (heterogeneous response). Similarly, when organisations embrace formal programmes, policies and actions in response to institutional

pressures, they may decouple these prescribed strict organisational structures from the real practices (Meyer & Rowan, 1977). This decoupling point occurs when organisational adaptations to external institutional pressures have uncertain consequences for efficiency (Rogers, Purdy, Safayeni, & Duimering, 2007), contradict internal efficiency needs (Meyer & Rowan, 1977), or when practices do not reflect local circumstances (Scott, 2008). More particularly, "organizations supposedly adopt new organizational structures to enhance their legitimacy, and then decouple these same structures from their practices to maintain technical efficiency in a competitive quest for survival" (Boxenbaum & Jonsson, 2008, p. 93). Moreover, decoupling is a more complex phenomenon in the field of socio-environmental governance, specifically sustainability standards adoption, as organisations are embedded within different economic and cultural contexts, which may require divergent practices (Wijen, 2014). Hence, more in-depth exploration is needed to understand why organisations decouple (Greenwood, Raynard, Kodeih, Micelotta, & Lounsbury, 2011) and how to adapt to the decoupling phenomenon (Rogers et al., 2007) in the complex setting of embedding sustainability practices into multi-tier supply chains.

Furthermore, research suggests that institutional pressures may lead to heterogeneous responses rather than homogeneous consequences if conflicting institutional logics exist (Bhakoo & Choi, 2013). As such, the existence of conflicting institutional logics has been regarded as one explanation for decoupling (Meyer & Rowan, 1977). Institutional logics are termed as "assumptions and values, usually implicit, about how to interpret organizational reality, what constitutes appropriate behavior, and how to succeed" (Thornton, 2004, p. 70). The term "institutional logic" was introduced by Alford and Friedland (1985) and applied by several scholars in different contexts (Glover et al., 2014; Greenwood, Díaz, Li, & Lorente, 2010; Sayed et al., 2017).

Greenwood et al. (2010), for example, examined how multiple types of logic such as regional state logic, family logic and market logic may complement but may compete or conflict with each other, thus generating complex institutional contexts for the organisations. Within the sustainability context Glover et al. (2014) examined the role of institutional logics across the dairy supply chain, and found that economic logic (cost reduction and profit maximisation) competes with sustainability logic, which indicates challenges for implementing sustainability practices. Similarly, in their study, Sayed et al. (2017) found the role of a multiplicity of institutional logics (sustainability versus financial logic) across three tiers of food and catering supply chains. Moreover, Wilhelm et al. (2016, p. 43) examined the implementation of sustainability practices in multi-tier supply chains, finding that "suppliers operate in different contexts and are exposed to conflicting trade-offs that dictate efficiency and legitimacy concurrently". It is crucial to understand the trade-offs and synergies among the three pillars of sustainability (Caniato et al., 2012; Haffar & Searcy, 2017). More research is thus required to investigate under what environments such trade-offs may become synergies (from conflicting to complementing) (Haffar & Searcy, 2017; Sodhi & Tang, 2018), particularly in the context of upstream multi-tier suppliers (Sayed et al., 2017; Wilhelm et al., 2016).

In the context of this study, institutional theory allows the researcher to examine why and how multi-tier apparel suppliers might respond to the influence of the institutional pressures regarding the implementation of SSM practices, understanding the local ground-level realities, and competing logics concerning apparel suppliers' practices which may differ from inspected practices.

3.5.3 Contingency Theory

Contingency theory is one of the dominant theoretical perspectives applied to understanding organisational activities (Donaldson, 2001; Sousa & Voss, 2008). The evolution of contingency theory can be traced back to the 1960s through its seminal proponents including Burns and Stalker (1961), and Lawrence and Lorsch (1967). The underlying assumptions of contingency theory suggest that there is no 'universal approach' for effective management to attain high performance, but such management is derived from creating a fit between the characteristics of an organisation and its changing contextual factors (Donaldson, 2001; Lawrence & Lorsch, 1967; Sousa & Voss, 2008). Similarly, since organisations vary in terms of the activities and practices they implement as well as the external environment they confront, both organisation and management are influenced by internal and external variables such as organisational structure, size, culture, type of industry, market and technology (Donaldson, 2001; Luthans & Stewart, 1977; Sousa & Voss, 2008). Thus, organisations and their management adjust over time to uphold a fit with dynamic contextual factors to accomplish better operational and sustainability outcomes.

While contingency theory has traditionally been applied to examining issues in the fields such as leadership, strategic management and organisational structures, it has attracted significant attention recently in multi-tier supply chains and SSM literature (Furlan Matos Alves, Lopes de Sousa Jabbour, Kannan, & Chiappetta Jabbour, 2017; Sauer & Seuring, 2018; Wilhelm et al., 2016). For example, in their empirical study on seven Brazilian multinational companies, Furlan Matos Alves et al. (2017) have found four supply chain-related contingencies – new regulations, scarcity of resources, technological advances and extra costs – which are related to changes in the organisational structure of firms for better

carbon management and tackling climate change issues. In their research on the United Kingdom private sector, Walker and Jones (2012) applied contingency theory to develop a typology of approaches to SSCM based on a wide range of internal and external contingency variables. These variables include internal enablers (for example, top management commitment, employee involvement, culture, and organisational characteristics), external enablers (government policy, level of competition and influence of NGOs), internal barriers (resources, reputation, risk and organisational size) and external barriers (government regulation, buyers' and consumers' pressures for lower prices and media reporting).

Furthermore, in the context of multi-tier supply chains, Wilhelm et al. (2016, p. 196) argue that the implementation of multi-tier suppliers' sustainability practices depends on several contingency factors such as supply chain complexity and the sustainability management capabilities of the first-tier suppliers where they operate. In their review study of multi-tier supply chain literature, Tachizawa and Wong (2014) identify various key contingency variables such as power, stakeholder pressure, industry, dependency, distance, and knowledge resources that are influential regarding on the application of multi-tier suppliers' SSM governance. Despite the growing significance of contingency theory, its empirical application in the developing country multi-tier suppliers' SSM context needs further exploration (Hofmann et al., 2018; Sauer & Seuring, 2018). Accordingly, future work is much needed to investigate the context under which organisations are effective in more than organisational structures and practices (Sousa & Voss, 2008; Sauer & Seuring, 2018; Tachizawa & Wong, 2014). To this end, it is argued that the effective implementation of SSM practices across multi-tier suppliers is subject to context-dependent factors which can be informed by contingency theory along with other theories (Sauer & Seuring, 2018). As shown in Figure 3.2, all aspects of the multi-tier suppliers' SSM implementation framework –

drivers, barriers, mechanisms, SSM practices and outcomes – can be influenced by different contextual factors. Thus, in the context of this study, contingency theory can be a suitable theoretical perspective to understand why and how multi-tier apparel suppliers implement SSM practices.

3.5.4 Complementary Theoretical Perspectives

Based on the above discussion, the motivations and justifications for selecting three theoretical perspectives in the context of this study are presented in Table 3.2. The common underlying assumption between stakeholder theory and institutional theory is that organisations generate externalities (environmental impact) that affect different stakeholder groups, who in response will exercise institutional pressures over those organisations (Zhu, Sarkis, Cordeiro, & Lai, 2008). Similarly, within a sustainability and SCM context, Sarkis, Zhu, and Lai (2011, p. 9) argue that "stakeholders are usually closely aligned with social institutions…there are norms and legitimacy aspects of stakeholder theory that overlap with institutional theory". Some scholars also claim that stakeholder theory shares common views with institutional theory (Wahl & Bull, 2014) as it describes homogeneous isomorphism influencing suppliers' sustainability adoption (Acosta, Acquier, & Delbard, 2014).

However, some key challenges of stakeholder theory have appeared in the SCM literature. First, it "does not explain why stakeholders occasionally decide to punish firms in the absence of objective misconduct" (Busse et al., 2016, p. 314). Second, it does not analyse the conditions under which companies are likely to act in socially responsible ways vis-à-vis their stakeholders (Chkanikova & Mont, 2015). Finally, it cannot fully address issues beyond coercive pressures (Acosta et al., 2014). Against this context, institutional theory examines

Table 3.2: Justifications for selecting theoretical perspectives – A summary

Basis of Analysis	Integrative Stakeholder Theory	Institutional Theory	Contingency theory
Definition	Integrative stakeholder theory combines descriptive, instrumental and normative aspects, and advocates that an organisation will respond to the concerns and expectations of dominant stakeholder groups (Freeman, 1984; Hörisch et al., 2014).	Institutional theory provides a useful theoretical frame that aids in understanding how firms progressively respond to a combination of pressures from powerful factors and actors within their institutional field (DiMaggio & Powell, 1983).	Contingency theory suggests that there is no best way for effective management to attain optimal performance, but such management is derived from creating a fit between characteristics of an organisation and its changing contextual factors (Burns & Stalker, 1961; Donaldson, 2001; Lawrence & Lorsch, 1967; Sousa & Voss, 2008).
Prior Application in Sustainability, Supply Chain Management and other Domains	Widely used in management research, this theory has also been widely used in much empirical research on social and environmental issues. It offers potential to explore the phenomena relating to sustainability and supply management.	Widely used in sociology and organisational research, it has also been used in empirical research on social and environmental issues. The application in SSM-related empirical research is still increasing; hence it has significant potential in this study.	Widely used in leadership, strategic management and organisational structure research. The application of this theory in sustainability and SCM is evolving; hence it has significant potential in the context of this study.
Research Methods used	Content analysis, case studies, qualitative interviews or quantitative surveys can be applied.	Content analysis, case studies, qualitative interviews or surveys can be applied.	Case studies and qualitative interviews can be applied.
Criticisms	Cannot fully address issues beyond coercive pressures; Identifying the relevant stakeholders and suggesting stakeholder management practices without analysing the conditions under which companies are likely to act in socially responsible ways vis-à-vis their stakeholders.	Implicit tool (why firms adopt behaviours that conform to normative demands but conflict with the rational attainment of economic goals)	Lessons learned regarding contingency factors external to SSM implementation in a specific context may not be fully transferable to other supply chain contexts.
Relevant to this Thesis	Yes: It explains why multi-tier apparel suppliers implement SSM practices in their supply chains. Ethical and economic aspects of stakeholder theories are relevant to explore what motives induce factory management to integrate, and barriers that impede them from implementation, supply chain sustainability practices into these apparel supply companies.	Yes: It examines how multi-tier apparel suppliers might respond to the influence of institutional pressures regarding the implementation of sustainability practices. It is useful to understand the local ground-level realities, and competing logics concerning apparel suppliers' practices which may differ from inspected practices.	Yes: It examines why and how multi-tier apparel suppliers implement SSM practices. It can also be relevant in examining several aspects of multi-tier suppliers' SSM implementation – drivers, barriers, mechanisms, practices and outcomes – which can be influenced by different contextual factors.

both homogeneous pressures and decoupling factors that influence the implementation of multi-tier suppliers' SSM practices (Acosta et al., 2014; Busse et al., 2016; Chkanikova & Mont, 2015).

Furthermore, although institutional theory covers broad aspects of institutional pressures, it is mostly applied as an implicit tool (Suddaby, 2010). For example, why firms adopt behaviours that conform to normative demands but conflict with the rational attainment of economic goals (Suddaby, 2010). To overcome this challenge of institutional theory, the integrative stakeholder theory allows incorporation of descriptive, instrumental aspects along with the normative core of stakeholder theories in SSCM (Hörisch et al., 2014; Montabon et al., 2016). Thus, both theories can complement each other through leveraging benefits in the critical area in the sustainability and SCM literature (Islam & Deegan, 2008; Busse et al., 2016). Nevertheless, the implementation of sustainability practices is dependent on context-specific challenges, which may not be learned through understanding the issues and challenges of other contexts (Silvestre, 2015a). Against this background, some scholars argue that contingency theory could complement both stakeholder and institutional theoretical perspectives to understand context-dependent drivers for and barriers to SSM implementation (Hofmann et al., 2018; Sauer & Seuring, 2018; Sousa & Voss, 2008; Wilhelm et al., 2016). For example, Sauer and Seuring (2018, p. 569) suggest "the use of contingency theory to support the institutional theory" for understanding an SSM implementation framework from a developing country multi-tier supplier context. Thus, a combination of these three theories is required to explain the complexity involved in implementing multi-tier suppliers' SSM practices in GSCs. The selection of research methods in this study is compatible with the characteristics of the adopted theories and an abductive research approach, which are discussed in the following section.

3.6 Research Methods

Research methods are practical techniques applied to accumulate and analyse data related to particular research questions (Crotty, 2003). In particular, studies adopting a qualitative methodology use different non-statistical approaches such as narrative research, grounded theory, ethnography, discourse analysis, interviewing, focus groups and case studies (Creswell, 2014; Saunders et al., 2015). Guided by the interpretivist philosophy and adopting an abductive approach, qualitative interviewing was selected as the preferred research method to investigate the perceptions of multi-tier apparel business owners and managers for several reasons.

First, qualitative interviewing is a useful research method for comprehensively accessing individual insights and values that cannot be attained through a formal survey or observation (Patton, 2015; Silverman, 2013). Second, interviewing is widely used in interpretive research where the aim is to obtain rich, in-depth data on how individuals understand and give meaning to their perceptions, feelings and experiences (Arksey & Knight, 1999; Fontana & Frey, 2003). Third, within the context of the Bangladeshi apparel industry, interviews are considered to be the best technique for collecting empirical data, from the managers' perspective, regarding the diverse pressures on the apparel industry (Islam & Deegan, 2008). Finally, it is also argued that the qualitative interview method is an appropriate method for understanding complex issues involving temporal dynamics, intricacies and multiple levels of analysis in a comprehensive way (Denzin & Lincoln, 2011; Graebner et al., 2012). Thus, this research uses qualitative interviewing, as it provides access to specific themes and activities, particularly the implementation of multi-tier apparel suppliers' SSM practices by examining owners and managers' experiences and perspectives.

3.6.1 Sampling Plan and Selection of Participants

In qualitative research, an organised sampling plan is required for the researcher to validate each sample participant selected (Lee & Lings, 2008). Sampling plan decisions relate to identifying and selecting an appropriate unit of analysis such as an individual person, groups, organisation(s), industry, specific programmes and activities (Cavana et al., 2001). As this research examines the implementation of SSM practices across multi-tier apparel suppliers, this study focuses on one industry – the apparel industry – to minimise the extraneous effects such as regulations and economic settings. However, this study is limited to three-tier apparel suppliers (first-tier supplier–second-tier supplier–third-tier supplier) in the research setting of Bangladesh. Investigating more than a three-tier supply chain is a very long and complicated process as it is hard to identify and obtain data from further lower-tier suppliers (Bhakoo & Choi, 2013). Accordingly, these three tiers of Bangladeshi apparel suppliers' sustainability-related supply management strategies and practices have been chosen as the primary unit of analysis for this study. This is consistent with the aim and focus of this study, which is to examine why and how Bangladeshi multi-tier apparel suppliers implement SSM practices into their supply chains.

For this study, several criteria have been applied to select participants from Bangladeshi multi-tier apparel suppliers. The participants in this study were selected purposively (Patton, 2015) based upon several criteria recommended by Soundararajan & Brown (2016): first, their level of involvement and relevance to the research context (multi-tier apparel suppliers in Bangladesh); second, their level of awareness related to various aspects of SSM in the research context; third, practical accessibility; and fourth, their willingness to take part in the research process. The purposive sampling technique is deemed appropriate for qualitative

research since it requires participants from information-rich firms which illuminate the questions being investigated (Patton, 2015).

Interestingly, the majority of participants from first-tier suppliers are listed members of either BGMEA or the Bangladesh Knitwear Manufacturers and Exporters Association (BKMEA). Apparel industry associations such as BGMEA and BKMEA regularly monitor, advise, and provide information to the listed member suppliers and their respective managers regarding social responsibility and sustainability compliance requirements, strategies and practices. In addition, during interviewing, a snowball sampling technique suggested by Miles and Huberman (1994) was used to gain access to additional potential participants through interviewee referrals. For example, first-tier suppliers acted as referrals because of their direct connections with sub-contractors and accessory suppliers (second-tier and third-tier suppliers). Thus, apparel industry associations' database and interviewee referrals were used to select sample participants for this study.

3.6.2 Data Collection Methods and Sources

Data collection methods comprise techniques utilised for gathering data for analysis (Bryman & Bell, 2007). Both primary and secondary data were collected and considered in this study to generate multiple sources of evidence. Primary data was collected through face-to-face semi-structured interviews, which helped obtain rich and first-hand empirical data regarding the implementation of SSM practices. This was supplemented by multi-tier apparel factory visits, and where permitted, pictures and notes were taken. In addition, primary data in the form of semi-structured interviews were obtained from key informants from a wide range of stakeholders. Finally, available secondary data sources such as companies' codes of conduct,

the Accord's inspection reports, the Alliance's audit reports, government reports and news articles were used to triangulate and support the interview data.

3.6.2.1 Primary Data – Semi-structured Interviews

There are three different kinds of primary data collection methods used by researchers: structured, semi-structured and unstructured interviews (Arksey & Knight, 1999; Saunders et al., 2015). On the one hand, quantitative research uses structured interviews, which typically use standard formats, large samples, and fixed questions and responses to test theory or hypotheses (Saunders et al., 2015). On the other hand, qualitative research mostly applies unstructured and semi-structured interviews techniques, which jointly are better known as qualitative interviews (Arksey & Knight, 1999; Bryman & Bell, 2007; Saunders et al., 2015). Unstructured interviews generate comprehensive and varied data but lack focus and are often difficult to analyse (Arksey & Knight, 1999; Bryman & Bell, 2007). Alternatively, semi-structured interviews are flexible and permit a sense of standardisation (Saunders et al., 2015). Individual semi-structured interviews are particularly well suited to the qualitative abductive research approach (Soundararajan & Brown, 2016; Spens & Kovács, 2006), in particular to explore the complex phenomena in global apparel supply chains (Perry et al., 2015; Soundararajan et al., 2018). Therefore, semi-structured interviews were used as the approach for data collection in the present study with the purpose of examining managerial views regarding the implementation of multi-tier apparel suppliers' SSM practices.

3.6.2.1.1 Semi-structured Interview Guide

For the purpose of collecting data from sample participants, a semi-structured interview guide was developed based on the review of existing sustainability and supply management

literature (see Figure 3.1). This guide had a number of specific themes in relation to the research topic that each included a number of related questions. Generally, semi-structured interviews contain a list of predetermined open-ended questions and other questions emerging from the flow of conversation during interviews (Saunders et al., 2015). Within the context of exploring issues with an interview guide in GSCs, semi-structured interviews allow other varied questions to emerge from the flow of conversation between interviewer and interviewees (Andersen & Skjoett-Larsen, 2009; Soundararajan & Brown, 2016). The key aim is to permit flexibility for the interviewees, given their diverse backgrounds, experiences and work-related duties in their respective organisations. Although a detailed semi-structured interview guide is provided in Appendix 1, the sample themes within the interview guide in relation to the research questions of this study are highlighted in Table 3.3.

Table 3.3: A sample semi-structured interview guide in relation to the research questions

Themes/topics	**RQ1** Drivers for SSM implementation	**RQ2** Barriers to SSM implementation	**RQ3** Implementation mechanisms, pressures, decoupling and logics	**RQ4** Practices and Outcomes
Participants' demographics				
Company's general sustainability policies, practices, initiatives				√
Drivers, logics and outcomes for integrating SSM practices	√		√	√
Barriers or challenges to implementing SSM practices		√	√	
Implementation mechanisms, institutional pressures and complexities	√		√	

In order to improve in-depth understanding of the research topic, follow-up questions were asked to extend the on-going conversation, clarify any confusion and retrieve rich information from the participants. To obtain ease of understanding of the interview queries from the participants' viewpoint, this study also conducted pilot interviews. Pilot interviews were conducted to confirm usefulness in questioning (Saunders et al., 2015), as the juncture of sustainability and multi-tier suppliers is an underdeveloped research area (Grimm et al., 2016). To this end, the interview guide was initially discussed with three experienced academics and further validated with three participants in the field. Constructive feedback and insights received from these academics and interviewees helped the researcher to refine the questions in the interview guide.

3.6.2.1.2 Gaining Access to participants

Establishing preliminary communication with prospective participants and gaining access for an interview was a difficult task due to both personal and organisational constraints. For instance, one of the personal constraints was that some managers were suspicious about the research inquiry. Accordingly, there was a possibility of interviewees' social desirability bias due to the normative climate, especially in the wake of the Rana Plaza disaster. Several steps were taken to reduce the possibility of how interviewees may have been influenced by motives to represent themselves as in compliance with sustainability norms. First of all, targeted participants were assured their agreement to take part in the research process was optional. Second, an approach was followed to ask interviewees both positively and negatively worded questions during conversation. Third, referring to anonymity issues, interviewees were told that under no circumstances would their identities, positive and negative responses be revealed. Third, questions were phrased with caution to avoid socially

desirable responses rather than putting emphasis on a specific response. Finally, follow-up and probing indirect questions were asked of interviewees during open discussions. Thus, this research addressed interviewees' potential normative influences and carefully interpreted their responses in the empirical findings chapters.

Furthermore, some managers showed interest but did not agree to participate because of their other personal commitments. Regarding organisational constraints, several managers required formal permission from their superiors to take part in research. Additionally, it was challenging to obtain time for an interview due to the busy work schedules of apparel company owners and managers. For example, some managers confirmed their participation in this research after two months of repeated communications. Therefore, the process of finding relevant participants and gaining their consent proved to be time-consuming and tedious.

Once the relevant participants from the sample suppliers were identified, the researcher applied several approaches for recruiting interviewees. First, the main aim was to get the relevant interviewee's contact email address from the apparel suppliers of BGMEA and BKMEA, whose membership lists are accessible by the public. Second, the corporate websites of these listed suppliers in Bangladesh were also used to locate the contact phone numbers of relevant participants. Third, social networking websites such as Facebook and LinkedIn were utilised to recruit potential research participants since these forums are a very useful way to get personal and professional information about participants. Finally, the personal connections of the researcher played a vital role in soliciting interviewees for this research. Thus, a database was finally prepared, with the contact details of the potential participants from the respective apparel suppliers and other relevant stakeholders.

After identifying the relevant potential participants and their contact details, a total of 84 formal invitations were sent via email to top and mid-level managers: seeking their participation in the interviews, introducing the research project, and including an information sheet and consent letter. Those who did not respond to the initial email were sent a reminder, followed by a phone call, after one week. Once the relevant participants had agreed to participate, appointments were made for the interviews. During this recruitment process, direct telephone calls worked better than sending emails. It is also interesting to note that a significant number of participants from multi-tier suppliers agreed to participate through referrals.

3.6.2.1.3 Interview Procedure and Real-life Data Collection Phases

Qualitative data were collected primarily in the form of face-to-face in-depth semi-structured interviews with various owners and managers, as it has been argued that face-to-face interviews allow researchers to witness non-verbal cues, including body language and the facial expressions of the sample respondents (Seidman, 2006). Interviewees were given the option to be interviewed in either Bengali (the national language) or English. All interviews, except for one in English, were conducted in Bengali because most interviewees were comfortable speaking Bengali. Interestingly, some interviewees opted to speak in a mixture of Bengali and English in response to semi-structured questions. Accordingly, interviews began with semi-structured questions about each participant's background and then moved on to open dialogue following several open-ended questions focused on participants' thoughts about, interpretations of and experiences with the issues of drivers, challenges and pressures regarding implementation of SSM practices in GSCs.

Real-life data collection from sample participants took place in Dhaka city, Gazipur, Chittagong city, and Narayangonj – the most important apparel exporting regions in Bangladesh – from late March to June 2017. The data collection process was conducted in three phases. During the first phase, a pilot field study was conducted consisting of interviews with three managers over two weeks, which provided the opportunity to amend and improve the interview guide and schedule (Saunders et al., 2015). Personal networks in the apparel sector were used for identifying the pilot interviewees.

This pilot study was followed by the second data collection phase, consisting of 46 semi-structured interviews with owners and managers: 23 respondents from first-tier suppliers, 16 participants from second-tier suppliers, and 7 from third-tier suppliers (see Table 3.4). In the apparel industry, these multi-tier apparel suppliers are involved in different manufacturing activities (for example, dyeing, washing, weaving, finishing, cutting, sewing and making accessories) for the major European and North American buyers. The participants hold a variety of positions (for example, compliance manager, sustainability manager, business owner, human resources manager and administrative manager). Prior studies have suggested that the activities and attitudes of owners alongside senior and middle-level managers can play a vital role in implementing firms' SSM practices in their GSCs (Islam & Deegan, 2008; Perry et al., 2015). The interview process with participants from each tier ended when responses became repetitive (Soundararajan & Brown, 2016; Strauss & Corbin, 1998). Some researchers have argued that data redundancy can be achieved in as few as 6 to 12 qualitative interviews (Ando, Cousins & Young, 2014; Guest, Bunce & Johnson, 2006). However, "there are no magic formulas for determining sample size" in qualitative research (Braun et al., 2019, p. 851). Hence, the subjective view was applied in this study "to judge whether the

information generated by participants offers something new or not" (Braun et al., 2019, p. 851).

During the third phase of data collection, a total of 15 in-depth "key informant context interviewing" (Perry et al., 2015, p. 742) sessions were conducted with a wider range of relevant institutional actors who have an influence on SSM implementation (see Table 3.5). The major stakeholder groups and institutional actors of trade unions, government officials, industry associations, the media, NGOs, academia and civil society organisations were recruited as participants. In addition, an informal discussion with eight workers was conducted to explore the perception of their respective factory's sustainability activities and initiatives. The positions of the workers were support staff (of machine operators), operators and supervisors who had 2 years to 14 years work experience. This key informant context interviewing is consistent with prior research on sustainability implementation in GSCs that has stressed the significance of collecting the comprehensive viewpoints of a complete group of institutional actors surrounding the supply organisations such as government agencies, NGOs, donor agencies, civil society organisations, academics and media (Pagell & Shevchenko, 2014; Perry et al., 2015; Soundararajan & Brown, 2016).

A total of 61 interviews were audio-recorded with the interviewee's consent, except for two cases where the participants did not agree to record the discussion. It is important to note that one interview from an apparel supplier was not included from the sample due to its brevity and inadequate significance to this research. However, all interviews were supplemented by comprehensive field notes. The interviews ranged in length from approximately 30 to 90 minutes, and were transcribed for data analysis.

Table 3.4: Profile of the participating multi-tier suppliers in the apparel supply chains

Supplier's Position in the Supply Chain	Products and services	Major Buyers (in terms of zone)	Size (approx. no. of workers)	Position of interviewee	Year of Experience	Length of interviews	Reference Mnemonic
Tier 1 Supplier 1	Full-packaged (Bottoms, Fleece jackets, Knit, Sportswear, Swim shorts)	North American and European Buyers	7360	Deputy General Manager, Head of Compliance	17 years	44 minutes	T1-S1
Tier 1 Supplier 2	Full-packaged (Knits, Woven Tops and Bottoms for men, women and children)	North American, European and Australasian Buyers	7200	General Manager, Compliance and Industrial Safety	25 years	44 minutes	T1-S2
Tier 1 Supplier 3	Full-packaged (Jackets, Sportswear, Vest, Pants)	North American and European Buyers	14234	Manager, Compliance	18 years	82 minutes	T1-S3
Tier 1 Supplier 4	Full-packaged (Woven apparel and textile products and other services including logistics)	North American and European, and Asian Buyers	15200	Assistant manager, Compliance Team Leader, Compliance and Sustainability	9 years 18 years	32 minutes 28 minutes	T1-S4-1 T1-S4-2
Tier 1 Supplier 5	Full-packaged (Polo shirts, T-shirts, Sweat Shirts, Jackets, Basic Shirts, Trousers, Boxers, Underpants)	North American, European, Australasia and Asian Buyers	25000	Senior General Manager, Admin., Human Resource (HR) and Compliance General Manager, Admin., HR and Compliance	19 years 10 years	54 minutes 58 minutes	T1-S5-1 T1-S5-2
Tier 1 Supplier 6	Full-packaged (Apparel and textile products)	North American, European and Asian Buyers	30000	Deputy General Manager, HR and Compliance Executive Director, HR and Compliance Manager, Environment, HR and Compliance	17 years 20 years 5 years	57 minutes 65 minutes 47 minutes	T1-S6-1 T1-S6-2 T1-S6-3
Tier 1 Supplier 7	Full-packaged (Intimate Apparel e.g. underpants, Bras, Bikinis, Sleepwear, and Knit dresses and tops, Thermal set, Ladies' shirts, Boxers)	North American Buyers	17000	General Manager, Quality Assurance and Compliance	27 years	94 minutes	T1-S7
Tier 1 Supplier 8	Full-packaged except accessories (Knitting, dyeing, cutting, sewing, and finishing knitwear for men, women and children)	European Buyers	1530	Assistant Executive, Compliance Manager, HR and Compliance	6 years 11 years	37 minutes 10 minutes	T1-S8-1 T1-S8-1

Tier 1 Supplier 9	Full-packaged (Woven, knit and flat knit, Denim trousers, Denim jackets, Vests, skirts)	European Buyers	7315	Head of CSR	17 years	51 minutes	T1-S9
Tier 1 Supplier 10	Full-packaged (Denim bottoms, Twill pants, shorts, Denim western jackets, Cargo shorts)	North American and European Buyers	14000	Manager, HR and Compliance	12 years	57 minutes	T1-S10
Tier 1 Supplier 11	Limited-packaged (Cutting, sewing, and finishing woven items such as tops and bottoms)	North American and European Buyers	4000	Manager, HR corporate	6 years	46 minutes	T1-S11
Tier 1 Supplier 12	Limited-packaged (Cutting, sewing, and finishing woven items)	European Buyer	430	Head of HR, Compliance and Accounts	14 years	62 minutes	T1-S12
Tier 1 Supplier 13	Full-packaged except accessories (Denim & non-denim woven bottoms for children, men, and women)	North American, European and Asian Buyers	1900	General Manager, Admin., HR and Compliance	15 years	79 minutes	T1-S13
Tier 1 Supplier 14	Full-packaged (Formal and casual shirts for men, ladies blouses)	European and Asian Buyers	8300	Senior Manager, Admin and Compliance	17 years	40 minutes	T1-S14
Tier 1 Supplier 15	Full-packaged (Men's formal suits and denim pants, sweaters)	North American and European Buyers	20000	Chief Operating Officer Manager, Compliance	12 years 10 years	41 minutes 89 minutes	T1-S15-1 T1-S15-2
Tier 1 Supplier 16	Limited-packaged (Cutting, sewing and finishing woven bottoms and jackets)	European and Asian Buyers	1720	Assistant Manager, HR and Compliance	9 years	57 minutes	T1-S16
Tier 1 Supplier 17	Full-packaged (Men's and women's woven jeans, jackets, trousers, Bermuda shorts)	North American, European and Asian Buyers	30000	Assistant General Manager, Sustainability	15 years	75 minutes	T1-S17
Tier 2 Supplier 1	Accessories (Nylon, plastic and metal zippers, sewing thread, buttons).	Tier 1 Supplier 13 and other T1 Suppliers (European Buyers' nominated)	550	Assistant General Manager, Admin. and Compliance	14 years	51 minutes	T2-S1
Tier 2 Supplier 2	Accessories (Apparel label solutions)	Tier 1 Supplier 14 and other T1 Suppliers (North American and European Buyers' nominated)	188	Manager, Compliance Manager, Customer Service and Business Development	10 years 13 years	38 minutes 58 minutes	T2-S2-1 T2-S2-2

Tier 2 Supplier 3	Accessories (Printing, packaging, embroidery, poly and elastic)	Tier 1 Supplier 4 and other T1 Suppliers (North American and European Buyers' nominated)	150	Head of Marketing, Second-generation Owner	4.5 years	46 minutes	T2-S3
Tier 2 Supplier 4	Apparel washing facility	Tier 1 Supplier 16 and other T1 suppliers	400	Manager, HR and Compliance	13 years	56 minutes	T2-S4
Tier 2 Supplier 5	Knit composite	Tier 1 Suppliers and Small-sized European Buyers	140	Business Owners	12 years	55 minutes	T2-S5
Tier 2 Supplier 6	Knit composite	Tier 1 Suppliers	576	Manager, HR and Admin.	10 years	36 minutes	T2-S6
Tier 2 Supplier 7	Textile (Fabrics, dyeing and finishing)	Tier 1 Suppliers	550	Manager, HR, Admin. and Compliance	12 years	46 minutes	T2-S7
Tier 2 Supplier 8	Textile (Fabrics, dyeing and finishing)	Tier 1 Suppliers (Buyers' nominated)	400	Manager, HR, Admin. and Compliance Managing Director	10 years 22 years	64 minutes 36 minutes	T2-S8-1 T2-S8-2
Tier 2 Supplier 9	Apparel woven items, subcontractor	Tier 1 Suppliers	300	Managing Director, Second-generation Owner Commercial Manager	11 years 12 years	27 minutes 31 minutes	T2-S9-1 T2-S9-2
Tier 2 Supplier 10	Textile (Fabrics, dyeing and finishing)	Tier 1 Suppliers (North American and European Buyers' nominated)	4000	Assistant General Manager	9 years	48 minutes	T2-S10
Tier 2 Supplier 11	Textile (Knit fabrics, dyeing and finishing)	Tier 1 Suppliers	315	Manager, HR & Compliance Executive, HR and Welfare Assistant General Manager, Commercial	13 years 3 years 18 years	56 minutes 16 minutes 19 minutes	T2-S11-1 T2-S11-2 T2-S11-3
Tier 3 Supplier 1	Grey fabrics subcontractor	Tier 2 Suppliers	23	Business Owner	8 years	34 minutes	T3-S1
Tier 3 Supplier 2	Colour and Accessories	Tier 2 Suppliers	24	Manager, Dyeing Business Owners	14 years 16 years	23 minutes 40 minutes	T3-S2-1 T3-S2-2
Tier 3 Supplier 3	Grey fabrics	Tier 2 Supplier 7 and other T2 Suppliers	100	Business Owner	22 years	47 minutes	T3-S3
Tier 3 Supplier 4	Grey fabrics subcontractor	Tier 2 Local Suppliers	99	Chief Executive Officer	7 years	38 minutes	T3-S4
Tier 3 Supplier 5	Grey fabrics	Tier 2 Supplier 8 and other T2 suppliers	150	Senior Merchandiser Manager, HR and Admin.	7 years 27 years	47 minutes 37 minutes	T3-S5-1 T3-S5-2

Table 3.5: Profile of the participating stakeholder groups

Name of the Stakeholder Groups	Products and Services	Position of interviewee	Year of Experience	Length of interviews	Reference Mnemonic
European Branded Buyer 1	Outdoor jackets, woven bottoms and denim, circular knits, sweaters, shirts, blouses, socks, gloves, underwear, scarves and caps	Manager, Corporate Social Responsibility (Liaison Office)	8 years	77 minutes	B-1
European Branded Buyer 2	Fashion clothing, shoes, accessories, and cosmetics	Ethical Compliance Manager (Liaison Office)		64 minutes	B-2
Third-party Auditor 1	Assessment and auditing on behalf of buyers and certification bodies	Lead Auditor	19 years	65 minutes	TPA-1
Third-party Auditor 2	Assessment and auditing of suppliers' social issues including health and safety on behalf of European buyers	Compliance Auditor	6 years	57 minutes	TPA-2
European Development Agency (Non-profit organisation)	Provide technical aids to develop knowledge and skills of mid-level managers through training, and promote governance and sustainability standards in apparel sector and SMEs	Technical Advisor	9 years	70 minutes	DA
International NGO	Strengthen a participatory social movement to promote good governance and combat corruption	Assistant Programme Manager, Research and Policy	7 years	58 minutes	NGO
Higher Education Institute	To provide specialised education and build knowledge and skills in apparel and textile sector	Pro-Vice Chancellor	6 years (as a Pro-VC)	46 minutes	HEI
Public Regulatory Agency	Inspection and monitoring to ensure workplace health and safety, workers' rights and good living conditions as per laws	Deputy Inspector General Joint Inspector General	25 years 30 years	78 minutes 59 minutes	PRA-1 PRA-2
Supranational Organisation	Influence regulatory agency, and arrange various training sessions and build capacity to improve working conditions in the apparel and textile sector	Training Officer	12 years	69 minutes	SO
Local Media	Publicity and reporting apparel and textile related news	Executive Editor	12 years	55 minutes	LM
Trade Unions 1 (Global)	To protect the interests of workers across a multinational company's operations	President, Bangladesh	39 years	67 minutes	TU-1
Trade Unions 2 (Local)	To protect the interests of workers across business organisations	President	30 years	48 minutes	TU-2
Industry Associations 1	To promote and facilitate the apparel industry through policy advocacy to the government, services to members, ensuring sustainability standards at factories.	Joint Secretary, Trade Promotion	8 years	68 minutes	IA-1
Industry Associations 2	Offer services to strengthen the sustainable capacity building process and ensure quality to address the worldwide tastes and demands.	Assistant Joint Secretary, Research and Development	5 years	32 minutes	IA-2
Workers	To explore the perception of their respective factory's sustainability activities through an informal discussion with eight workers	Support Staff (of Machine Operators), Operators, Supervisors	From 2 years to 14 years	54 minutes	WD

3.6.2.2 Secondary data

Secondary data were collected from multiple sources, e.g., company websites, news articles, companies' internal documents, annual reports, and CSR and sustainability reports related to the apparel industry, to triangulate and support interview data. In addition, this study used trade association publications, donor agency research reports, NGO reports and government and auditor inspection reports related to the apparel industry to gain a better understanding of social and environmental regulations and trade facilitating initiatives. Multiple data sources contribute to the sense-checking of information collected and improve research quality and rigour by using the data triangulation approach (Jamali et al., 2017; Perry et al., 2015). This was essential, as the records of publicly available inspection reports and several first-tier suppliers' CSR and sustainability reports were investigated to validate information gathered from the qualitative interviews.

3.7 Data Analysis

Data analysis in qualitative research encompasses a systematic process of identifying, transcribing and organising data, synthesising data into meaningful pieces and assigning codes or themes to the pieces that have shared topics and then discussing these thematic findings through tables and illustrations (Creswell, 2014; Miles, Huberman, & Saldana, 2014). Research shows that a variety of techniques have been used to analyse qualitative data such as analytic induction (Bryman & Bell, 2007), grounded theory (Glaser, 2014; Strauss & Corbin, 1998), content analysis (Joffe & Yardley, 2004) and thematic analysis (Braun & Clarke, 2006; Braun et al., 2019). However, there are no universally agreed logical rules of thumb by which a particular qualitative data analysis approach can be chosen and utilised for a particular research problem (Bryman & Bell, 2007; Creswell, 2014). Despite this fact,

Miles and Huberman (1994, p. 12) claimed that qualitative data analysis as an iterative process involves three key components: “data reduction”, “data display” and “conclusions drawing”. Following the argument of Miles and Huberman (1994) regarding the qualitative data analysis process, Braun and Clarke (2006, p. 79) have offered a foundation technique for qualitative interviews which is “thematic analysis”.

“Thematic analysis is a method for identifying, analysing, and reporting patterns (themes) within data” (Braun & Clarke, 2006, p. 79). In relation to thematic analysis, Braun and Clarke (2006, p. 84) claimed that the data analysis goes beyond the surface-level content of the data to “identify or examine underlying ideas, assumptions and conceptualisations – and ideologies – that are theorised as shaping or informing the semantic content of the data”. The theoretical thematic analysis method is “both theory and analyst-driven” (Soundararajan & Brown, 2016, p. 91), and is appropriate to better understand the complex matter of this research inquiry. Thus, for data analysis, this research followed the procedures of the thematic analysis method suggested by Braun & Clarke (2006).

Thematic analysis was deemed suitable for this study for several specific reasons. First, thematic analysis provides the researcher with a flexible and useful analytical tool (Braun & Clarke, 2006) for identifying and analysing perceptions and experiences of owners and managers regarding multi-tier apparel suppliers’ SSM implementation. As this study applied the qualitative interviewing method, thematic analysis is a very useful technique to create meaning by examining line by line the transcribed interview conversations with varied participants from companies. Second, thematic analysis usually “provides a rich, and detailed, yet complex, account of data” (Braun & Clarke, 2006, p. 78). More specifically, it often draws on not only the explicit meaning of the manifest content of data but also the underlying ideas of the latent data (Joffe & Yardley, 2004). Third, thematic analysis allows

the researcher to determine themes in a number of ways as long as the selected themes are salient for the research purpose (Joffe & Yardley, 2004). Fourth, thematic analysis permits the researcher to combine analysis of the frequency of instances (number of citations) with their meaning within the particular context, thus adding to the advantages of the precision and complexity of qualitative analysis approaches (Braun & Clarke, 2006; Joffe & Yardley, 2004). Finally, thematic analysis supports qualitative data analysis using the abductive approach, a combination of inductive and deductive coding processes (Graebner et al., 2012).

Within the context of sustainability and SCM issues, thematic analysis is increasingly becoming an effective qualitative data analysis tool since it offers flexibility to analyse detailed accounts of textual data using a step-by-step framework in supply chain sustainability research (Sodhi & Tang, 2018; Soundararajan & Brown, 2016). According to Braun and Clarke (2006), thematic analysis comprises six steps that must be followed to conduct data analysis in qualitative research. As shown in Table 3.6, these steps are: familiarisation with the data, followed by generating initial codes, searching for themes, reviewing themes, defining and naming themes, and finally, producing the report. These steps or phases correspond well with the nature of this study, presenting the ideal flexibility to identify, analyse and compare various perspectives on the relatively poorly-understood area of SSM implementation from Bangladeshi multi-tier apparel suppliers' viewpoints. Accordingly, these general phases were applied in this study.

Table 3.6: Phases of thematic analysis, adopted from Braun & Clarke (2006, p. 87)

Phase(s)	Description of the process
1. Familiarizing yourself with your data	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2. Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5. Defining and naming themes	On-going analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

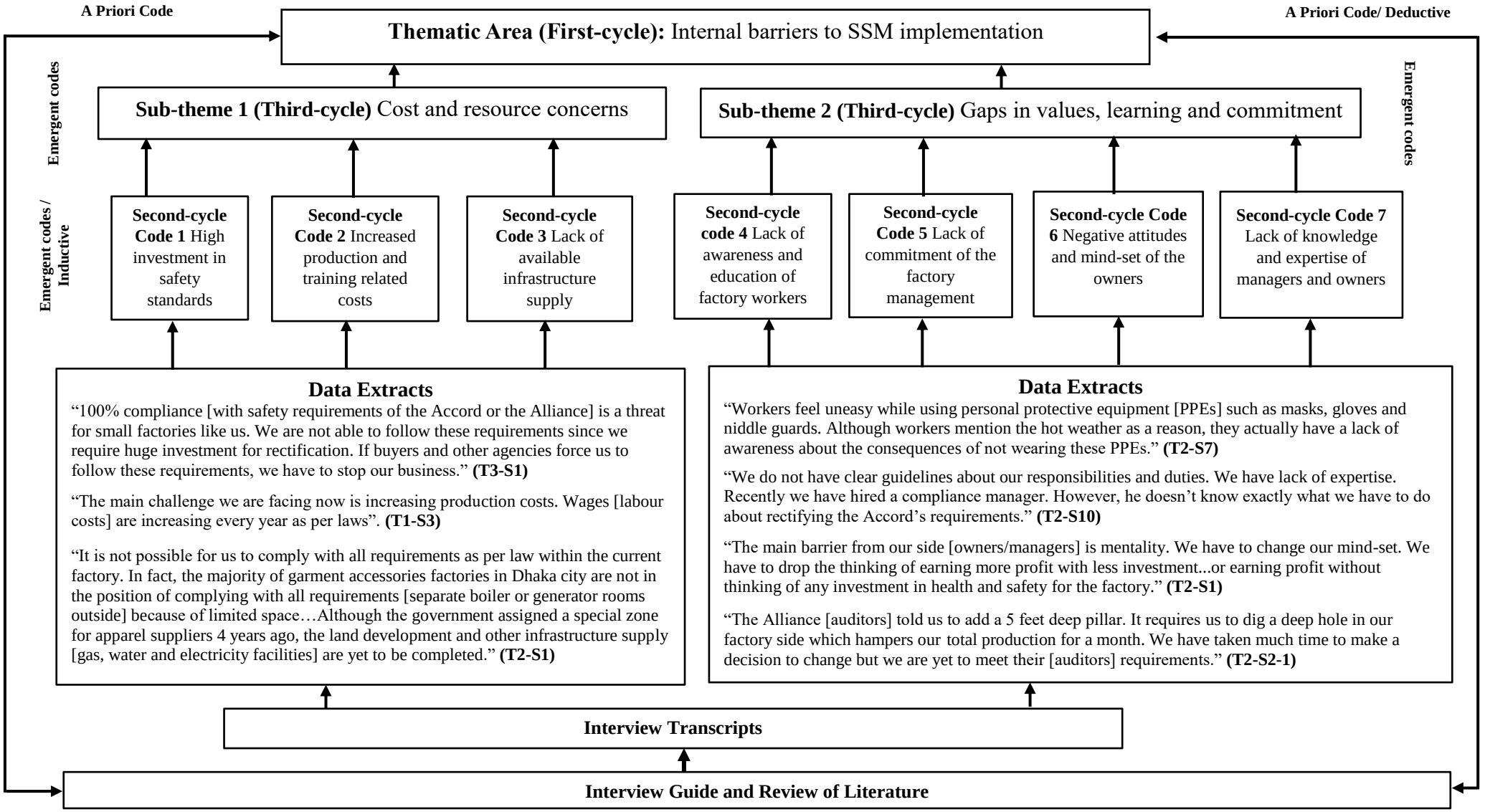
In the first stage, all the interviews were transcribed word by word and organised individually in file folders (in Microsoft Word as well as Excel formats) for better data management. Additional data from the other sources was also added to the database. Once the data including all transcripts was ready, the researcher read and re-read the complete account of data line by line and word by word. Then, important memos and notes were taken to ensure data familiarisation.

The second stage is concerned with the generation of initial codes from the rich data, particularly the transcripts. Saldana (2016, p. 4) defines a code in qualitative analysis – the product of the coding process – as "a word or short phrase that symbolically assigns a summative, salient and essence-capturing" attribute to a portion of related data. An initial code can be either divided into more different codes or combined with other codes (Braun et al., 2019). According to Braun and Clarke (2006), there are different ways of developing

initial codes but codes are either inductive/data driven (generated from raw data without any prior knowledge from the literature) or deductive/theory driven (generated from the prior theories and literature). Moreover, Wilson (2014) proposed a hybrid approach which is useful for the researcher to leverage the benefits of two approaches in the coding process: emergent coding and a priori coding. According to Wilson (2014), emergent coding deals with the development of themes through systematically analysing the empirical data whereas a priori coding deals with exploring themes before data analysis using prior theories and literature. In a similar vein, Miles et al. (2014) suggest a flexible coding process where codes are deductively derived from the semi-structured interview protocol and the literature review, adding inductive codes as the analysis continues. Such a descriptive first-cycle coding process could help initially summarise segments of data from the transcripts (Miles et al., 2014) to generate themes. Although many studies using qualitative data label their analyses as inductive, "in reality many researchers use a blend of inductive and deductive processes" (Graebner et al., 2012, p. 281). Accordingly, this study explicitly adopted a blended and flexible coding process for data analysis.

The initial codes or a priori codes such as drivers for SSM implementation are derived from the systematic review of literature and the interview guide while emergent codes such as high investment in safety standards emerged from the data extracts and interview transcripts. Figure 3.4 shows a flexible and blended data coding and analysis process through taking an extract of data from the interview transcripts (see also Appendix 6). At this stage, a total of 187 codes emerged from the data extracts and no key theme was defined then, because the number of codes was still large and there was room for further refinement to reduce the number.

Figure 3.4: An illustration of the data coding and analysis process used in this Study



The third stage is concerned with searching for themes based on reducing or merging initial codes. To ensure a more meaningful search for themes as well as more analytical coding, initial codes with similar connotations and applications were merged. Following these processes, the total number of codes came down to 117 for the purpose of searching for sub-themes. According to Miles et al. (2014), this process is known as second-cycle coding based on first-cycle coding, which involved developing inferential pattern codes that capture emergent themes.

The fourth stage is concerned with reviewing themes. At this stage, all emergent themes were reviewed again and repeated pattern codes or themes were merged or removed. After reviewing all pattern codes, a total of 30 sub-themes (third-cycle) and 9 key themes were finally drawn from the data extracts.

The fifth stage of thematic analysis deals with defining and naming themes. To generate rich, thick characterisations of the properties of these themes or categories, all relevant data was used to populate them. This allows for detailed analysis through defining and naming specific themes, particularly where participants discuss the same themes in different ways. The overview sections of the three findings chapters (4, 5, and 6) report and define all final key themes of this study. Finally, the theoretical constructs and their resulting pattern codes and key themes with respect to each tier of apparel suppliers are elaborated in separate sections of the findings chapters. Selected vivid and compelling comments from the participants are highlighted and discussed. These thematic findings, where appropriate, are compared with the existing relevant literature with the aim of contributing to the theory and its practical implications for apparel suppliers, managers, and policy-makers. In order to improve the presentation of reported findings, a

number of tables and figures are also used to illustrate the identified key themes. It is important to note that although there are step-by-step procedures for analysing data in thematic analysis, "it is [a] more recursive process", where a researcher is moving back and forward throughout the stages as required (Braun & Clarke, 2006, p. 86). The following section describes the required measures which were taken to establish research rigour in this study.

3.8 Research Rigour

It is imperative that research rigour such as validity and reliability is maintained in qualitative research procedures with the aim of ensuring confidence in the research findings and conclusions (Bryman & Bell, 2007). Reliability refers to the consistency in the research procedures such as the data collection or analysis techniques so that they can be repeated with the same results (Creswell, 2014). Validity "refers to the correctness or credibility of a description, conclusion, explanation, interpretation, or other sort of account" (Maxwell, 2013, p. 122). However, consistency and correctness in the sense of generalisability and reproducibility are unlikely in qualitative research because of the contextual and subjective impressions of the research inquiry (Creswell, 2014). In this regard, qualitative researchers have suggested four criteria – credibility, dependability, conformability and transferability – for ensuring trustworthiness and judging the rigour of qualitative research (Bryman & Bell, 2007; Lincoln & Guba, 1985; Miles et al., 2014).

One of the key criteria for assessing qualitative research rigour is credibility. Credibility refers to the authenticity of the findings (Lincoln & Guba, 1985). The findings should be clear, coherent and logically unified (Bryman & Bell, 2007; Miles et al., 2014). Following these criteria, the

findings display context-rich evidence, verbatim comments and careful consideration of alternative explanations. In addition, the findings discussions include tables and diagrams across multi-tier supplier levels with the aim of comparing data from a range of participants' viewpoints.

Another criterion for checking research rigour is dependability which is concerned with the consistency and repeatability of the research findings (Lincoln & Guba, 1985; Miles et al., 2014). In this regard, there needs to be a consistent audit investigation to establish the correctness of supporting evidence (Lincoln & Guba, 1985). Following this condition, this study documented all evidence, steps and measures taken throughout the data collection and data analysis process. For example, the researcher documented a total of 61 interview transcripts, except for one participant who did not agree to be recorded; however, in that case the researcher took detailed field notes. Moreover, this study used a semi-structured interview guide, which was discussed with three experienced academics and three of the interviewees for checking codes and maintaining consistency. Furthermore, all emergent themes were then evaluated against Patton's (2015) two criteria for judging groupings to affirm internal homogeneity (whether emergent themes comprised coherent data) and external heterogeneity (whether there was a clear distinction between each emergent theme). As recommended by Braun and Clarke (2006), internal heterogeneity was achieved through reviewing the emergent themes many times to confirm their consistency. External heterogeneity was achieved through reviewing all the emergent themes again to verify their uniqueness. Then, the assembled data extracts under each theme were rearranged into theoretically relevant categories that explained drivers, barriers,

institutional pressures, logics, practices and performance regarding multi-tier suppliers' SSM implementation.

The conformability criterion can be recognised as a degree of neutrality or the extent to which the findings of a study are formed by the participants and not researcher bias (Bryman & Bell, 2007; Lincoln & Guba, 1985; Miles et al., 2014). One of the key approaches for establishing conformability is 'audit trials', which are performed to preserve a record of what was done in the inquiry (Lincoln & Guba, 1985). To establish conformability in the context of this study, a rigorous step-by-step data collection and analysis process was followed. For example, this study applied the step-by-step thematic analysis framework of Braun and Clarke (2006) for initial coding, generating themes and their relationships, and interpreting the reported findings from the entire set of empirical data.

The final criterion for evaluating research rigour is transferability, which refers to whether particular findings can be generalised in other contexts (Bryman & Bell, 2007; Lincoln & Guba, 1985; Miles et al., 2014). In most qualitative research, the transferability of the findings can be challenged since complex issues such as the management and implementation of SSM practices in developing countries are highly contextual in nature (Silvestre, 2015a; Soundararajan et al., 2018). However, thick description is described by Lincoln and Guba (1985) as a way of obtaining transferability in qualitative research. They also argued that thick description involves explaining a phenomenon in adequate detail so that one can start to assess the extent to which the findings and conclusions drawn are transferable to other research settings. Following this criterion, a rich illustration of the research settings and interpretation of the research findings were provided to the reader in detail to allow evaluation of their appropriateness. Moreover, data

were collected from diverse sample participants to ensure broader applicability. For example, selected sample participants from different types (first-tier full-package suppliers vs. third-tier accessories suppliers) and sizes (small vs. large) of apparel suppliers located in Bangladesh. A summary of the criteria adopted to achieve research rigour is displayed in Table 3.7.

Table 3.7: The criteria adopted to achieve research rigour

Criteria	The criteria adopted in this study to achieve research rigour
Credibility	• Data Triangulation - Interviews with apparel firm owners and managers, factory visits - Document analysis from various secondary sources - Interviews with diverse stakeholder groups • Used multiple theoretical perspectives to examine and interpret the data • Presented context-rich explanations and verbatim comments with the purpose of providing enough details to the reader • Created tables and diagrams with the aim of comparing data from a range of institutional participants
Dependability	• Recorded and transcribed all 61 interviews, except for two participants who did not agree to be recorded; however, took detailed field notes • Used a semi-structured interview guide for maintaining consistency • All emergent themes were evaluated to confirm internal homogeneity and external heterogeneity. • Peer examination - The interview guide was discussed with three experienced academics and three of the interviewees of this study. • Documented all evidence, steps and measures taken throughout the data collection and data analysis process
Conformability	• Complete picture of the step-by-step data collection and analysis process provided - Coding process and generating themes, definitions, and relationships • Used multiple sources of evidence - Integrated diverse viewpoints of key knowledgeable institutional informants - Incorporated relevant and context-rich secondary data
Transferability	• Research findings compatible with and related to extant literature • A rich illustration of the research settings and interpretation of the research findings for evaluating its appropriateness to the reader in detail, also known as thick description • Diverse sampling frame to ensure broader applicability - Selected sample participants from different types (first-tier full-package suppliers vs. third-tier accessories suppliers) and sizes (small vs. large) of apparel suppliers located in Bangladesh. - These suppliers had different global buyers (small vs. large branded retailers or trading companies) from different countries (Europe vs. North America).

3.9 Ethical Considerations

The research was designed in accordance with Massey University's Code of Ethical Conduct for Research, Teaching and Evaluations involving Human Participants. This is because ethical issues are very important in social science research. Moreover, ethical approval must be given prior to data collection as a requirement of Massey University. An application was submitted after discussion with my primary supervisor to review risk factors, based on Massey University's Code of Ethical Conduct for Research, Teaching and Evaluations involving Human Participants. Accordingly, ethical approval was obtained from the Ethics Committee (see Appendix 2). This project was evaluated by peer review and judged to be low risk. Although it was low-risk research, the researcher was concerned with several ethical issues, such as informed consent and the protection of confidentiality of the participants and organisations.

Participants were informed about the terms and conditions of their participation. Initially, an invitation letter was sent through email or presented in person to all participants, stating the title and purposes of the research project and the value of interviewees' participation to the body of knowledge and management practices (see Appendix 4). Interviewees were also informed in the invitation letter about the approximate time required to participate in the study. An information sheet (see Appendix 3) and consent form (see Appendix 5) were given to each participant at the time of their interview. Participants were asked to sign a consent form to confirm their voluntary participation in the study. Participants' rights were clearly mentioned on the consent form and information sheet, such as the audio-recording of the interview (if an interviewee agreed), freedom to withdraw from the interview at any time or ask for the recorder to be turned off at any time, the

right to ask questions or express doubts, the right to refuse to respond to any particular questions, confidentiality of collected information and anonymity of participants.

3.10 Conclusion

This chapter discussed two fundamental aspects of the study – the research methodology and the theoretical framework. The systematic review of extant literature suggests the integration between sustainability and supply management. However, little is known about the drivers, barriers, pressures, logics and decoupling issues behind the implementation of SSM practices and performance at multi-tier supplier level in a challenging institutional context. The objective of this study is to reduce this knowledge gap by empirically investigating why and how multi-tier apparel suppliers implement SSM practices into their supply chains.

This chapter introduces a discussion of the philosophical considerations of the research methodology and approach employed in this study. In particular, this study took the perspective of a subjective view of social reality, underpinned by an interpretivist paradigm where participants apply their subjectivity to events and experience reality in different ways. An exploratory research design was found suitable due to the nature of the research questions as well as to collect rich information with a view to deep insight development. A qualitative methodology was chosen as research evidence suggests that given its explorative-interpretivist nature, understanding underexplored complex issues involving temporal dynamics, dilemmas and multiple levels of analysis can be better addressed with qualitative methodology. The explicit adoption of an abductive approach was justified. Accordingly, the next section of this chapter was devoted to understanding multi-tier suppliers' SSM implementation through drawing on theories within

SSCM and borrowing relevant theories from other disciplines to guide the inquiry. Thus, adopting integrative stakeholder theory, institutional theory and contingency theory, a theoretical framework was proposed to guide the research methodology, particularly data collection and analysis processes, and systematically relate to the empirical findings of this study.

Afterwards, research methods were explored including the justifications for the use of the interviewing method and semi-structured interviews as data collection methods to investigate the perceptions of owners and managers across multi-tier apparel suppliers. Moreover, data in the form of interviews from multiple stakeholders as well as archival documents were dealt with in a triangulated fashion using multiple sources to generate thick data. Thematic analysis was used since it offers flexibility with the research method and approach to analyse detailed accounts of textual data using a step-by-step framework. Finally, the important aspects of the study such as research rigour and ethical issues that relate to improving the validity and reliability of this research were explained. Building on the proposed theoretical framework and methodology applied in this research, Chapters 4, 5 and 6 discuss and critically examine the key findings of this study.

CHAPTER 4

Drivers for and Barriers to SSM Implementation

4.1 Introduction

This chapter examines the drivers for and barriers to implementing SSM practices amongst multi-tier apparel suppliers in Bangladesh and marks the first of three chapters discussing the findings. As discussed in Chapter 2, the critical review of literature found that prior studies have explored the factors that drive or impede firms' implementation of sustainable practices in their supply chains. However, a few empirical studies in the literature have investigated the drivers for and barriers to SSM implementation focusing on suppliers (Winter & Lasch, 2016), specifically in the context of the developing country multi-tier supplier perspective (Grimm et al., 2014; Huq et al., 2014). Against this background, this chapter attempts to explore these two research questions:

1. Why do Bangladeshi multi-tier apparel suppliers embed sustainability practices into their supply chains?
2. What barriers do multi-tier apparel suppliers encounter while embedding SSM practices?

An overview of the chapter is highlighted in the first section. The second section illustrates the findings relating to the drivers for multi-tier suppliers' SSM implementation. The next section illustrates the barriers to multi-tier suppliers' implementing SSM practices. In the last sub-section of this chapter, the conclusions are presented.

4.2 Overview of the Chapter

The key themes and sub-themes relating to SSM implementation drivers and barriers that emerged from the data are shown in Tables 4.1 and 4.2. This chapter reports four key themes: *internal drivers*, *external drivers*, *internal barriers* and *external barriers*. In particular, this chapter highlights four sub-themes covered under the key theme *internal drivers*, namely *increased factory productivity*, *risk and resource management*, *cost reduction and improved price*, and *top management values, learning and commitment*. As presented in Table 4.1, the overall findings show that internal drivers were cited 103 times in total by owners and managers of the multi-tier suppliers whereas instrumental drivers were cited 78 times, followed by normative drivers (cited 25 times). On the other hand, *external drivers* were cited 82 times by participants whereas descriptive drivers were cited 59 times, followed by instrumental drivers (cited 23 times).

Moreover, the chapter reports four sub-themes covered under another key theme – *external drivers* – namely *buyers' requirements*, *external stakeholders' expectations*, *competition amongst suppliers*, and *opportunities for loan and tax incentives*. It is confirmed that the findings from the data are linked to descriptive, normative and instrumental aspects of the integrative stakeholder perspective. The descriptive aspect of the integrative stakeholder theory identifies the external stakeholders and describes how organisations are managed (Hörisch et al., 2014). Meanwhile the normative aspect attempts to provide the moral justifications for why the organisation should take into account stakeholder interests, the instrumental aspect attempts to examine the achievement of organisational goals to do so (Donaldson & Preston, 1995; Hörisch et al., 2014).

Table 4.1: Key themes and sub-themes of SSM implementation drivers

Drivers (Key themes that deductively emerged from the literature)	**Definition/Description of the themes** (based on the literature and theories)	**Sub-themes** (that inductively emerged from data)	**Codes** (Second-cycle codes that inductively emerged from data)
Internal Drivers (103)	Internal drivers are defined as the organisational factors relating to human resources, risk management, performance management and functional issues that propel firms to adopt sustainability practices in their supply chains (Walker et al., 2008; Walker & Jones, 2012).	**Increased factory productivity (32)** (Instrumental)	Increased production through minimising work-related accidents and injuries (12) Workers' loyalty and motivation for factory productivity (10) Increased production through reducing employee turnover (10)
		Cost reduction and improved price (19) (Instrumental)	Cost reduction through minimising resource use (8) Reducing hiring and training costs (5) Obtaining more business opportunities (5) Profit maximisation through improved price (1)
		Risk and resource management (27) (Instrumental)	To secure long-term business relationships (19) To tackle the future resource uncertainty (8)
		Top management values, learning and commitment (25) (Normative)	Owners' values and commitment (9) Involvement of the top-level factory management (8) Education and experience of second-generation owners/managers (8)
External Drivers (82)	External drivers are the factors beyond the organisation's internal environment that propel firms to successfully implement SSM practices (Walker & Jones, 2012).	**Buyers' Requirements (40)** (Institutional factors)	Requirements from buyers (24) Third-party requirements (buyer directed) (16)
		External stakeholders' expectations (19) (Descriptive)	Government laws and regulations (5) Supranational organisations' recommendations (3) Media reporting and publicity (4) NGO influence (2) Final consumers' (end users) expectations and sensitivity (2) Development programmes by industry associations and other external stakeholders (3)
		Competition amongst suppliers (18) (Instrumental)	Gaining competitive advantage (10) Appeal to skilled labourers (8)
		Other external opportunities (5) (Instrumental)	Opportunities for loans and tax incentives (5)

Furthermore, as displayed in Table 4.2, the study reported two major sub-themes covered under internal barriers (cited 67 times), namely *cost and resource concerns*, and *gaps in values, learning and commitment*. These findings are also associated with instrumental and normative aspects of integrative stakeholder theory. Furthermore, several findings suggest that external barriers to SSM implementation are dependent on contingency factors. For example, the study reported three sub-themes covered under contextual barriers (cited 66 times), namely *gaps in regulatory framework, complexity involved in sustainability standards*, and *power and trust gaps between actors.* Interestingly, some findings clearly indicate that the drivers and barriers to implementing SSM practices are also connected to the institutional perspective. While the reported findings identify external stakeholders' influence including government regulations as one of the drivers for SSM implementation, lack of enforcement of those regulations indicates a key institutional barrier. Thus, it can be argued that institutional theory shares views with contingency theory (Sauer & Seuring, 2018; Wilhelm et al., 2016) and stakeholder theory (Acosta et al., 2014; Tachizawa & Wong, 2014) in the overlapping findings area of this chapter.

To explore and illustrate the most important thematic drivers and barriers concerning SSM implementation, this chapter highlights illustrative quotes along with the number of citations regarding major sub-themes under internal and external drivers. This kind of presentation and assessment of the findings from the interviewees' open-ended comments are useful to understand drivers for and barriers to SSM implementation (Giunipero et al., 2012). Accordingly, the thematic areas, sub-themes and their resulting citations identified with respect to multi-tier apparel suppliers' SSM implementation drivers and barriers are shown in the following Tables 4.3 (Section 4.3) and 4.4 (Section 4.4). Relevant comments from the participants are presented, where appropriate, and findings are compared with the existing relevant literature.

Table 4.2: Key themes and sub-themes of SSM implementation barriers

Barriers (Key themes that deductively emerged from the literature)	**Definition/Description of the themes** (based on the literature and theories)		**Sub-themes** (that inductively emerged from data)	**Codes** (Second-cycle codes that inductively emerged from data)
Internal Barriers (67)	Internal barriers refer to the organisation-related factors that obstruct the owners' and managers' efforts to successfully implement SSM practices (Walker et al., 2008).	Instrumental	**Cost and resource concerns (39)**	High investment for safety standards (25) Increased production and training-related costs (7) Lack of available infrastructure (7)
		Contingency factors	**Gaps in values, learning and commitment (28)**	Lack of awareness and education of factory workers (11) Lack of commitment of the factory management (5) Negative attitudes and mind-set of the owners (6) Lack of knowledge and expertise of managers and owners (6)
		Normative		
External Barriers (66)	External barriers refer to the factors beyond the organisation's internal environment that may obstruct the efforts of factory management to successfully implement SSM practices (Walker et al., 2008).	Institutional	**Gaps in regulatory framework (31)**	Lack of government enforcement (13) Corruption and unethical practices (10) Lack of government support (8)
		Contingency factors	**Complexity involved in sustainability standards (4)**	Lack of consistency in sustainability standards (4)
			Power and trust gaps between actors (31)	Lack of suppliers' bargaining power (11) Trust gaps between factory management and third-party auditors (8) Trust gaps between factory management and media (7) Political affiliation of owners and their associations (5)

4.3 Drivers for Multi-tier Apparel Suppliers' SSM Implementation

This section examines why multi-tier apparel suppliers embed sustainability practices into their supply chains. In this chapter, drivers denote a set of internal organisational factors as well as external factors that drive organisations to integrate SSM practices (Walker et al., 2008). According to the findings reported in Table 4.1, internal drivers were mentioned more often than external drivers. However, participants from different tiers of apparel suppliers attribute varying importance to factors that propel them to adopt SSM practices. For example, while owners and managers of first-tier suppliers cited *top management values, learning, and commitment* as one of the most dominant drivers (19 times) for adopting SSM practices, participants from third-tier suppliers cited this same sub-theme as the lowest rated driver (2 times). Accordingly, all sub-themes and their resulting citations under internal and external drivers for SSM implementation have been portrayed in Table 4.3.

4.3.1 Internal Drivers

As previously highlighted and defined in the overview section of this chapter, three sub-themes emerged under internal instrumental drivers. They are *increased factory production, cost reduction and improved price,* and *risk and resource management*. In addition, one sub-theme that emerged under internal normative drivers is *top management values, learning and commitment*. The findings relating to key internal drivers displayed in Table 4.3 are discussed below.

Table: 4.3 Sample illustrative quotes relating to drivers for SSM implementation across the multi-tier apparel suppliers

Key themes under drivers	Sub-themes	Sample illustrative quotes	Interviewees from multi-tier apparel suppliers cited this thematic driver (based on second-cycle codes from data)		
			First-tier Suppliers	Second-tier Suppliers	Third-tier Suppliers
Internal Drivers	**Increased factory productivity**	"We are giving priority to workers. Workers are our main production wheels. We know we cannot increase our productivity without having happy and healthy workers. We ensure their [workers'] health and safety." (T2-S8-1)	Cited 16 times	Cited 16 times	Did not mention
	Cost reduction and improved price	"We invest in unskilled workers to develop their operational skills and health and safety knowledge from the very beginning…We require two to three years for a worker to reach his/her optimum operational efficiency level. If we can retain them, it will reduce hiring and training-related costs for the company." (T1-S6-2)	Cited 10 times	Cited 9 times	Did not mention
	Risk and resource management	"Many suppliers have closed down their businesses…The key reason for us to ensure health and safety standards is to survive in the market for a long time...Although we are not getting any direct buyers' benefits, we perceive it will reduce our business and reputational risk due to recent disasters [Tazreen factory fire in 2012 and the Rana Plaza collapse in 2013]." (T2-S8-2)	Cited 10 times	Cited 11 times	Cited 6 times
	Top management values, learning and commitment	"It is our owner's wish to view workers as family members, not employees. He [the owner] values their demands [workers] as family members and sees human well-being as an important factor in our CSR policy." (T1-S8-1)	Cited 19 times	Cited 4 times	Cited 2 times
External Drivers	**Buyers' requirements**	"After removal of the quota facility [the Generalized System of Preferences (GSP)] by the USA, factory compliance is the first key gateway of the business." (T1-S2)	Cited 20 times	Cited 17 times	Cited 3 times
	External stakeholders' expectations	"We have washing and dyeing facilities. Government agencies want environmental clearance and effluent treatment plant (ETP) reports every three months to ensure the proper treatment of chemical-containing waste water." (T2-S4) "We have different collaborative social projects. We cooperatively work with NGOs as well as buyers to implement these projects...Buyers are increasingly recommending we get involved in these types of projects." (T1-S3)	Cited 12 times	Cited 7 times	Did not mention
	Competition amongst suppliers	"I feel non-compliant factories in our country will not sustain their businesses. The main reason is competition that we are facing not only from Bangladeshi suppliers but also from suppliers in Vietnam, Cambodia, India and Myanmar." (T2-S11)	Cited 8 times	Cited 6 times	Cited 4 times
	Opportunities for loan and tax incentives	"There are some other benefits such as World Bank loans with low interest rates and tax exemptions from government if any entrepreneur builds a socially and environmentally compliant factory." (T1-S5-2)	Cited 4 times	Cited 1 times	Did not mention

4.3.1.1 Increased Factory Production

The findings revealed that *increased factory production* was one of the dominant internal instrumental drivers that motivated owners and managers of first-tier suppliers (cited 16 times) and second-tier suppliers (cited 16 times) to implement SSM practices. In particular, *increased factory production* as a result of having workers' loyalty, motivation, reduced work-related accidents and low turnover was emphasised by participants as being an important internal instrumental driver for SSM implementation. For instance, the manager T1-S6-1 remarked:

> We carefully look after each worker's health through providing a good lunch, clean drinking water and medical facilities. We ensure a safe working environment to prevent workers from having work-related injuries and sickness. It is our loss ultimately if they [workers] fall sick or get injured. This is because our workers' lines and machines will stop regular factory production.

The above manager's view highlights that improving health and safety work conditions reduces worker absences, workplace-related injuries and illness. This finding is in accordance with previous research by Huq et al. (2014) which found that the integration of health and safety initiatives reduces employee turnover and absenteeism. This argument also demonstrates that consistent factory production depends on the presence of all workers on the production floors. In a similar vein, some owners and managers of second-tier suppliers confirmed this view and perceived that labour was the key factor of production. For example, the manager T2-S8-1 stated:

> We are giving priority to workers. Workers are our main production wheels. We know we cannot increase our productivity without having happy and healthy workers. We ensure their [workers'] health and safety.

The above findings suggest that implementing sustainability practices has not only a positive impact on productivity but also improves workers' motivation and commitment. The issues of workers' commitment and loyalty were found in several managers' comments. For instance, the manager T1-S5-1 said:

> We run a Friday clinic where all factory-level workers as well as their family members can get healthcare treatment and discounted medicine and diagnosis facilities…We have observed some benefits of having this clinic. For example, workers have become more committed and loyal to the factory management. Even workers' family members motivate them to stay with us for a long time. Overall productivity of the factory has significantly improved.

The above manager's view indicates that the implementation of SSM practices enables suppliers to increase workers' commitment which, in turn, positively affects factory productivity. It implies that workers remain loyal to the factory management of apparel factories with good working conditions. These findings are in accordance with previous research by Huq et al. (2014) and Perry et al. (2015), which found that the adoption of social sustainability practices reduces employee turnover and absenteeism, and increases workers' commitment towards factory productivity.

4.3.1.2 Cost Reduction and Improved Price

The second sub-theme that emerged under internal instrumental barriers was *cost reduction and improved price*. In particular, the participants discussed *cost reduction and improved price* as a result of having more order opportunities, higher price, minimising resource use, and hiring and training costs. The findings revealed that not all third-tier suppliers were convinced that social and environmental sustainability always lead to economic benefits. However, several owners and managers of first-tier suppliers (10 times) and second-tier suppliers (9 times) cited *cost reduction and improved price* as an important internal driver for adopting SSM practices. As the director T1-S6-2 commented:

> We invest in unskilled workers to develop their operational skills and health and safety knowledge from the very beginning…We require two to three years for a worker to reach his/her optimum operational efficiency level. If we can retain them, it will reduce hiring and training-related costs for the company.

The above manager's comment indicates that social sustainability initiatives reduce hiring and training-related costs and improve operational efficiency. This finding is in accordance with previous research by Huq et al. (2014), Sajjad et al., (2015), and Chkanikova & Mont (2015), which found that workers' skill improvement initiatives increase operational efficiency and save costs. Some owners and managers even perceived that improving work conditions enhanced the likelihood of getting more business orders and good prices. For instance, the director T2-S8-2 affirmed: "…Since we are investing in health and safety initiatives, we perceive orders as well as

cutting and making charges [CM price] from buyers will be increased." Following the above argument, the manager T1-S2 remarked:

> It is wise to invest in a compliant and green factory. We have two green factories. Initial investment is high but has many long-term benefits. A green factory means brand-owning buyers perceive to work at our company with blind eyes [highly trust]. Our factory production has never been stopped. It [green factory] helped us to reduce pollution and resource use, preserve rain water, and increase operational efficiency.

The above manager's view acknowledges the costs for establishing green factories as long-term investments instead of expenses. Moreover, the reported findings suggested that environmentally friendly and compliant factories can reduce the use of non-renewable resources and environmental damage, and ensure consistent business orders and returns. Previous empirical studies strongly support these findings that implementing environmental practices reduces costs and energy use and increases revenues (Giunipero et al., 2012; Nidumolu et al., 2009; Sajjad et al., 2015).

4.3.1.3 Risk and Resource Management

Risk and resource management deals with the awareness and potential control of risks and resources within a firm's scope (Zorzini et al., 2015). The findings indicated that *risk and resource management* was a top instrumental factor that propelled owners and managers of

second-tier suppliers (cited 11 times) and third-tier suppliers (cited 6 times) to implement SSM practices. For example, the director T2-S8-2 remarked:

> Many suppliers have closed down their businesses…The key reason for us to ensure health and safety standards is to survive in the market for a long time...Although we are not getting any direct buyers' benefits, we perceive it will reduce our business and reputational risk due to recent disasters [Tazreen factory fire in 2012 and the Rana Plaza collapse in 2013].

The above director's view demonstrates that apparel suppliers are complying with SSM practices with a view to surviving in the market. In fact, the majority of second-tier and third-tier suppliers drew attention to the fear of losing buyers' orders due to reputational risks. This is consistent with prior studies arguing that vertical industries such as the apparel, textile and footwear industries are increasingly exposed to reputational risks associated with supply chain social and environment issues (Locke et al., 2013; Lund-Thomsen & Lindgreen, 2014; Neef, 2004). Reputational risk "refers to the probability that stakeholders will detect the negative event or practice, and subsequently change their perception and image of the firm" (Roehrich, Grosvold, & Hoejmose, 2014, p. 698). To mitigate these risks, even business owners of small sub-contracting suppliers were adopting some social sustainability practices on an ad hoc basis. For instance, the following comment of the owner T3-S1 reflected this situation:

> My company is a small factory…However, we pay workers' regular salary, overtime payment and attendance bonus on time. I think if we continue this practice, business risk

> will be minimised. We can retain our current accounts and attract more good accounts [secure orders from second-tier local garment buyers].

The above owner's view clearly indicates that the majority of third-tier suppliers consider meeting only minimal social sustainability requirements to decrease existing business risks and secure future business opportunities. However, the findings further revealed that owners and managers of first-tier suppliers were thinking beyond economic and social sustainability issues. According to the findings, several participants from first-tier suppliers perceive *risk and resource management* as a mid-rated driver (cited 10 times), which enables them to manage future uncertainty and risks regarding environmental sustainability issues. The following quotation from the manager T1-S7 provides an example:

> If we waste water, our next generation will not get fresh water to use. Water resources are limited. For example, if the ground water we currently use may run out within the next 20 years, we will not be able to run our factory in the future. Although we preserve rain water, rain water is not enough for us. Besides, there is no assurance of continuous rain due to unpredictable weather changes…You know climate change is a big threat for us. These issues have encouraged us to adopt environmental sustainability practices.

The above manager's comment suggests that first-tier suppliers are proactively thinking of managing environmental sustainability issues. The manager clearly draws attention to potential scarcity of water resources due to climate change which may have a negative impact on their factory's future production. This finding supports the previous argument by Pagell and

Shevchenko (2014), which argues that various stakeholders are demanding firms' action on "issues from climate change to working conditions in supplier factories in developing countries" (p. 45). However, pro-sustainability firms can tackle sustainability risks by developing relationships with supply chain partners and committing to preservation of resources in the long run (Roehrich et al., 2014). Thus, it is suggested that several proactive first-tier suppliers are looking ahead to build appropriate strategies and capabilities to manage future risk and resources related to the implementation of SSM practices.

4.3.1.4 Top Management Values, Learning and Commitment

Top management values, learning and commitment was one of the top-cited (19 times) SSM implementation drivers by managers of first-tier suppliers. This sub-theme refers to the normative instances in which the participants discussed managers/owners' ethical values, awareness, experience, commitment and involvement regarding sustainability practices. Accordingly, the findings reported three second-cycle codes covered under this normative driver that emerged from the data: *owners' values and commitment*, *commitment of the top-level factory management,* and *educational background of owners and managers.* For example, a manager T1-S8-1 stated: "It is our owner's wish to view workers as family members, not employees. He [the owner] values their demands [workers] as family members and sees human well-being as an important factor in our CSR policy". Likewise, another manager T1-S4-1 confirmed that:

> Our managing director and his wife [owners] wanted to include two issues in our sustainability policy. One issue is to employ disabled workers, and the other issue is

> female and children's health and hygiene. We provide sanitary napkins at a lower price and preserve mothers' milk to ensure proper breast feeding for their children. These issues are not required by buyers.

The above-mentioned managers' views support the assertion that owners' characteristics such as *values and commitment* influence first-tier suppliers to endorse ethical business practices which are beyond the basic requirements (Huq et al., 2014; Wolf, 2011). In a similar vein, several managers indicated that *involvement and commitment of the top-level factory management* played a major role in the implementation of SSM practices. For instance, the manager T1-S10 remarked:

> Sometimes we [factory management] create pressure on the Managing Director [owner] to make a change which is good for the workers. For example, we recently have convinced the owner to remove a mosque [prayer room] from the third floor of the factory building [a risky place] to ensure workers' safety.

The above manager's comment demonstrates that proactive engagement and commitment of the factory management drive business owners to embrace SSM practices. These findings are consistent with prior research by Caniato et al. (2012), which found that corporate values of the owners and inspiration of the top management are vital internal drivers for successfully implementing sustainability practices. However, *top management values, learning and commitment* was cited as a low-rated driver by owners and managers of second-tier (cited 4 times) and third-tier suppliers (cited 2 times). Only owners and managers of these suppliers with

good educational backgrounds and experience tended to adopt SSM practices. For example, the owner S2-S9-1 stated:

> I had a good education from Australia. I gained experience from my family business. My previous education and experience inspired me to build a good compliant factory. I know how to address and deliver these [sustainability] practices.

The above owner's comment suggests that second-generation owners have high levels of awareness and expertise, which ethically inspire them to improve safety conditions for their workforce. Likewise, the following comments of manager T1-S5-1 supported this statement:

> Nowadays if you look into this [apparel] industry, you find the next generation of owners who are running their family businesses. They have a good education and understanding of foreign cultures. Most of the second-generation owners like our owner are very much aware of buyers' cultures. They have positive opinions on social and environmental sustainability issues. Even mid-level management have training and education from good institutions in Japan, Germany and other developed countries.

The above manager's comment highlights that individual characteristics of owners and managers, particularly good educational and professional backgrounds, motivate them to conduct their business operations ethically and responsibly. Since the Bangladeshi apparel industry is mature now, second-generation owners with good educations are taking charge of their family businesses. These owners' apposite knowledge about the buyers' cultures positively stimulates

multi-tier suppliers to implement SSM practices. These findings are consistent with the previous study by Huq et al. (2014), which indicated that owners' educational background and experience drive suppliers to adopt SSM practices.

4.3.2 External Drivers

As shown in Table 4.3, the study reported four key sub-themes covered under external drivers, namely *buyers' requirements, external stakeholders' expectations, competition,* and *opportunities for other incentives*. The findings relating to these key external drivers are discussed below.

4.3.2.1 Requirements from Buyers and Third-party Auditors

One of the key sub-themes under external drivers was *requirements from buyers and third-party auditors*, which was cited (20 times) by owners and managers as a top-level driver for embracing SSM practices. The empirical findings suggested that first-tier and second-tier suppliers perceived implementing SSM practices as necessary preconditions for getting business orders. As the manager T1-S2 stated: "After removal of the quota facility [the Generalized System of Preferences (GSP)] by the USA, factory compliance is the first key gateway of the business". The following quotation of the manager T2-S2-1 confirmed this view:

> We are adopting social and environmental compliance practices because of buyers' requirements…Previously we didn't adopt these practices.

This manager's point of view suggests that the majority of upstream apparel suppliers, particularly lower-tier suppliers, are often not complying with SSM practices until required by their buyers to do so. This finding is in accordance with the results of a recent study where buyers' provisions have been reported as dominant stimuli that propel upstream suppliers to implement SSM practices (Hofmann et al., 2018). While buyers cannot regularly monitor the social and environmental conditions of upstream suppliers, they rely on third-party auditors or certification bodies who inspect these suppliers' sustainability practices. As the manager of T2-S7 asserted: "We are the nominated supplier of a German retailer. We are trying to fulfil technical and social compliance requirements since third-party inspectors on behalf of our buyer will visit soon for auditing purposes." In a similar vein, another manager T1-S7 commented:

> We have WRAP, BSCI, and ISO 14001 [EMS] certifications for each factory to manage social and environmental responsibilities. We want to keep everything perfect if buyers suddenly visit our factory. Because buyers want to see these [audit reports and certifications]. Every year we arrange further audits for updating these certifications from respective authorities

The above manager's comment suggests that different third-party certification bodies such as WRAP, BSCI and the ISO play a significant role that is encouraging suppliers to implement sustainability practices. These third-party authorities assess and prepare a report on the social and environmental sustainability practices of individual apparel factories. Based on the recommendations of the audit report, buyers make a decision on whether to continue working with current suppliers. This finding is consistent with previous studies (Handfield, Walton,

Sroufe, & Melnyk, 2002; Pagell & Wu, 2009) which indicate that supplier certification drives suppliers to comply with supply chain sustainability practices.

4.3.2.2 Competition amongst Suppliers

The findings indicated that *competition amongst suppliers* was cited by owners and managers of multi-tier suppliers as an external driving factor that propelled them to embrace SSM practices. For example, the manager T2-S11 said:

> […] I feel non-compliant factories in our country will not sustain their businesses. The main reason is competition that we are facing not only from Bangladeshi suppliers but also from suppliers in Vietnam, Cambodia, India and Myanmar.

This above manager's view showcases that local and global competition amongst suppliers for obtaining business order opportunities is a factor that leads suppliers to endorse SSM practices. Likewise, the manager T1-S7 remarked:

> If you want to gain competitive advantage, you have to aim for sustainability. Our gas and water are very important resources for this [apparel] industry. If we do not try to reduce the usage level of these non-renewable resources, we cannot last. And this concern is not only true for us; other suppliers [competitors] would have to attempt reduction…We have targeted to reduce these resources by 2% in the upcoming year.

The above manager's comment demonstrates that first-tier suppliers are proactively designing environmental sustainability-related resource reduction targets with a view to gaining competitive advantage. Although the majority of suppliers highlight the matter of market competition for obtaining competitive advantage and business orders, some owners and managers reveal peer competition for their existing skilled workers. For example, the director T2-S9-1 confirmed this concern: "We have been searching to find skilled workers for our factory. We aspire to retain our current workers through providing a good working environment and facilities." This finding is supported by an empirical study by Huq et al. (2014), which suggests that competition amongst suppliers for skilled labour encourages suppliers' social sustainability improvements.

4.3.2.3 External Stakeholders' Expectations

The findings show that *external stakeholders' expectations* was cited as an external SSM implementation driver by owners and managers of first-tier (11 times) and second-tier (6) suppliers. This sub-theme refers to the instances in which the participants described the management of expectations and demands associated with sustainability from external stakeholders. In particular, *government enforceable laws and regulations* as well as *supranational organisations' recommendations* (e.g. ILO conventions) were the vital external factors that influenced suppliers to adopt SSM practices. For example, the manager T1-S6-1 stated: "We are required to follow the national laws along with ILO's conventions. Regulatory authorities, particularly government inspectors, monitor social and environmental activities of

our factories as per laws [labour and environmental laws]". Likewise, another manager T2-S4 confirmed this view and remarked:

> We have washing and dyeing facilities. Government agencies want environmental clearance and effluent treatment plant (ETP) reports every three months to ensure the proper treatment of chemical-containing waste water.

The above managers' comments illustrate that it is mandatory to have a functioning ETP for apparel suppliers who have washing and dyeing activities. These findings are supported by previous studies (Chkanikova & Mont, 2015; Hofmann et al., 2018), which suggest that the need for legal compliance relating to emission and waste reduction drives firms to integrate environmental supply chain management practices. However, some prior studies contrast with these findings because of the lesser roles of government regulations (Huq et al., 2014) or such regulations having no effect on the sustainability implementation efforts (González-Benito & González-Benito, 2006). Interestingly, the reported findings from some owners and managers of third-tier suppliers revealed that government regulations had no major influence on their implementation of SSM practices.

Furthermore, the findings suggested that there was no evidence of the influence of media on the third-tier suppliers' adoption of SSM practices. This is because media only highlighted the social and environmental activities of large firms, particularly the first-tier and second-tier suppliers. Some managers of first-tier and second-tier suppliers mentioned the role of negative media

publicity as a positive external driver for improving sustainability practices. For example, the manager T1-S6-1 remarked:

> Media can play a significant role to bring positive change in this [apparel] industry. They were not interested unless there was a major accident…We observed [that] both global and local media highlighted the Rana Plaza disaster with great importance. Since then, most factory owners and managers are more aware about fire and building safety issues.

The above manager's view reveals that suppliers view the role of media with scepticism. However, suppliers are increasingly aware of avoiding negative media publicity through focusing on the improvement of health and safety in the workplace. This finding is accordance with a previous study by Islam and Deegan (2010), which found that there is a positive link between negative media attention and increased social and environmental disclosures by global clothing and sports firms. Moreover, the media only highlight major incidents such as the 2013 Rana Plaza collapse in Bangladesh, which subsequently raised the awareness of other external stakeholders including consumers. The following comment from manager T1-S5-2 reflected this assertion:

> Our consumers [Bangladeshi] and their consumers [western consumers in buyers' countries] are different. They [western consumers] are much more reactive and sensitive to any social misconduct like the Rana Plaza apparel factory collapse. International media influence our buyers who in turn, directly influence us to improve working conditions...We are making products not to showcase but to deliver these to the hands of consumers.

The above manager's comment indicates that some western consumers occasionally raise their concerns about brand-owning firms' activities when these firms outsource products from non-compliant factories in Bangladesh. This argument confirms that western consumers can comprise an external driving factor that propels Bangladeshi apparel suppliers to embrace SSM practices (Islam & Deegan, 2008). Therefore, buying firms have an influence over suppliers through cancelling business contracts (Egels-Zandén et al., 2015).

Interestingly, the findings also revealed that media created spill-over awareness effects across different stakeholders beyond consumers with regard to implementing SSM practices. This finding is consistent with prior research (Huq et al., 2014; Islam & Deegan, 2010; Park-Poaps & Rees, 2010), which found that the media play a vital role by observing and reporting on social and environmental failures, which sensitise consumers and other external stakeholders including NGOs. More specifically, NGOs' reactions in the form of public demonstrations against poor working conditions is another major factor in advancing sustainability practices (Egels-Zandén et al., 2015; Huq et al., 2016). In response to the external stakeholders' demands, the findings of this present study indicated that some suppliers were working with NGOs to improve their working conditions at the production level. However, not all multi-tier suppliers were involved with NGOs. For example, the manager T2-S2-2 remarked:

> We didn't work with any NGO…However, so far I know some big suppliers, those who have child care centres and medical facilities, are jointly working with NGOs.

The above participant's view alongside the evidence from several managers at the first-tier supplier level suggest that only a small number of first-tier suppliers are working with NGOs under the guidance of buyers to improve workers' health and safety, and the welfare of their children. This finding is consistent with the previous study by Huq et al. (2014), which reported that NGOs play a lesser role in stimulating suppliers to embed SSM practices. However, collaboration helps to develop capacity and transfer sustainability-related innovative knowledge, skills, and practices from buyers and NGOs to upstream suppliers (Egels-Zandén et al., 2015; Huq et al., 2016; Klassen & Vereecke, 2012).

With regard to developing awareness and capacity building, some managers mentioned that trade associations also guide, monitor and develop suppliers' ability to embrace sustainability activities. For example, the manager T1-S2 supplier stated:

> […] After getting a membership in a trade association, the compliance cell of the association often monitors our factory according to its checklists. Sometimes the trade association arranges training and workshops relating to heath and fire safety to raise awareness of middle-level managers and workers.

The above finding is in agreement with a previous study, which found that trade associations play a vital mediating role in supplier development through arranging social and environmental sustainability-related training and workshops (Huq et al., 2014). In their study, Lund-Thomsen and Nadvi (2010) also found the role of trade associations was a collective role, which reduces social compliance costs as well as promoting suppliers' adoption of SSM practices.

4.3.2.3 Opportunities for Loan and Tax Incentives

Furthermore, the findings indicated that another external instrumental factor – *opportunities for loan and tax incentives* – motivated suppliers to include sustainability practices in their supply chains. For example, the manager T1-S5-2 remarked: "...There are some other benefits such as World Bank loans with low interest rates and tax exemptions from government if any entrepreneur builds a socially and environmentally compliant factory." In a similar vein, another manager T1-S10 confirmed this view: "We work with the International Finance Corporation (IFC) [World Bank Group] with regard to saving non-renewable resources and increasing the production efficiency of our factory. In doing so, we have several projects which are funded by IFC." Thus, the findings suggested that owners and managers of multi-tier suppliers were encouraged to adopt SSM practices because of such external instrumental drivers.

To sum up, the findings of this study reveal that diverse internal and external drivers propel multi-tier apparel suppliers to implement sustainability practices in their supply chains. The majority of these findings resonate with several past studies (Hofmann et al., 2018; Huq et al., 2014; Islam & Deegan, 2010) which found that numerous drivers, including external stakeholder pressure, competition, regulations, owners' characteristics and economic benefits encourage suppliers towards the implementation of sustainability practices. While second-tier and third-tier suppliers are adopting some selected SSM practices on an ad hoc basis only because of instrumental drivers, all driving aspects of descriptive, instrumental and normative stakeholder theory may be functioning in an integrated way for the majority of first-tier suppliers. For example, it is suggested that first-tier suppliers' top management values and commitment to

investing in sustainability practices reduce employee turnover rates and increases work motivation which, in turn, improves operational efficiency and productivity. This finding is consistent with prior sustainability research by Hörisch et al. (2014) and Sajjad et al. (2015), which suggest that business (instrumental aspects) and ethics (normative aspects) are not perceived as conflicting but as fundamentally interlinked.

4.4 Barriers to Multi-tier Apparel Suppliers' SSM Implementation

This section examines the barriers multi-tier apparel suppliers encounter while embedding SSM practices. In this chapter, 'barriers' refers to a variety of internal and external factors that inhibit a firm's attempt to successfully embed SSM practices into its supply chain (see Chapter 2). According to the reported findings, participants from different tiers of apparel suppliers gave different orders of importance to forces that hindered them from embedding SSM practices. For example, while managers and owners of first-tier suppliers cited p*ower and trust gaps between actors* (20 times) as a top-rated barrier, participants from third-tier suppliers cited this same theme as the lowest-rated (2 times) barrier to SSM implementation. The findings relating to the key internal and external barriers displayed in Table 4.4 are discussed below.

4.4.1 Internal Barriers

According to the reported findings, multi-tier apparel suppliers faced numerous internal barriers to the implementation of sustainability practices, which were covered under two major sub-themes. As shown in Table 4.4, these two sub-themes are *cost and resource concerns*, and *gaps in moral values, learning and commitment*.

Table: 4.4 Sample illustrative quotes regarding barriers to SSM implementation across the multi-tier apparel suppliers

Key themes under barriers	Sub-themes	Sample illustrative quotes	Interviewees from multi-tier apparel suppliers cited this thematic driver (based on second-cycle codes from data)		
			First-tier Suppliers	Second-tier Suppliers	Third-tier Suppliers
Internal Barriers	**Cost and resource concerns**	"The main challenge we are facing now is increasing production costs. Wages [labour costs] are increasing every year as per laws". (T1-S3) "It is not possible for us to comply with all requirements as per law within the current factory. In fact, the majority of garment accessories factories in Dhaka city are not in the position of complying with all requirements [separate boiler or generator rooms outside] because of limited space…Although government assigned a special zone for apparel suppliers 4 years ago, the land development and other infrastructure supply [gas, water and electricity facilities] are yet to be completed." (T2-S1)	Cited 12 times	Cited 20 times	Cited 7 times
	Gaps in moral values, learning and commitment	"We do not have clear guidelines about our responsibilities and duties. We have lack of expertise. Recently we have hired a compliance manager. However, he doesn't know exactly what we have to do to meet the Accord's requirements." (T2-S10) "The main barrier from our side [owners/managers] is mentality. We have to change our mind-set. We have to drop the thinking of earning more profit with less investment...or earning profit without thinking of any investment in health and safety of the factory." (T2-S1)	Cited 5 times	Cited 18 times	Cited 5 times
External Barriers	**Gaps in the regulatory framework**	"Rules, regulations and the Factory Act are wonderful for the industry but truly there is a lack of proper monitoring from the government agencies. Even they [inspectors] lack expertise and integrity." (T1-S2)	Cited 15 times	Cited 13 times	Cited 3 times
	Complexity involved in Sustainability Standards	"We don't have any common standards for compliance. Different buyers have different compliance requirements." (T2-S1-21)	Did not mention	Cited 2 times	Cited 2 times
	Trust and power gaps between actors	"…Third-party auditors have inspected our factory 8 to 10 times. We received a new corrective action plan (CAP) every time they visit our factory. Accordingly, we have to pay inspection fees. There is no end to their CAPs despite complying with their suggestions. It is very difficult to understand and trust them." (T1-S2) "The Trade Association is basically working on behalf of owners' interests. All its leaders are connected to political organisations, especially the ruling party. Now this is totally a political platform. It would be better for the industry and workers if this association worked beyond the influence of political parties." (T1-S12)	Cited 20 times	Cited 9 times	Cited 2 times

4.4.1.1 Costs and Resource Concerns

One of main sub-themes under internal barriers was *costs and resource concerns*, which was cited 39 times by managers and owners of multi-tier apparel suppliers as the leading obstacle to implementing SSM practices. As shown in Table 4.1, three second-cycle codes/patterns emerged from the data under *costs and resource concerns*. *High investment in safety standards* was the first cited thematic code by participants from multi-tier apparel suppliers. For example, the owner T3-S1 remarked:

> […] 100% compliance [safety requirements of the Accord or the Alliance] is a threat for small factories like us. We are not able to follow these requirements since we require huge investment for rectification. If buyers and other agencies force us to follow these requirements, we have to close our business.

The above manager's comment clearly reveals that small suppliers do not have sufficient financial resources to meet all safety requirements demanded by buyers and third parties (the Accord or the Alliance). The above findings also show that two norm-making authorities – the Accord on Fire and Building Safety in Bangladesh (Europe based) and the Alliance for Bangladesh Worker Safety (America based) – emerged in the apparel supply industry. In reality, owners and managers of second-tier and third-tier suppliers perceived high initial investment in safety improvement as the most serious barrier that hampers their efforts to integrate sustainability practices. However, some managers highlighted that first-tier suppliers were in a favourable position since lower-tier suppliers confronted financial challenges to adopting health and safety improvements. For example, as the manager T1-S4-2 commented:

> The large suppliers have strong financial bases, which facilitates upgrading their factories to a higher level. Some suppliers like my factory are now focusing on green factories which are doing good business…I think although we have fulfilled the Accord's audited corrective action plan (CAP), some small supply firms are struggling to address the Accord's CAP. These factories are forced to leave the apparel industry because they are not financially able to meet these safety standards.

The above manager's view has pinpointed two key obstacles. First, considerable investment is required to improve working conditions relating to fire, electrical and building safety as per the auditors' requirements. Second, although first-tier suppliers have a strong financial base, the majority of second-tier and third-tier suppliers have noted the lack of financial resources to comply with buyers' social and environmental practices. This indicates that contingency factors such as the size of apparel suppliers are critical to adopting SSM practices. These findings are consistent with previous research which found that initial supplier investment (Giunipero et al., 2012) as well as resource constraints of small firms (Hervani, Helms, & Sarkis, 2005; Jenkins, 2006; Oelze, Hoejmose, Habisch, & Millington, 2016) were the most cited barriers to implementing SSM practices.

The second thematic code was *increasing production-related costs*, which was cited by participants as a factor that hindered their efforts to engage in SSM practices. For example, the manager T2-S10 remarked:

> There is no balance between production costs and price. The raw material costs are increasing. There is no improvement of fabric price from the buyers' side. Ultimately we

> need to run the factory and have to pay workers' salaries on time. Because of these reasons, we are unwilling to concentrate on 100% of compliance issues.

Similarly, another manager T1-S3 confirmed this view: "The main challenge we are facing now is increasing production costs. Wages [labour costs] are increasing every year as per laws". The views of the owners and managers of multi-tier suppliers identify production and resource-related costs for safety improvements as one of their primary constraints. This is in accordance with the findings of previous studies (Ageron et al., 2012; Chkanikova & Mont, 2015), which found higher financial costs as a key barrier to adopting sustainability practices.

The third thematic code was *lack of available infrastructure for rectification*, which was cited by owners and managers as a barrier to SSM implementation. For example, the manager T1-S6-1 asserted:

> One of the major challenges is to upgrade our factory building as per the Accord requirements. This is a rented building. So we cannot change any major structure without the permission of the landlord. Most of the garment factories are like that...Some factories are situated in a residential building where several floors are occupied by markets and homes and a few top floors are used for apparel production. This situation is improving though.

The above manager's comment reveals that numerous apparel factory buildings are still located in residential areas, and are rented from private owners. Suppliers are facing difficulties to

convince the owners of these residential buildings to modify building structures according to the Accord requirements. However, some solvent first-tier and second-tier suppliers planned to relocate their existing residential factories into non-residential areas. For example, the following quotation from the manager T2-S1 asserted that:

> It is not possible for us to comply with all requirements as per law within the current factory. In fact, the majority of garment accessories factories in Dhaka city are not in the position of complying with all requirements [separate boiler or generator rooms outside] because of limited space…Although the government assigned a special zone for apparel suppliers 4 years ago, the land development and other infrastructure supply [gas, water and electricity facilities] are yet to be completed.

The above manager's viewpoint suggests that several multi-tier apparel suppliers are experiencing dilemmas in order to comply with buyers' requirements because of the shortage of available space to expand the current factory buildings. Moreover, there are some spaces or sites available where the government cannot give any guarantee to provide sufficient water and energy facilities to consistently run the factories. This finding is in agreement with the findings of previous studies by Diabat et al. (2014) and Silvestre (2015b), which found inadequate infrastructural development is a critical barrier to adopting SSM practices.

4.4.1.2 Gaps in Values, Learning and Commitment

Another sub-theme under internal barriers was *gaps in values, learning and commitment*. This sub-theme was cited by managers and owners of second-tier suppliers (18 times) and third-tier suppliers (5 times) as one of the key obstacles to implementing SSM practices. As shown in Table 4.2, four thematic codes emerged from the data under this internal barrier. The first sub-thematic code was related to *lack of awareness and education of the factory workers*. For example, the manager T2-S7 remarked: "...Workers feel uneasy while using personal protective equipment [PPEs] such as masks, gloves and niddle guards. Although workers mention the hot weather as a reason, they actually have a lack of awareness about the consequences of not wearing these PPEs." Following this argument, the owner T3-S3 confirmed this view: "Workers are not aware about health and safety issues. Workers face injuries because of their negligence. They do not think of the risk of fire-related accidents, which may happen while they are smoking secretly at the factory." Similarly, the following comments of the manager T1-S1 supported this assertion:

> Our workers do not have enough educational background [below secondary school certificate]…. Workers continuously work with fabric, thread and dust which they can inhale into their bodies. We suggest they wear face masks and other PPEs to avoid injury. Honestly they [workers] don't bother about their health and safety. Most workers say they feel uncomfortable working while wearing these PPEs…It's very difficult to make uneducated workers aware about these practices.

The above owners and managers' comments indicate that the majority of workers in this industry lack awareness about health and safety-related issues due to limited or no education. They do not feel comfortable using PPEs on the production floors. They still do not feel the urgency for using these materials after having multiple orientations from the factory management. Some factory workers who informally participated in a group discussion also agreed on being uncomfortable using PPEs at work.

Furthermore, the findings of the present study revealed *lack of knowledge and expertise of managers and owners* as another obstacle to SSM implementation. For instance, the manager T2-S2-2 stated: "I can say that lack of awareness and education is one of the key barriers to compliance. This concern is applicable not only at worker level but also for factory management and owner levels." Similarly, the following comments of another manager T2-S10 endorsed this view:

> […] We do not have clear guidelines about our responsibilities and duties. We have lack of expertise. Recently we have hired a compliance manager. However, he doesn't know exactly what we have to do to meet the Accord's requirements.

The above managers' views suggest that role ambiguity as well as lack of appropriate awareness and clarity regarding sustainability are the important factors that impede multi-tier suppliers from adopting sustainability practices. These findings are consistent with the previous research (Chkanikova & Mont, 2015; Sajjad et al., 2015; Walker & Jones, 2012), which indicates that

lack of awareness and understanding of management about how to integrate sustainability practices into supply chains obstruct firms from adopting SSM practices.

Another thematic code was *attitudes and mind-set of the owners*, which was cited by multi-tier apparel suppliers as a barrier to implementing SSM practices. For example, the manager T2-S1 remarked: "The main barrier from our side [owners/managers] is mentality. We have to change our mind-set. We have to drop the idea of earning more profit with less investment...or earning profit without considering any investment in health and safety at the factory." The following quotation of the auditor TPA-1 confirmed this view:

> Honestly speaking our industrialists [owners] are not willing to implement social and environmental responsibilities seriously. They feel the costs of improving social and environmental conditions are expenses, not investments. They think the production department's job is to produce goods, and the marketing department's job is to bring more orders. So the costs of hiring compliance-related employees are additional expenses for the company. This tendency is prevailing in among 80% of total apparel business owners.

The above findings reveal that except for some first-tier suppliers, the attitude of the majority of owners of multi-tier suppliers is not conducive to integrating sustainability practices into their businesses. They perceive the expenses for improving working conditions as costs, not as investments. This is in accordance with previous studies by Giunipero et al. (2012) and Sajjad et al. (2015), which suggest that managerial attitudes concerning economic uncertainty as opposed

to social or environmental sustainability value negatively influence the implementation of SSM practices.

Furthermore, the findings indicated that multi-tier apparel suppliers viewed *lack of commitment of the factory management* as an internal barrier to embracing sustainability practices. For instance, the manager T1-S4-1 stated: "Some major training sessions are organised by our trade association. It is difficult for factory management to send workers away for training. Owners do not allow it at the expense of meeting factory production deadlines." This finding of the manager illustrates that factory management cannot commit to sending workers elsewhere for training since they have obligations to fulfil buyers' orders in certain timeframes. Similarly, the following quotation from the manager T2-S2-1 asserted that:

> The Alliance [auditors] told us to add a 5 feet deep pillar. It requires us to dig a deep hole in our factory side which would hamper our total production for a month. We have taken considerable time to make a decision to change but we are yet to meet their [auditors'] requirements.

The above manager's comment demonstrates that factory management of the multi-tier suppliers have a lack of commitment to complying with sustainability requirements as expected by third-party auditors, buyers and trade associations. This finding is in agreement with the previous finding of Walker and Jones (2012), who suggested that lack of management commitment and training hinders companies from implementing sustainability practices.

4.4.2 External Barriers

According to the reported findings, multi-tier apparel suppliers faced various external barriers towards the implementation of sustainability practices which were classified under three major sub-themes. As shown in Table 4.4, these three major sub-themes are *gaps in the regulatory framework, complexity involved in transparency and visibility,* and *trust and power gaps between actors*.

4.4.2.1 Gaps in the Regulatory Framework

The first sub-theme was *gaps in the regulatory framework*, which was cited by first-tier suppliers (15 times) and second-tier (13 times) suppliers as the top external barrier to implementing SSM practices. In particular, *gaps in the regulatory framework* refers to the instances in which the participants discussed regulatory uncertainties due to limited support and law enforcement, corruption and unethical practices. For example, as the manager T1-S2 commented: "Rules, regulations and the Factory Act are wonderful for the industry but truly there is a lack of proper monitoring from the government agencies. Even they [inspectors] lack expertise and integrity." The following comments of the manager T3-S2-1 confirmed this view:

> Sometimes inspectors from government agencies visit this factory. Since this factory is small, we have no strict pressure to comply with all social and environmental compliance requirements. We just follow some of them.

The above manager's view reveals that the majority of small suppliers are getting regulatory exemptions from government agencies during factory inspections. As such, inadequate enforcement is a major challenge to implementing sustainability practices. This finding is in agreement with the findings of previous studies by Huq et al. (2014) and Hofmann et al. (2018), which suggest that uneven enforcement of laws creates an obstacle to implementing sustainability practices amongst suppliers. In addition, some owners and managers highlighted that the unethical practices of government inspectors impeded multi-tier suppliers from engaging in SSM implementation. For example, the manager T2-S1 affirmed:

> If I say something about our regulatory agencies, I think foreign buyers may be disappointed. However, I want to say that we [suppliers] manage inspectors. If they manage, we have nothing to do. It doesn't matter to them [inspectors] who does what and how much regarding the integration of sustainability practices.

The above manager's comment reveals that both suppliers and government inspectors are involved in corruption and other unethical business practices, which impede the implementation process. This is consistent with previous studies, which indicate that corruption is a fundamental reason for the lack of implementation of adequate sustainability practices in developing countries (Belal, 2016; Silvestre, 2015b; Soundararajan et al., 2018). Furthermore, some owners and managers of multi-tier apparel suppliers experienced lack of cooperation from government agencies with regard to improving sustainability standards. For instance, the director T1-S6-2 remarks:

> We face some challenges such as the lack of cooperation from government agencies doing field work. The whole process is very slow. For example, we need the renewal of

> some certificates such as environmental clearance certificate, boiler certificate and fire brigade training certificates. We deposited money a long time ago to inspect our factory and arrange fire training for our factory workers. As per law, 25% of our total workers have to get this certification training but we are not getting any scheduled. I think government agencies have a shortage of inspectors to provide these services.

The above director's comment suggests that multi-tier apparel suppliers are confronting difficulties in complying with sustainability requirements due to the lack of support from government agencies. This is because the apparel industry of Bangladesh has more than 5000 supply factories (BGMEA, 2018). For the purpose of monitoring and training, the number of assigned factories under each inspector is beyond their capacity, which may delay the whole inspection and documentation process. These findings are consistent with previous research (Caniato et al., 2012; Huq et al., 2014), which indicates that lack of governmental support and expertise has been regarded as a key barrier to implementing SSM practices.

4.4.2.2 Complexity Involved in Sustainability Standards

The second sub-theme under external barriers derived from the data was the *complexity involved in sustainability standards*. The findings suggested that some owners and managers of lower-tier suppliers perceived less pressure to comply with SSM practices due to *lack of consistency in buyers' sustainability standards*. For instance, the executive T2-S1-21 remarked: "We don't have any common standards for compliance. Different buyers have different compliance requirements." This participant's view suggests that suppliers have difficulties managing diverse

audit procedures demanded by different kinds of buyers. The following quotation from the owner T2-S6 confirmed this view:

> There are different kinds of business customers. We are working with C graded buyers who didn't join the Accord or the Alliance. We get 80% of our buyers directly from the Alibaba.com website. To be honest, these buyers do not have any difficult requirements. We try to ensure their minimum requirements such as on-time salary payment, dining facilities, clean drinking water and hygiene in toilets.

The above owner's comment demonstrates that various types of buyers prevail in the global apparel market. Some buyers do not want comprehensive social or environmental requirements from all suppliers. This finding resonates with the finding of prior research (Egels-Zandén et al., 2015) that buyers did not expect sustainability practices from most sub-suppliers since these non-audited suppliers were often excluded from the published information. Some owners of third-tier suppliers even indicated that local buyers (first-tier and second-tier suppliers) did not focus on any sustainability standards; rather they emphasised product quality and timely delivery issues. For instance, the following comment from the owner T3-S1 reflected this situation:

> We do not have direct connections with foreign buyers. We only know the local garments buyers [second-tier apparel suppliers]. There is no strict monitoring from them [second-tier apparel suppliers] regarding workers' health and safety issues. These local garment factories only focus on quality of product and machines, and on-time delivery.

The above manager's view indicates that lack of consistency in buyers' standards is an obstacle to embedding sustainability practices into multi-tier apparel supply chains. This is in accordance with the findings of Chkanikova and Mont (2015) and Lund-Thomsen and Lindgreen (2014), which suggest that lack of industry-wide consistent sustainability criteria hampers firms in implementing sustainability practices.

4.4.2.3 Power and trust Gaps between Actors

The final sub-theme under external barriers that emerged from the data was *trust and power gaps between actors*. Power is "usually defined as the ability to influence others to do what they would not otherwise have done" (Gadde, Håkansson, & Persson, 2010, p. 115). As such, power is deeply rooted in interdependency and can be exercised in either a threatening or an influencing way (Egels-Zandén et al., 2015). In this chapter, power and trust refer to instances in which the participants discussed bargaining power, influence or dependency on other resources that one of the actors controls. As shown in Table 4.2, four second-cycle codes under this sub-theme emerged from the data. The first thematic code was *lack of suppliers' bargaining power to share implementation costs*, which was cited by owners and managers of multi-tier suppliers as a significant barrier that impeded their sustainability efforts. For example, the manager T1-S7 remarked:

> For us, the major challenge is price because of increased expense. What they [buyers] now want: no compromise with quality, no compromise with [social and environmental] compliance. Everything they want 100%. But when we talk about the price adjustment, they [buyers] don't open their mouth. We have already spent more than 10 crore

> Bangladeshi Taka on fire, building and structural safety over the last two years. They [buyers] did not compensate any single penny. They don't even care about this issue.

In a similar vein, the manager T2-S2-2 confirmed this view and stated:

> […] We are facing serious challenges from two sides. On the one side, we are required to invest in compliance. On the other side, buyers are demanding to reduce their prices. This concern [low price] is the same for first-tier suppliers who force us to reduce accessories prices…We cannot refuse business orders [from buyers or first-tier suppliers]. We think it is better to produce apparel accessories at a low price instead of no production at all.

The above managers' comments show that although buyers want suppliers to comply with all sustainability requirements, they do not want to share any costs of sustainability implementation. Additionally, buyers are using bargaining power to reduce prices since the apparel market is buyer-driven in nature. As such, multi-tier apparel suppliers perceive buyers' bargaining power (supplier dependency) as the main barrier against adopting sustainability practices. This finding is in contrast with the previous research (Hoejmose, Brammer, & Millington, 2013) which highlights that supplier power (buyer dependency) is an obstacle to implementing supply chain sustainability practices. However, they also claim that joint dependency plays a vital role in successfully implementing these practices. Furthermore, the majority of key informants (10 out of 15) from the sample stakeholder groups also indicated that buyers are reluctant to share sustainability-related development costs through improving price. These findings are consistent with a previous study by Huq et al. (2014), which revealed that pressure to reduce prices as well

as buyers' unwillingness to share implementation costs are the key barriers to embracing social sustainability practices.

The second thematic code under trust and power gaps was *trust gaps between factory management and third-party auditors.* For instance, the manager T1-S2 remarked:

> […] Third-party auditors have inspected our factory 8 to 10 times. We received a new corrective action plan (CAP) every time they visit our factory. Accordingly, we have to pay inspection fees. There is no end to their CAPs despite complying with their suggestions. It is very difficult to understand and trust them.

Likewise, the following comments of another manager T1-S13 affirmed this view:

> A buyers-directed audit consortium is doing business from our factories. The majority of engineers in this consortium have their own consulting firms or connections with consulting firms…For audit approval, we are required to design building drawings and modification materials [fire doors] from their authorised consulting firms. Otherwise, it is difficult to pass an audit.

These above managers' views showcase the trust gaps between factory management and auditors. They also reveal that some third-party auditors have created an invisible system, with which suppliers are forced to comply to get auditors' approval. As such, factory management have to purchase building design and safety materials from auditors' nominated firms, and these

auditors receive commissions from such firms. This finding supports the result of the previous study by Huq et al. (2014), which identified that confrontational relationships between suppliers and auditors has been considered an obstacle to adopting social sustainability practices. However, procedural fairness and trustworthiness, particularly global buying firms' economic and non-economic support of suppliers can facilitate the successful implementation of SSM practices (Boyd, Spekman, Kamauff, & Werhane, 2007; Hamilton-Hart & Stringer, 2016).

The other thematic code under this external driver that emerged from the data was *trust gaps between factory management and other external stakeholders* such as media and trade unions. Except for third-tier suppliers, the majority of participants from first- and second-tier suppliers perceived the role of media and trade unions as negative towards the implementation of sustainability practices. For instance, the director T1-S6-2 remarked:

> We have so many factories. Factory-related accidents like the Rana Plaza collapse are very rare. However, the media exaggerated that incident. Some questions were raised regarding the role of some selfish global media alongside the politically motivated NGOs and other organisations wanting to destroy this industry. If you observe, a number of workers died a few months ago because of a factory fire in New York, USA as well as New Delhi, India. But the media didn't talk about it.

The above director's comment suggests that local and global media seldom highlight the best factories of Bangladesh in favour of identifying and publicising the worst factories. Moreover, the number of non-compliant factories is much lower than the total number of good factories.

According to the inspection reports in 2018, a total of 2582 factories were inspected under the Alliance and the Accord whereas only 178 factories faced business termination due to their failure to fix faults (The Alliance, 2018). Nevertheless, some managers and owners feared that media and NGOs show bias when they do not equally report other factory accidents in other countries. In their study on the sustainability reporting practices of Bangladeshi garment industry associations, Islam and Deegan (2008) have revealed this similar finding. Hence, it can be argued from the findings that the *trust and communication gaps between suppliers and media* are external barriers for SSM implementation.

Furthermore, several key informants (4 out of 15) from stakeholder groups suggested that several apparel owners were politicians and elected members of parliament who created obstacles to passing any labour laws and consideration of living wages on behalf of workers. For example, as the advisor from donor agency DA commented:

> We have proposed some amendment to laws for the betterment of workers to the government. For this amendment, the law has to be voted for by the parliament. About 80% of the parliamentarians are businessmen. About 13% of these parliamentarians are garment business owners. When the amendment bill, which increases their business costs, arrives on their desk, there is zero chance of passing it. We are facing this hurdle.

The above manager's comment illustrates that apparel company owners are powerful and control the regulatory agencies which impede external stakeholders from enforcing their agenda relating to the improvement of social and environmental standards in the apparel industry. In a similar

vein, one supplier highlighted the political connections of owners' associations as a barrier to adopting SSM practices. For example, the manager T1-S12 commented:

> The Trade Association is basically working on behalf of owners' interests. All its leaders are connected to political organisations, especially the ruling party. Now this is totally a political platform. It would be better for the industry and workers if this association worked beyond the influence of political parties.

The above finding is in accordance with prior research by Huq et al. (2016), Siddiqui and Uddin (2016) and Soundararajan et al. (2018), which found that apparel owners are influential because of their political affiliations with the ruling party and control the regulatory bodies and apparel industry associations. Two participants from DA and a NGO further confirmed this view. Thus, *power and trust gaps* between suppliers and other actors were identified as a barrier to SSM implementation.

To sum up, owners and managers of multi-tier apparel suppliers encountered a wide range of internal and external barriers and challenges to the successful implementation of SSM practices in their supply chains. The findings also indicated that the majority of owners and managers from first-tier suppliers faced more external barriers (cited 35 times) such as *gaps in the regulatory framework* than internal barriers (cited 17 times) such as *cost and resource concerns*. In contrast, owners and managers of second-tier suppliers and third-tier suppliers encountered more internal barriers such as *cost and resource concerns* than external barriers such as *complexity in transparency and visibility*. Figure 4.1 below summarises the SSM drivers and barriers discussed in the chapter.

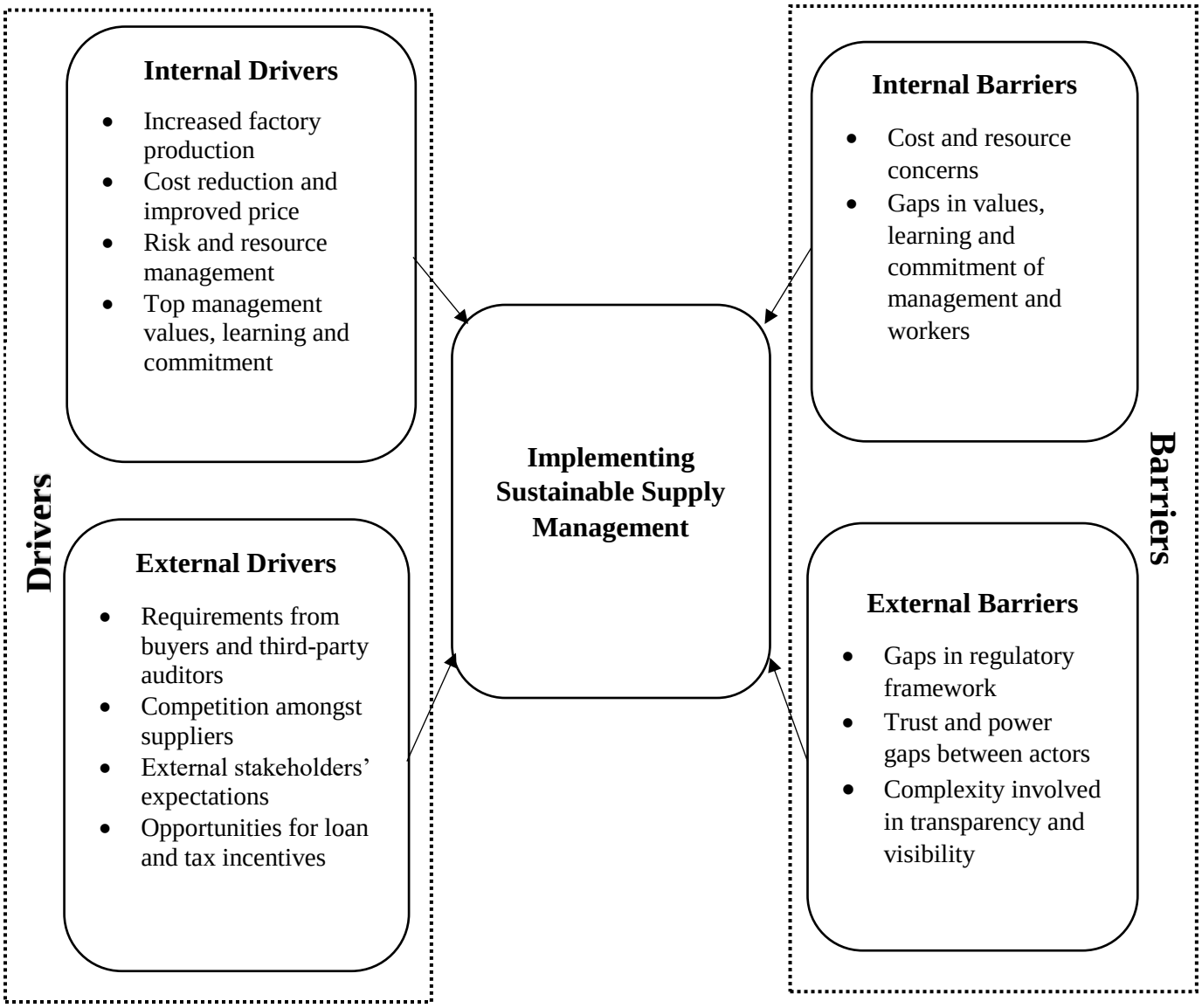


Figure 4.1 Drivers for and barriers to implementing Bangladeshi multi-tier apparel suppliers' SSM practices (constructed based on the findings from the interviews)

4.5 Conclusion

This chapter investigates the drivers for and barriers to SSM implementation. The findings demonstrated that managers and owners of first-tier and second-tier apparel suppliers experienced more drivers than barriers. With regard to overall drivers, instrumental drivers were

cited more than normative drivers. This is mainly due to the conventional viewpoint of stakeholder theory, which drives multi-tier apparel suppliers to embrace SSM practices as a way of maximising economic sustainability. It is suggested that in the case of first-tier and second-tier suppliers, descriptive, instrumental and normative drivers are perceived to function in an integrative way to successfully implement SSM practices in their supply chains. However, owners and managers of third-tier suppliers perceived more barriers than drivers. This may be because third-tier suppliers lack financial resources as well as institutional human expertise to comply with SSM implementation practices. Thus, it is evident that third-tier suppliers were adopting some sustainability practices on an ad hoc basis while first-tier suppliers and buyer-nominated second-tier suppliers were propelled to fulfil all SSM requirements.

Furthermore, the findings indicated that owners and managers of first-tier suppliers experienced more external barriers than internal barriers. This may be because first-tier suppliers are more visible to external institutional actors whereas buyers, NGOs and regulators are continuously scrutinising the implementation of sustainability practices of these suppliers. Moreover, first-tier and second-tier suppliers encounter some external institutional barriers such as *regulatory gaps* that impede their efforts to embed SSM practices. However, external barriers to SSM implementation can also be influenced by contingency factors such as *power and trust gaps*. Finally, the findings of this chapter will be further expounded in detail with regard to integrative stakeholder theory, institutional theory and contingency theory in the discussion chapter.

CHAPTER 5

Multi-tier Apparel Suppliers' SSM Implementation: Institutional Pressures, Decoupling and Logics

5.1 Introduction

This chapter examines how institutional pressures and mechanisms have an impact on the implementation of SSM practices across multi-tier apparel suppliers, and why these suppliers' responses to institutional pressures differ on factory production floors. Previous research has investigated the effects of institutional pressures, mechanisms, and decoupling on firms' implementation of sustainability practices. However, relatively few studies have explicitly examined the influence of institutional pressures, decoupling, and logics on the implementation of SSM practices within multiple tiers of upstream suppliers. This chapter aims to fill this gap by achieving the following objectives:

- to investigate the institutional pressures and mechanisms influencing the implementation of SSM practices across multi-tier apparel suppliers;
- to identify multi-tier apparel suppliers' decoupling of formal SSM practices; and
- to examine the role of institutional logics in the implementation of multi-tier apparel suppliers' SSM practices.

This chapter is the second of three chapters discussing the findings. An overview of the chapter is presented in the first section. The second section illustrates the findings relating to the

institutional pressures affecting the implementation of SSM practices across multi-tier apparel suppliers. The next two sections illustrate heterogeneity (decoupling) and the role of institutional logics in the implementation of multi-tier apparel suppliers' SSM practices. In the last section of the chapter, the conclusions are presented.

5.2 Overview of the Chapter

The findings of this chapter are guided by the institutional theory, particularly *institutional pressures*, *heterogeneity/decoupling* and *institutional logics*, used in this study. Within a SSM implementation context, the key reason behind the adoption of institutional theory is to "understand the mechanisms that lead firms utilize to transfer the sustainability pressures across several tiers of the supply chain" (Tachizawa & Wong, 2014, p. 654). As such, mechanisms, also recognised as governance mechanisms, refer to the institutional approaches and practices (supplier assessment, collaboration, and competition) through which firms manage relationships with their multiple tiers of suppliers to improve SSM outcomes (Gimenez & Sierra, 2013). Accordingly, the codes, sub-themes and key themes used in this chapter are shown in Table 5.1. The key themes and sub-themes associated with institutional theory, namely *institutional pressures* (coercive, mimetic and normative pressures and mechanisms), *institutional heterogeneity/decoupling* (avoidance, defiance, and manipulation), and *institutional logics* (conflicting and complementary institutional logics) were derived from the existing literature. All of the second-cycle codes emerged inductively from the interviews and other documentary data. In addition, all of the second-cycle codes relating to *institutional pressures* were identified under three governance mechanisms (*direct*, *indirect* and *don't bother*).

In terms of coercive pressures and mechanisms, the findings indicated a series of second-cycle codes from the data such as *buyers' selection and assessment, Tier 1 or Tier 2 suppliers' selection and assessment, legal obligations, third-party auditors' assessment,* and *pressures resulting from buyers' consortium platforms*. In terms of mimetic pressures and mechanisms, the findings indicated two second-cycle codes from the data: *pressure resulting from competitors* and *participation in best-practice sharing groups and voluntary frameworks.* In terms of normative pressures and mechanisms, the findings identified several second-cycle codes from the data such as *collaboration between direct buyers and suppliers,* and *collaboration between suppliers and non-traditional partners such as NGOs and other institutional actors*.

Furthermore, in terms of institutional heterogeneity, the findings suggested a series of second-cycle codes: *buyers/suppliers' mock compliance, voluntarily concealing violations, cheating through further sub-contracting buyers' orders without their consent, blaming actors associated with institutional demands, opportunistic behaviour of owners,* and *owners' influence on and control over workers and their associations*.

In terms of institutional logic, the interview data identified several second-cycle codes: *social logic, environmental logic* and *economic logic*. The reported findings of this research have been structured on a three-tier apparel suppliers' basis, specifically tier 1, tier 2 and tier 3 suppliers. Accordingly, the theoretical constructs and their resulting codes and themes identified with respect to each tier of apparel suppliers are elaborated in separate sections (5.3, 5.4 and 5.5) of the chapter. Relevant comments from the participants are presented, and where appropriate, findings are compared with the existing relevant literature.

Table 5.1 The overview of identified codes and themes relating to multi-tier suppliers' SSM implementation

Key Thematic Area (deductively emerged from the literature)	**Sub-themes** (identified from the literature)	**Definitions/Explanations** (based on existing theoretical knowledge in the literature)	**Codes** (Second-cycle codes that inductively emerged from data)
Institutional Pressures **(Coupling Mechanisms)**	**Coercive pressures and mechanisms**	Coercive pressures are exercised by other formal and informal powerful organisations within a network upon which the organisations find themselves dependent (DiMaggio & Powell, 1983). *Selection* and *assessment* are the key coercive mechanisms.	**Direct** Buyers' selection and assessment requirements (codes of conduct) **Indirect** Third-party assessments or certification (ISO 140001, BSCI) Legal obligations Tier 1 or Tier 2 suppliers' selection and assessment for Tier 3 Pressures resulting from non-traditional partners (NGOs) **Don't bother** No pressures on lower-tier suppliers, only focus on first-tier suppliers
	Mimetic pressures and mechanisms	Mimetic pressures occur when organisations seek legitimacy through imitating best practices of successful *competitors* because of "standard responses to uncertainty" (DiMaggio & Powell, 1983, p. 67).	**Indirect** Pressure resulting from competitors (following sustainability practices of exemplary factories) Participation in best-practice sharing groups and frameworks
	Normative pressures and mechanisms	Normative pressures come from educational and professional experts, through which norms and behaviours are accepted as legitimate and transferred to individuals (DiMaggio & Powell, 1983). *Collaboration for Supplier Development* is the key normative mechanism.	**Direct** Collaboration between direct buyers and suppliers **Indirect** Collaboration between suppliers and non-traditional partners (NGOs, industry associations, and government agencies)
Institutional Heterogeneity **(Decoupling Approaches)**	**Avoidance**	Avoidance refers to the circumstances (voluntarily hiding violations) where no practice is implemented at all (Oliver, 1991).	Buyers/suppliers' mock compliance Voluntarily concealing violations Cheating through further sub-contracting buyers' orders
	Defiance	Defiance refers to the circumstances (openly blaming the sources of pressures) where no practice is implemented (Oliver, 1991).	Blaming actors associated with institutional demands
	Manipulation	Manipulation refer to the circumstances (viciously exercising influence to change the content of the practice) where no practice is implemented (Oliver, 1991).	Opportunistic behaviour of owners Owners' influence on and control over workers and their associations
Institutional Logics **(Causes)**	**Conflicting Institutional Logic**	Conflict "exists when one partner perceives the other partner as impeding the attainment of goals or some other function of concern" (Weitz & Jap, 1995, p. 315). As such, sustainability practices' implementations "carry an opportunity cost" (Haffar & Searcy, 2017, p. 496) and the organisations find themselves in conflicting situations "whenever they confront incompatible prescriptions from multiple institutional logics" (Greenwood et al., 2011, p. 317).	Environmental logic versus economic logic Social logic versus economic logic Social logic versus environmental logic
	Complementary Institutional Logic	Complementary institutional logic, also known as synergy, refers to a situation whereas owners and managers of organisations perceive 'win-win' business opportunities to engage in social, economic and environmental initiatives (Haffar & Searcy, 2017).	Social logic complements economic logic Environmental logic complements economic logic Environmental logic complements social logic

5.3 Institutional Pressures and Mechanisms

This section illustrates the findings relating to the institutional pressures and mechanisms influencing the implementation of SSM practices. The findings from interviews are summarised in Table 5.2. While Table 5.2 only displays sample quotes from some of the participants across multi-tier suppliers, these quotes were further confirmed by the other participants from supply firms as well as key informants from different stakeholder groups in the right-hand columns of the same table, as discussed below.

5.3.1 Institutional Pressures: First-tier Suppliers

The findings suggested that the strong institutional pressures and mechanisms influencing the SSM practices of first-tier apparel suppliers were coercive pressures, followed by normative pressures and mimetic pressures (see Table 5.2). As the evidence shows in Tables 5.1 and 5.2, three sub-themes and their respective codes were identified from the data as falling under institutional pressures.

5.3.1.1 Coercive Pressures and Mechanisms

According to the findings, coercive pressures to embed SSM practices were perceived by most participants (17 out of 23) from first-tier suppliers as the dominant institutional pressures. In particular, *buyers' selection and assessment* was a significant coercive mechanism that influenced first-tier apparel suppliers to integrate SSM practices. For example, the following comment from manager T1-S7 highlighted buyers' direct pressure for sustainability codes of conduct as a major *selection and assessment* mechanism:

Table: 5.2 Key themes relating to institutional pressures across the multiple tiers of apparel suppliers

Supply Chain Tier	Sub-themes under Institutional Pressures	Sources of pressures	Sample illustrative quotes	Interviewees perceiving this pressure on implementation	Key informants from stakeholders supporting this view
First-tier Suppliers	**Coercive** ***(Selection and assessment)***	Stem from buyers' direct selection and assessment requirements (codes of conduct)**,** third-party indirect assessments or certification (ISO 140001), legal obligations, non-traditional stakeholders' pressures (buyers' consortium platforms)	"We have pressure from buyers to fulfil their business requirements. The majority of buyers and buying houses are focusing on technical and social sustainability-related requirements during the assessment process of our current activities. Additionally, some other buyers put emphasis on environmental sustainability requirements. Based on the fulfilment of these requirements, they place orders in our factory." (T1-S8-1) "We recently have invested 50 crore BDT for the installation of the 300 cubic feet Effluent Treatment Plant (ETP) to save the surrounding environment...All factories who have dyeing and washing facilities will have to set up ETP now and in the future since we have strong pressure from local government and the environmental department. To apply for renewal of environmental licenses, all factories are required to submit zero discharge plans every three months." (T1-S10) "There is pressure from a buyers' consortium to improve our factory's working conditions, particularly safety standards. We see it positively. (T1-S7)	T1-S1, T1-S2, T1-S3, T1-S4-1, T1-S5-1, T1-S6-2, T1-S7, T1-S8-1, T1-S9, T1-S10, T1-S11, T1-S12, T1-S13, T1-S14, T1-S15-1, T1-S16, T1-S17 (High)	B-1; B-2; TPA-1; TPA-2; DA; NGO; PRA-1; PRA-2; SO; TU-1; TU-2; IA-1; IA-2
	Mimetic (***Competitive tendency***)	Stem from participating in best-practice sharing groups and voluntary frameworks, competitors' pressures	"We are motivated by some world-class apparel factories. We are going to set up a new project, known as a US-LEED certified green factory, where we would have three activities: super wash, super garments and packaging. This project will be completed in 2019. We feel apparel businesses will be highly competitive…green factories will lead apparel businesses for the next 50 years." (T1-S6-2)	T1-S1, T1-S3, T1-S4-2, T1-S5-1, T1-S6-2, T1-S7, T1-S8-1, T1-S9, T1-S10, T1-S11, T1-S12, T1-S13, T1-S15-1 (Medium)	TU-1; DA; B-1; B-2, IA-2
	Normative (***Collaboration for supplier development)***	Stem from collaboration between direct buyers and suppliers, collaboration between suppliers and non-traditional partners such as NGOs and other institutional actors for developing awareness-raising training and workshops	"We have ISO 14000 certification. As part of the requirements of this certification, the upper and middle-level factory management have already participated in several awareness training sessions and workshops prior to its implementation at the factory level". (T1-S3). "Trade associations arrange training of trainers, particularly for mid-level managers and then we train workers at the factory level. Sometimes, we send managers and workers outside the factory to attend different training and awareness workshops on topics such as fire drills, personal protective equipment, health and safety. These training sessions and workshops are jointly organised by trade associations and Europe-based development agencies for the purpose of developing capacity and knowledge acquisition to improve social and environment standards at the factory." (T1-S5-2)	T1-S1, T1-S3, T1-S4-1, T1-S5-1, T1-S6-1, T1-S7, T1-S8-1, T1-S9, T1-S10, T1-S11, T1-S12, T1-S13, T1-S14, T1-S15-1, T1-S16 (High)	B-1; B-2; LM; HEI; TPA-2; DA; NGO; PRA-1; PRA-2; SO; TU-2; IA-1; IA-2; WD

			"Our company is collaborating with one supranational organisation and Mohila Polytechnic Institute regarding the 3 months duration vocational learning, skill development and health and safety-related training to train rural young women who will be hired by us." (T1-S1)		
Second-tier Suppliers	**Coercive** ***(Selection and assessment)***	Stem from buyers' selection and assessment requirements, legal obligations, and third-party assessment requirements	"Recently different agencies such as buyers, third-party auditors, and government inspectors are more vigilant about health and safety issues. These forces drive us to focus on social sustainability practices". (T2-S10)	T2-S1, T2-S2-1, T2-S2-2, T2-S3, T2-S4, T2-S5, T2-S6, T2-S7, T2-S9-1, T2-S9-2, T2-S10, T2-S11-1 (High)	B-1; B-2; TPA-1; TPA-2; DA; NGO; PRA-1; IA-1; IA-2
	Mimetic (***Competitive tendency***)	Stem from participating in best-practice sharing groups, and competitors' pressures	"We have a factory where we didn't maintain compliance before the 2013 Rana Plaza incident. For example, we didn't have any childcare and medical facilities. Now buyers are recommending these facilities to all factories like us. Business is becoming more competitive day by day. We are complying with these requirements since other suppliers are setting up these facilities." (T2-S2-1)	T2-S1, T2-S2-1, T2-S2-2, T2-S4, T2-S8-1, T2-S8-2, T2-S9-1, T2-S9-2, T2-S11-1, T2-S11-2 (High)	TU-2; DA; B-1; B-2
	Normative (***Collaboration for supplier development)***	Collaboration between suppliers and non-traditional partners for developing awareness-raising training	"We have different training equipment manuals. We arrange PPEs training, fire drill training and health-related first aid training. Although it is difficult for us to continuously provide all training topics, we at least try to arrange fire drill training every two months on our production floors." (T2-S7)	T2-S2-1, T2-S4, TS-S6, T2-S8-1, T2-S8-2, T2-S11-2 (Low)	B-1; B-2; LM; HEI; TPA-2; DA; NGO; PRA-1; PRA-2; SO; TU-2; IA-1; IA-2; WD
Third-tier Suppliers	**Coercive** ***(Selection and assessment)***	Stem from local buyers' selection and assessment requirements	"Local garment factories [second-tier suppliers] want us to fulfil some key social requirements such as minimum health and safety practices since they have commitments with their direct buyers. So these social practices of local factories are our business requirements." (T3-S3)	T3-S3, T3-S2-1, T3-S5-2 (low)	IA-1; IA-2; WD
	Mimetic (***Competitive tendency***)	Stem from competitors' pressures	"After the 2013 Rana Plaza accident, small sub-contracting factories like my company have changed a lot regarding fire safety since we have intense pressure resulting from competition. Prior to that, we had a fire license and some expired fire prevention equipment, but nobody checked them. Now we have to keep some up-to-date fire prevention equipment in our factory to tackle future accidents." (T3-S1)	T3-S1, T3-S3, T3-S5-1 (Medium)	DA; WD

> Every buyer is mainly looking for two kinds of conditions during the selection and assessment of our factory. One is technical and product conditions which includes price, quality, machinery, timely delivery and flexibility. Another is compliance and human resource (HR)-related conditions. These two conditions are known as codes of conduct (CoC), which buyers share with the factory. They are straightforward and say... Look if you want to do business, you have to maintain our CoC [buyers' requirements]. We have no other option but to continue this [supplying apparel] business.

The above manager's view demonstrated that buyers imposed specific sustainability requirements, particularly internal codes of conduct, on suppliers as pre-conditions to qualify for buyers' production orders. Key informants from two buying firms confirmed this view. As the manager B1 said:

> We directly assess and monitor our suppliers' activities on the basis of the company's codes of conduct. At the time of selection and assessment of our suppliers, we mainly focus on health and safety, on-time wage payments, acceptable working hours and environmental impact.

The above finding is consistent with previous studies which found that coercive pressures on suppliers mainly stem from powerful buyers' specific codes of conduct as selection and assessment requirements to obtain production orders (Huq et al., 2014; Sayed et al., 2017; Wilhelm et al., 2016).

However, several participants indicated that first-tier suppliers obtained production orders from diverse new as well as existing buyers worldwide on an on-going contract basis. In terms of dealing with existing buyers, the majority of first-tier suppliers were not required to go through a *buyers' selection and assessment* process as they were trusted by their respective buyers. The manager T1-S5-1 justified this argument in the following way:

> We are working for 70 different buyers across North America, Europe, Australasia and Asia. Except for a few buyers, the majority of them are our existing buyers who have been outsourcing apparel products for a long time. In the case of existing buyers, the monitoring and assessment of our sustainability practices are limited as they trust us and are happy with our current performance. However, the audit team of new buyers visit our factories and assess our technical capabilities, working conditions and environmental practices as per their codes of conduct.

The above manager's comment demonstrated that suppliers faced formal monitoring and auditing of sustainability activities before gaining production orders from new buyers. Furthermore, the monitoring and assessment of suppliers were conducted indirectly by third-party auditors and certification bodies. As such, beyond the *buyers' selection and assessment* mechanism, *third-party assessment* was another key coercive mechanism. For example, the manager T1-S5-2 highlighted the presence of different auditing systems:

> […] There are three types of auditing systems that are followed by third-party auditors on behalf of buyers during the assessment process: announced audit, semi-announced and

> unannounced audit. During an announced audit, third party auditors give us a specific date to visit our factories. During a semi-announced audit, they provide us with a window period in which they will visit and assess our factories' sustainability practices. Sometimes we have experienced a surprise audit [without announcement] from buyers or third-party auditors.

Regardless of the above examples of diverse auditing systems, most third-party auditors followed the same procedures when they audited individual suppliers. Two key informants (TPA-1 and TPA-2) from auditing firms confirmed the practice of similar audit processes. For instance, the auditor TPA-1 explained:

> We divide our audit process into several parts. First of all, we identify the audit scope based on the type of supplier, starting from yarn manufacturers to ready-made garment suppliers. Then, we visit the factory and do an audit meeting initially. After that, we assess all kinds of documentation such as salary sheets, licenses and so on. Then, we conduct a planned tour to talk to workers about their health and safety issues on the production floors. Finally, we conduct a closing meeting and prepare an integrated report based on triangulation of all stages of the auditing process.

In a similar vein, the manager T1-S2 supported the above argument through highlighting the existence of different factory-based compliance rating systems:

> Third-party auditors bring specific standards of the respective buyers while they audit our factory…They want to identify the acceptable risks or different categories of supply factories against their respective sustainability standards and colour codes. For example, red means non-compliant factory [rating D or scoring below 60%], orange means high-risk factory [rating C or scores of 60%-70%], yellow means medium-risk factory [rating B or a score of 70%-80%] and green means low-risk factory [rating A or above 80%]. Further, auditors assess and monitor the high-risk factory immediately after three months. However, they further monitor a green-rated factory after two years. It's a continuous process.

It is clear from the above participant's view that third-party auditors followed a similar process to assess suppliers' social and environmental compliance practices, and also assigned a factory rating or score based on their assessment report. The frequency of subsequent assessment depended on the range of risks or rating associated with individual supply factories. This finding is in accordance with previous studies which showed that auditors from certification bodies and third parties regularly assess social and environmental compliance practices of first-tier suppliers to improve suppliers' SSM practices (Boyd et al., 2007; Huq et al., 2016). However, several previous studies criticised the role of compliance-based mechanisms such as voluntary codes of conduct as well as third-party assessment regarding their ability to effectively address suppliers' sustainability practices (Barrientos & Smith, 2007; Egels-Zandén & Lindholm, 2015; Soundararajan & Brown, 2016). Despite this critical concern about the traditional compliance-based assessment mechanism, a new form of buyers' consortium audit emerged immediately

after the 2013 Rana Plaza disaster to improve safety standards in Bangladesh. The following quotation from the manager T1-S2 supported the assertion that:

> After the 2013 Rana Plaza [disaster], engineers from the Accord and the Alliance [buyers' consortia] are seriously assessing detailed factory building safety analysis...Also, they are evaluating the fire and electrical safety of individual apparel suppliers like our factory. Based on their safety assessments, they give us valuable feedback to further improve. I think 98% of apparel factories have addressed these safety issues. Also, we have already incorporated the Accord's suggestions about safety standards.

The above manager's comment clearly revealed the improvement of workplace safety amongst first-tier apparel suppliers in response to specific compliance suggestions from two newly emerged buyers' consortium authorities: the Accord and the Alliance. The Accord is a legally binding collective agreement among a range of institutional actors including two global and eight local trade unions, four social movement organisations, and over 180 apparel retailers and brands from 20 countries in Europe, North America, Asia and Australia (Reinecke & Donaghey, 2015). During the safety improvement process under the Accord, apparel industry associations and governments (Reinecke & Donaghey, 2015) play a facilitating role between buyers and suppliers through monitoring the implementation of sustainability practices. This finding resonates with the findings of prior research (de los Reyes Jr et al., 2017; Huq et al., 2016), which argued that the pressures from these two buyers' consortia stimulate first-tier suppliers to adopt safety standards and industry norms within their factories.

Furthermore, the findings indicated that several owners and managers of first-tier suppliers perceived *legal obligations* from government agencies as a coercive pressure toward the implementation of SSM practices. For example, the manager T1-S10 remarked:

> We recently have invested 50 crores BDT for the installation of the 300 cubic feet Effluent Treatment Plant (ETP) to save the surrounding environment...All factories who have dyeing and washing facilities will have to set up ETP now and in the future since we have strong pressure from local government and the environmental department. To apply for renewal of an environmental license, all factories are required to submit zero discharge plans every three months.

The above finding is consistent with previous studies, which found that regulatory agencies such as governments can influence the social behaviour of suppliers through explicitly exercising sustainability laws and regulations (Lim & Phillips, 2008; Wu et al., 2012). However, some scholars (Huq et al., 2014; Soundararajan & Brown, 2016) argued that government regulatory pressures play a very weak role in extending sustainability practices across upstream suppliers. Instead, some participants indicated that an industry association was playing a key role as a regulatory force, regularly inspecting health and safety issues on production floors of their member supply firms. The following comment of the manager T1-S5-1 recounted this situation:

> The trade association monitors all listed member factories in Bangladesh. In the case of any serious violation of laws, this association guides and warns factory management about the withdrawal of membership. It is a big problem for us if we lose membership.

> Because the trade association provides a certain amount of money for group insurance for accident-related deaths or injuries, we are bound to follow their guidelines.

The above participant's comment demonstrated that the trade association created coercive pressure on apparel suppliers to ensure SSM implementation. Moreover, trade associations might take punitive action against any serious social violations, which tended to involve loss of membership-related benefits. This finding is line with earlier studies (Islam & Deegan, 2008; Lund-Thomsen & Nadvi, 2010; Park-Poaps & Rees, 2010), which suggested that the coercive pressures from industry associations play an important role in implementation of SSM practices.

However, coercive pressures on apparel suppliers from other *non-traditional supply chain actors* such as NGOs, trade unions and media were still less noticeable. Some key informants from stakeholder groups pointed out several reasons for this, which included lack of access, bargaining power, and inadequate knowledge about the inside operations of supply factories. For example, the following view of the participant from a NGO illustrated this concern:

> As an anti-corruption think tank, we are a pressure group for the apparel industry association. Prior to the 2013 Rana Plaza factory disaster, we didn't get access to the apparel industry association to discuss different irregularities and problems. When we proactively started to arrange different seminars and present our reports to the mass media, the industry association opened the door for us.

It is clear from the above participant's argument that due to the 2013 Rana Plaza incident, NGOs with the help of trade union leaders and media were in a good position to coerce first-tier suppliers and their associations to improve sustainability practices.

5.3.1.2 Mimetic Pressures and Mechanisms

According to the findings, mimetic pressures and mechanisms for embedding SSM practices were perceived by several participants (13 out of 23) from first-tier suppliers as institutional pressures. The majority of these participants identified mimetic pressures for SSM practices as being driven by *their competitors* with the purpose of getting buyers' business orders. For example, the manager T1-S6-2 confirmed this view through emphasising the firm's tendency to copy the best sustainability strategies of their rival firms:

> We are motivated by some world-class apparel factories. We are going to set up a new green factory project, where we would have three activities: super wash, super garments and packaging. This project will be completed in 2019. We feel apparel businesses will be highly competitive and the number of small factories will be reduced in future. However, the volume of business orders will not go away from Bangladesh…We hope green factories will lead the apparel businesses for the next 50 years.

The above manager's view demonstrated that due to competitive market pressures for obtaining future business opportunities, first-tier suppliers were following the best practices of their peers through investing in certified green factory projects. This trend towards the integration of green

and compliant factories was noticeable throughout the apparel industry. Consequently, a considerable number of first-tier suppliers built internationally recognised green factories through joining best-practice sharing groups, particularly the United States Green Building Council (USGBC). This may be because financially solvent first-tier suppliers have the opportunity to obtain first-mover advantages through joining the USGBC. One of the participants from an industry association (IA-2) justified this argument in this way:

> The industry is moving towards green industry. We have an alliance with the USGBC [U.S. Green Building Council] certification body. Actually we are a certified consultant for building green factories. We have a green industry development cell which has recently signed contracts with 15 factories. These factories are going for green projects and 50 more factories are in the pipeline to join USGBC through using our consultancy services.

Although the above-mentioned number of on-going certified green factories is relatively small in comparison with the total number of factories (around 5000) in the apparel industry (BGMEA 2018), the findings further revealed that the majority of first-tier suppliers were *participating in best-practice sharing groups and voluntary frameworks* as a result of experiencing mimetic pressures. This finding is in line with prior studies (Grob & Benn, 2014; Matten & Moon, 2008; Sancha, Longoni, & Giménez, 2015; Zhu & Sarkis, 2007), which found that mimetic pressures and tendencies through voluntary frameworks, systems, and alliances are pressuring developing country suppliers to embrace sustainable sourcing practices. For example, Sancha et al. (2015)

argued that mimetic pressure was the only significant institutional pressure which effectively leads to implementation of sustainable supplier development practices.

5.3.1.3 Normative Pressures and Mechanisms

As the evidence shows in Table 5.2, normative pressures for embedding SSM practices were perceived by a significant number of participants (15 out of 23) from first-tier suppliers as strong institutional pressures. In particular, the majority of them pointed out the role of collaboration for supplier development as the key normative mechanism. Similarly, several participants indicated that *buyers directly collaborated with first-tier suppliers* to offer awareness-raising training support in the implementation of SSM practices. For example, participant T1-S5-1 stated:

> Since 2015, our factory management along with the training support from our European buyer's local sustainability team progressively started implementing the new method of a social and environmental facility module under the Sustainable Apparel Coalition (SAC) Higg Index-2…which is a web-based sustainability assessment tool.

The above example demonstrates the significance of collaborative efforts between buyers and suppliers to participate in sustainable apparel norm development assessment frameworks. With regard to supplier development for sustainability, collaboration occurred not only between suppliers and buyers, but also with other external stakeholders such as government, NGOs, donor agencies and industry associations. In terms of collaboration between suppliers and NGOs, T1-S17 highlighted an example: "[…] is a local NGO which supports our child care facilities

through training and governance". One key informant from donor agency DA supported the above view through emphasising the need for the following multiple stakeholder-led collaborative platforms:

> We provide technical assistance to the apparel supply factories in collaboration with private regulators, public regulators, supranational organisations and NGOs. We have currently five projects specifically for the apparel industry. The main purpose of these projects is to promote social and environmental standards in the apparel industry through training, workshops, knowledge and capacity building. For example, we have identified a skill gap in mid-level and top-level management which is the higher education need for sustainable textiles. To fill this skill gap, we have undertaken a student [managers] exchange programme …which helps aspiring managers to study abroad in the respective discipline [higher educational institutions in Europe].

The above participant's comment demonstrates that a non-profit organisation formed a collaborative platform to fill sustainability skill gaps of factory management and build the capacity of government agencies. Several key informants from diverse non-traditional stakeholder groups such as TU-1 and PRA-1 confirmed their activities in such a collaborative platform. For instance, one key informant PRA-1 admitted their organisation's participation in the same collaborative platform:

> We have a collaborative awareness-raising and training development project with a supranational organisation, European development agency and apparel factories. The

> supranational organisation and development agency build capacity of our inspectors through arranging training and workshops in five key areas: machinery safety, accident prevention, ergonomics, construction safety and chemical safety. In practice, foreign trainers train these inspectors [training of trainers (TOT)] who, in turn, train factory managers and workers.

The above participants' views highlighted that *collaboration between non-supply chain stakeholders and first-tier apparel suppliers* facilitated development of sustainability expertise within government agencies as well as apparel supply factories. Further, trained sustainability experts in the apparel factory arranged *factory-based internal awareness-raising training* for the workers. As such, one of the normative mechanisms for adopting SSM practices stems from diverse sustainability-related awareness training, and workshops in *collaboration with other external stakeholders* such as government, NGOs, donor agencies and supranational organisations. This finding is consistent with prior studies (de los Reyes Jr et al., 2017; Lund-Thomsen & Nadvi, 2010), which found that multiple stakeholder collaboration in the apparel sector acts as a normative force to develop sustainability standards and extensive worker awareness-raising training.

5.3.2 Institutional Pressure: Second-tier Suppliers

5.3.2.1 Coercive Pressures and Mechanisms

As shown in Table 5.2, *coercive pressures* were cited by owners and managers (13 out of 17) of second-tier suppliers as strong pressures affecting SSM practices. Coercive pressures mainly

stemmed from two sources. One source was *selection and assessment* requirements of direct buyers. For example, manager T3-S2-1 commented:

> We are trying to address all buyers' requirements. Say for instance, we installed 100 fire extinguishers. After visiting our factory, one buyer has recently suggested we add more fire extinguishers to fight accidental fires. We also got some suggestions from the buyer's consortium platform to modify our building pillars and rooms. Although we cannot start this retrofitting due to a busy production schedule, we are required to meet their [buyer and third-party] requirements.

The above participant's comment demonstrates that a buyer directly demanded specific fire safety standards from its nominated second-tier supplier. Moreover, on behalf of buyers, auditors from a newly emerging consortium (the Accord) put pressure on second-tier suppliers to ensure specific social sustainability standards are met, particularly building and structural safety. As such, another source of coercive pressure was *selection and assessment requirements from buyer-directed third parties and even first-tier suppliers*. One of the managers (T1-S2) from a first-tier supplier supported this view:

> Sub-suppliers [second-tier suppliers] are mostly nominated by branded buyers. If we source value-added materials and services from backward linkage suppliers such as apparel washing, embroidery and body printing, we are required to disclose their names and activities to the buyers. We do audits in their factories [second-tier suppliers]

> according to brands' high priority areas like child labour, forced labour, hazardous conditions and payments on time.

The above participant's view highlighted that SSM practices of second-tier suppliers were sometimes audited and assessed by first-tier suppliers as they are required to report to direct buyers. This is consistent with previous research of Wilhelm et al. (2016) who found that first-tier suppliers on behalf of buyers are also playing a facilitating role in monitoring the implementation of sub-suppliers' sustainability practices.

Furthermore, the findings suggested that inspectors from government agencies were vigilant in ensuring the sustainability practices of second-tier suppliers. For instance, one key informant (PRA-1) highlighted some points regarding their inspection procedures in this way:

> We do inspection and monitoring of apparel factories either proactively (routine-based inspection) or reactively (complaint-based inspection). We have a checklist of 123 questions relating to social and safety standards which is used by the inspectors to assess individual factories [resulting in grades of one, two or three stars]. There are 10 questions [giving three stars] which are mandatory to comply with if businesses want to avoid prosecution.

The above participant's view demonstrates that inspectors were following structured mechanisms such as questionnaires to proactively and reactively monitor and control various suppliers' SSM practices in the apparel industry. This finding is in partly contrast with some previous studies,

which found that the influence of legal obligations is less effective for implementing sustainability practices in developing country sub-suppliers (Huq et al., 2014; Soundararajan & Brown, 2016; Soundararajan et al., 2018). However, in line with some other prior research (Esfahbodi et al., 2017; Wu et al., 2012), the findings of this study indicated that a reasonable number of second-tier suppliers perceived *legal obligations* from the government agencies as a coercive pressure to adopt SSM implementation practices.

5.3.2.2 Mimetic Pressures and Mechanisms

As displayed in Table 5.2, *mimetic pressures* were perceived by 10 out of 17 participants as other significant pressures affecting the SSM practices of the second-tier apparel suppliers. According to the findings, mimetic pressures stemmed from competitors since several second-tier suppliers were following the best practices of the rival apparel supply firms. For example, the manager T2-S10 stated:

> We have improved our sustainability practices a lot through following the best practices of other apparel factories. Our top-level managers have sometimes approached the factory management of a nearby exemplary factory to learn how they are implementing social and environmental practices. Although we are competing with each other, they have shared some practices due to a good relationship with our factory owner.

It is clear from the above participant's view that this second-tier supplier had a tendency to follow the sustainability norms of a peer supplier to effectively implement SSM practices. This is consistent with earlier studies, which found that competition for orders pressured suppliers to

follow and implement the SSM practices of their rival firms (Ageron et al., 2012; Bondy et al., 2012; Hofmann et al., 2018). Interestingly, the findings also suggested that some of the best suppliers came forward to share and support neighbouring apparel factories during the SSM implementation process despite being in competition with similar peer suppliers. Mutual cooperation and good relationships between owners were identified as the key reason behind this interesting motive. A similar argument regarding the suppliers' social ties of reciprocity has also been made in the critical study of upgradation in the fishing value chain analysis (Hamilton-Hart & Stringer, 2016).

5.3.2.3 Normative Pressures and Mechanisms

In terms of *normative pressures*, relatively few owners and managers (6 out of 17) indicated their participation in awareness-raising training and workshops arranged by the external stakeholders. On the one hand, one manager (T2-S8-2) stated: "Both mid-level management and workers participate in fire safety and health related training conducted by the industry association". On the other hand, another manager from the same supply firm T2-S8-1 held this view but highlighted different issues:

> We train a small amount of workers at a time. It is not possible to train all workers since it hampers and stops production. You know we don't want to stop production. However, we have decreased the number of untrained workers over the last couple of years from 80% to 20%.

The above managers' contrasting views suggested that while top-level management sometimes participated in collaborative fire and safety training, the diffusion of this training on the

production floor among general workers was still limited. Similarly, a key informant from the stakeholder organisation DA raised this as a critical concern in the following way:

> We are working with three hundred factories listed under public regulators [A, B and C rated factories] to develop knowledge and technical capacity-building in the area of social and environmental sustainability practices. There are many factories who want to work with us. But we have to ensure that interested factories will continue all of our recommended initiatives when we stop working with them at the end of our projects.

The above participant's view reveals that there are different collaborations between second-tier suppliers and non-traditional supply chain partners such as DA. However, after the completion of DA-led capacity-building initiatives, there was limited supplier commitment to continuously supporting training initiatives such as further continuation of factory-based training-related activities for workers. Following this argument, additional findings suggested that while several collaborative projects existed at the second-tier supplier levels, the normative pressures from NGOs and trade unions were still less noticeable. This finding resonates with the results of a previous study by Soundararajan and Brown (2016). To tackle this critical situation, some participants also suggested the importance of continuous education and training and financing of these initiatives. This finding supports the findings of previous studies, which argued that reflexive (spontaneous) organisational learning and educational initiatives such as training, workshops and dialogue are required to ensure supply chain sustainability governance (Andersen & Skjoett-Larsen, 2009; Boström, Jönsson, Lockie, Mol, & Oosterveer, 2015).

5.3.3 Institutional Pressure: Third-tier Suppliers

All participants from third-tier apparel suppliers suggested that coercive and mimetic pressures and mechanisms were the main institutional pressures behind the implementation of SSM practices, as evident in the illustrative quotes in Table 5.2.

5.3.3.1 Coercive pressures and mechanisms

In terms of *coercive pressures*, the findings indicated that local buyers' business requirements, particularly certain social criteria, were considered an order qualifier for the majority of third-tier apparel suppliers. For example, the business owner T3-S3 explained:

> Local garment factories [second-tier suppliers] want us to fulfil some key social requirements such as minimum health and safety practices since they have a commitment with their direct buyers. So these social practices of local factories are our business requirements.

The above view was also perceived by some second-tier suppliers as they were underlining the need for assessment initiatives during further sourcing from third-tier suppliers. One of the participants, T2-S8, said:

> We have textile sub-contractors. In the case of any problems like labour shortages and machine breakdowns, we have to sub-contract some of our buyers' production orders. We inform buyers before giving orders to sub-contractors. We infrequently see their quality, commitment to on-time shipment and certain social aspects.

The participant's view indicates that third-tier suppliers were mostly selected by second-tier suppliers based on mostly operational issues along with some selected social criteria. Interestingly, the findings further suggest that coercive pressures on third-tier suppliers from government agencies and other external stakeholders were less effective despite the presence of social and environmental rules and regulations for the apparel supply industry. A majority of owners and managers (5 out 7) of third-tier suppliers confirmed this finding. For example, one owner (T3-S1) commented: "We do not have strict requirements from government or other regulators". The social and environmental activities of third-tier suppliers were not explicitly examined and highlighted by other institutional actors such as buying firms and NGOs. This finding supports the findings of previous studies, which argued that buying firms do not concern themselves with the sustainability practices of upstream lower-tier suppliers (Meinlschmidt et al. 2018; Tachizawa and Wong 2014).

5.3.3.2 Mimetic Pressures and Mechanisms

Some owners and managers (3 out of 7) of third-tier suppliers indicated that they perceived mimetic pressures as a result of competition with peer suppliers. For example, the following quotation from business owner T3-S1 pointed out a few reasons for integrating certain safety initiatives:

> After the 2013 Rana Plaza accident, small sub-contracting factories like my company have changed a lot regarding fire safety since we have intense pressure resulting from competition. Prior to that, we had a fire license and some expired fire prevention equipment, but nobody checked them. Now we have some up-to-date fire prevention equipment in our factory to tackle future accidents.

It is interestingly clear from the above example that after the industry shocks, some third-tier sub-contracting suppliers attempted to comply with certain social standards because of ever-increasing competition as well as stakeholders' expectations. This situation revealed the fact that the 2013 Rana Plaza incident created intense mimetic pressure (competition amongst peers to adopt sustainability practices) not only within first-tier suppliers but also amongst further upstream second-tier and third-tier suppliers.

Drawing on the previously discussed findings, an integrated framework is depicted in Figure 5.1, which identifies the institutional pressures and mechanisms influencing the implementation of multi-tier apparel suppliers' SSM practices in GSCs. According to the framework, buyers formulated sustainability requirements (codes of conduct) and directly selected and assessed first-tier and second-tier suppliers (buyer nominated). In the absence of buyers' direct involvement, third-party organisations including auditors, certification bodies and best practice-sharing groups frequently assessed the sustainability practices of first-tier suppliers. Moreover, first-tier suppliers experienced pressures from government and other regulatory bodies (industry associations) alongside non-traditional collaborative partners, such as NGOs, donor agencies, and buyers' consortium platforms, particularly the Accord and Alliance. However, second-tier suppliers infrequently perceived coercive and mimetic pressures from third parties, government, NGOs and even first-tier suppliers. While first-tier suppliers regularly assessed the sustainability and other production issues of second-tier suppliers, second-tier suppliers either occasionally evaluated or did not bother to assess the sustainability practices of third-tier suppliers. Even third-tier suppliers did not perceive any strong institutional pressure from other institutional actors such as government, NGOs, trade unions and industry associations.

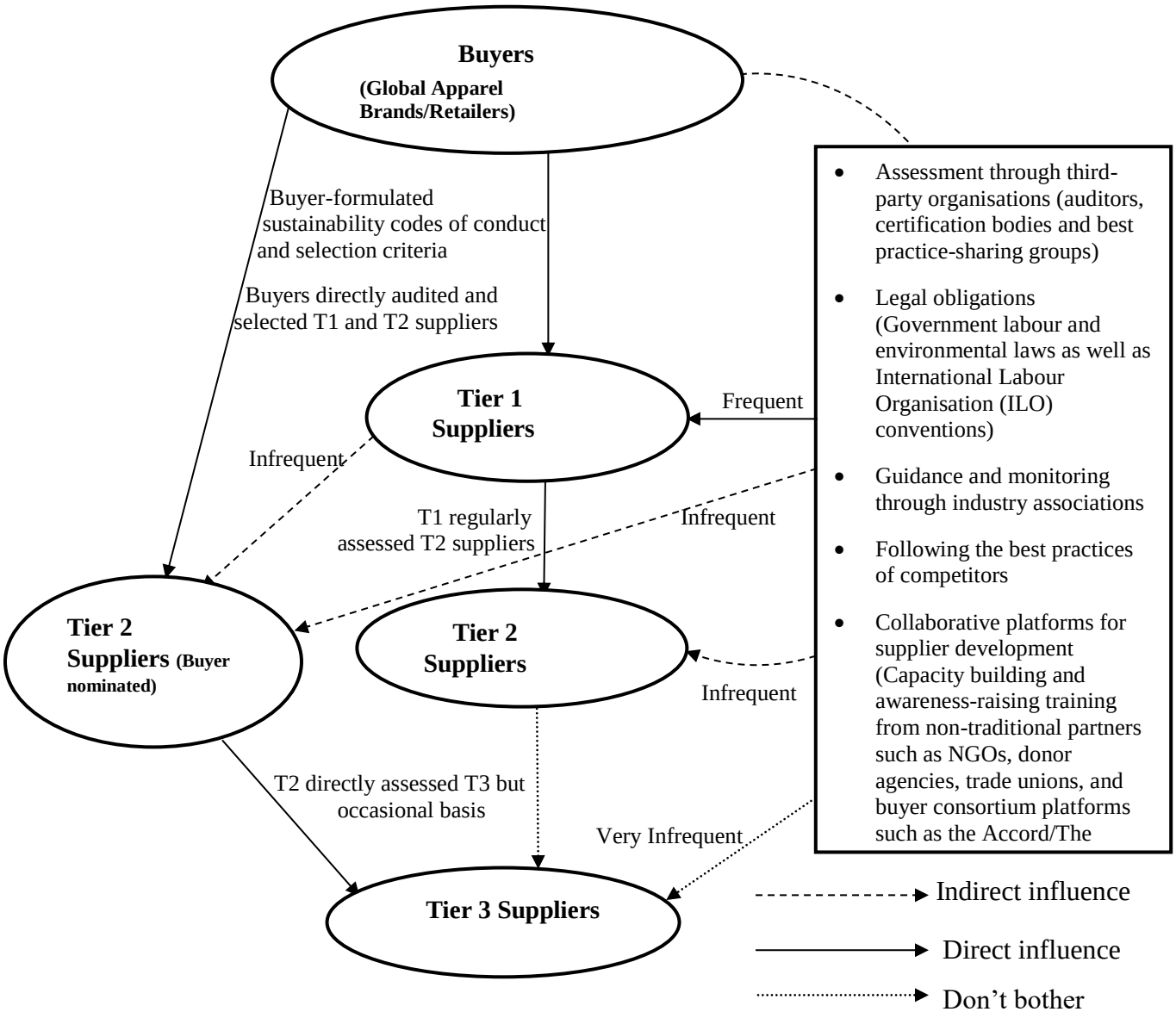


Figure 5.1: An integrative framework for understanding the institutional pressures and governance mechanisms influencing multi-tier apparel suppliers' SSM practices (constructed based on findings of this study)

5.4 Institutional Heterogeneity or Decoupling

This section illustrates the findings relating to multi-tier apparel suppliers' institutional heterogeneity or decoupling of formal SSM practices. The findings from interviews are summarised in Table 5.3. While Table 5.3 only displays sample quotes from some of the participants across multi-tier suppliers, these quotes were further confirmed by the other participants from supply firms as well as key informants from different stakeholder groups in the right-hand columns of the same table, as discussed below.

5.4.1 Decoupling: First-tier Suppliers

As shown in Table 5.2, the majority of owners and managers of the first-tier suppliers demonstrated their acceptance of institutional pressures as taken-for-granted rules and norms (see also sub-section 5.3.1). Nevertheless, the findings indicated that some owners and managers of first-tier suppliers applied two thematic decoupling approaches: *avoidance* and *defiance*.

5.4.1.1 Avoidance

At the first-tier supplier level, six owners and managers perceived *avoidance* as a key strategy used to decouple formal SSM practices. In particular, several participants indicated that they voluntarily concealed violations through allowing excess working hours. For example, the participant T1-S7 remarked:

> As per law, factory management cannot force any worker to work more than 10 hours [daily]. Workers should get one day off weekly. We have a normal practice that we never allow any kind of work during the weekend and public holidays. Some other times [workdays], we may tell workers to work 12 hours in a day if the situation demands.

Table: 5.3 Key themes relating to institutional decoupling across the multiple tiers of apparel suppliers

Supply Chain Tier	Sub-themes Under Suppliers' Heterogeneous Responses	Sources of decoupling	Sample illustrative quotes	Interviewees perceiving this pressure	Key informants of stakeholders groups supporting this view
First-tier Suppliers	**Avoidance**	Buyer/Supplier mock compliance, Voluntarily concealing violations	"We sometimes in practice feel that we can engage workers in excessive work due to different reasons. For example, in case of delay of receiving imported raw materials [fabrics] or getting late buyers' approval [short lead time] to produce their orders. This is the situation where brands accept excessive work hours." (T1-S2) "It is easy for our company to maintain buyers' standards if the buyers source materials and accessories from our textile, fabric and trim sources. If we buy these materials from other suppliers [second-tier or third-tier suppliers], we try to follow a similar process to how the buyers select us... However, the organised way in which buyers are assessing our company, we don't go into depth. That is true." (T1-S6-2)	T1-S1; T1-S2 T1-S6-2; T1-S7, T1-S9, T1-S-14	TPA-2, SO, B1 NGO
	Defiance	Blaming actors associated with institutional demands	"There is a deficiency in auditors' professionalism while auditing the factory. Sometimes they failed to see the big issue. Instead they took the small issue seriously which can be overlooked." (T1-S7) "Some auditors of certification bodies are doing good by developing social standards but some of them are giving certificates in exchange for money. These auditors do not properly assess the social and environmental conditions of the factories."(SO)	T1-S1, T1-S7, T1-S5-2	TU-2; LM; HEI, SO
Second-tier Suppliers	**Avoidance**	Cheating through further sub-contracting buyers' orders without their consent	"In the case of an emergency shipment if we cannot produce the whole of a buyer's orders, we give some of that order to the sub-contractor [third-tier supplier]. Say for example, we further subcontract a hundred thousand knit composite from a total of five hundred thousand product order in an individual shipment. Prior to selecting emergency sub-contractors, we often don't inform our buyers." (T2-S5)	T2-S2-1, T2-S2-2, T2-S5, T2-S7, T2-S8-1, T2-S8-2, T2-S10	TPA-2, NGO
	Defiance	Blaming actors associated with institutional demands	"Inspectors and auditors from several regulatory agencies come to our factory but they do not monitor properly. They take money from us and then provide a positive report about our factory. They don't care whether factories are maintaining the labour and environmental rules. If any factory maintains these rules, they still want money. So most owners do not want to invest when instead they can satisfy the inspectors and auditors." (T2-S10) "The majority of workers are not interested in joining trade unions to ensure their own rights." (T2-S4)	T2-S1, T2-S2-1, T2-S4, T2-S6, T2-S10	TU-1; LM, TU-2; TIB, SO

	Manipulation	Owners' influence on and control over workers and their associations	"We have a workers' participation committee (WPC) which is selected [not elected] by factory management and owners. We tell the new workers to communicate their problems to the WPC. The WPC regularly listens to workers about their complaints and presents these to the factory management and our managing director. We then try to solve these problems." (T2-S7) "Factory management select workers for the participation committee. I didn't see any election for the PC committee." (WD) "Our [Bangladeshi] workers are better than workers in other countries. The daily work hours including overtime is to 8pm. If we ask them to work more, they work until 10am. You cannot get this kind of worker in other parts of the world." (T2-S8-1)	T2-S5, T2-S7, T2-S8-1, T2-S11-1	TPA-1, TPA-2; WD, TU-1
Third-tier Suppliers	**Avoidance**	Voluntarily concealing violations, cheating through further sub-contracting buyers' orders without their consent	"We sometimes hide the real age of some workers. The age of some helpers is below 15 since we can hire them at BDT 3000 or 4000. The age of most operators is above 18 years though." (T3-S4)	T3-S1, T3-S4 T3-S1	TPA-2, B2, TU-1
	Defiance	Blaming actors associated with institutional demands	"Local apparel factories select our company on the basis of personal connection, experience, quality, price, on-time delivery and machine quality. We don't have any strong focus on social or environmental practices except on-time salary…Even regulators do not create any strict pressure on our companies." (T3-S3)	T3-S1, T3-S3	SO; TPA-1; TIB
	Manipulation	Owners' influence on and control over workers and their associations	"There is no workers' association in most factories. Some medium sized factories like us have workers' associations in documentation [pocket committee] but no real activities at all. These associations are not active." (T3-S3)	T3-S3	WD, TPA-1

The above example highlighted that apparel suppliers tactically exploited workers through violating certain core labour codes of ILO conventions. In some instances, buyers along with suppliers engaged in mock compliance regarding the same work hours issue. The following quotation from the manager T1-S1 confirmed this situation:

> Some buyers are tight, they don't allow us to engage factory workers beyond 10 work hours [8 regular hours plus 2 overtime hours as per labour law]. Some other buyers indicate us that it is alright to engage them in extra overtime beyond 10 hours for the purpose of completing their orders on time. The condition is that workers' compensation should be paid 100% as per law. We have four sewing units. To deal with this situation effectively, we divide our sewing units into different categories based on buyers' strictness.

The above participant's comment demonstrated that apparel suppliers in consultation with buyers intentionally violated regulatory requirements. In such cases, first-tier suppliers adopted different short-term superficial compliance practices for different buyers since some buyers verbally permitted these practices. This finding is in line with previous studies (Huq et al., 2014; Soundararajan et al., 2018), which found that developing country sub-contracting suppliers engage in socially irresponsible business practices through mock compliance. This argument was also evident from a key informant from buying firm B1, who said:

> As long as suppliers properly pay workers' salary for excessive hours, we accept excessive working hours above 10 hours. We believe workers may not work in a factory

> if they are not getting any overtime work opportunities, because their minimum wage is very low. An entry-level employee [helper] gets the minimum monthly wage 5300 BDT. If he gets 2000 or 3000 more from excessive work, he may get more than 8000 DBT in total.

Interestingly, some workers supported the above-mentioned argument through agreeing to participate in excessive work because of the low minimum wage. For instance, in an informal group discussion, the worker WD justified it in this way: "[…] We have to work additional hours and don't get any leave if there is huge work pressure on the production floors…Our regular salary is very low to lead our daily life. So we are highly dependent on overtime work." It is thus clear from the participant's view that second-tier suppliers and their supply chain partners decouple formal SSM practices through strategically evading serious violations.

5.4.1.2 Defiance

The findings indicated that several owners and managers of the first-tier suppliers blamed other institutional actors who were demanding formal adoption of SSM practices. For example, the manager T1-S1 remarked:

> We followed the safety requirements of a well-known American brand before the formation of the buyers' consortium platform [in 2013] in Bangladesh. The brand was happy about our safety standards. However, the buyers' consortium has recently found faults during the assessment of our existing safety standards…Although we previously

> invested in the existing safety system as per the brand's suggestions, we are now required to invest in safety improvements again, to our financial loss.

The above manager's view emphasised the fact that suppliers experienced compliance pressures from a buyers' consortium due to inappropriate safety-related suggestions by brands. Moreover, the finding illustrated suppliers' criticisms against some institutional actors such as brands and auditors from the buyers' consortium who demanded SSM implementation. In their studies, Huq et al. (2014) also found the presence of confrontational relationships between first-tier suppliers and auditors. Similarly, the manager T1-S5-2 accused another institutional actor, specifically the media, in the following way:

> The media come to our factory while factory workers protested about some issues but they [media] don't come during the peaceful times. They [media] are involved in yellow journalism, because media highlight the fake news instead of proper investigation. They [media] can play a good role through reporting and promoting our many good factories. Unfortunately they don't do that [...]

The above manager's comment indicated that media did not highlight good practices of the factories; rather they inflated negative news about workers' unrest without adequate investigation. Interestingly, one key informant TU-2 explained the underlying reason behind the approach by media:

> Local and international media are sympathetic enough about workers' rights and issues in the apparel industry…They are highlighting negative news more than positive news about this industry. I think it's their business strategies.

It is clear from the above example that some institutional actors such as media often played a counterproductive role through publicly reporting sustainability issues about the apparel industry. This finding resonates with the results of a previous study by Islam & Deegan (2008). With this situation in mind, the majority of suppliers challenged the role of some institutional actors who demanded the effective implementation of SSM practices.

5.4.2 Decoupling: Second-tier Suppliers

In terms of heterogeneous responses to institutional pressure by the second-tier suppliers of the apparel supply chain, the findings suggested that owners and managers used three thematic decoupling approaches: avoidance, defiance, and manipulation.

5.4.2.1 Avoidance

With regard to *avoidance*, several owners and managers (7 out of 16) indicated their involvement in cheating through further sub-contracting buyers' orders without their consent. For example, the manager T2-S2-2 stated:

> Although our factory is compliant, factory management transfer some of the total orders to small sub-contracting factories to increase the profit margin. The cost of production is high if we produce all products at our factory. So we bring additional buyers' orders

> through displaying our compliant factory. We engage with unauthorised suppliers to fill our total orders. We do not disclose it.

The following quotation of the auditor TPA-2 confirmed the above manager's view:

> [...] It's really difficult to identify the real social and environmental practices of some suppliers through documentation. Some suppliers are getting buyers' orders through displaying a nice factory. However, they shift some buyers' orders into other sub-factories. The compliance conditions of these sub-factories are not similar to the nice factory, rather the worst.

The above participant's comment revealed that some second-tier suppliers informally engage in production with unauthorised sub-contracting apparel firms with a view to earning more profits. However, auditors often cannot trace this kind of violation since second-tier suppliers maintained different valuation records. This finding is consistent with the findings of a previous study by Soundararajan et al. (2018), who found that small and medium sub-contracting suppliers engaged in unethical practices through providing fake versions of valuation documents. They also claimed that with the aim of gaining more production orders, sub-contracting suppliers showcased only exemplary factories and concealed non-compliant factories during the assessment process. In addition, the majority of apparel suppliers did not acknowledge their commercial transactions with unauthorised sub-suppliers. One key informant from a NGO justified it in this way:

> We suggested government agencies and apparel owners develop a sub-contractor guideline relating to sustainability issues. They replied that there are no unauthorised sub-contractors in this industry. Unfortunately, we have information about unauthorised apparel sub-contractors who are engaging in the apparel manufacturing process in a different way.

The above participant's view demonstrated that apparel suppliers regularly avoided disclosing their shared manufacturing activities with unauthorised sub-contracting suppliers. As such, non-supply chain actors like NGOs cannot develop industry norms within the whole apparel production network, which leads to decoupling of formal SSM implementation at the second-tier supplier level and beyond.

5.4.2.2 Defiance

In terms of *defiance*, some managers and owners (5 out of 16) blamed other institutional actors for their heterogeneous responses to institutional demands for SSM implementation. For example, one manager T2-S10 commented:

> Inspectors and auditors from several agencies come to our factory but they do not monitor properly. They take money from us and then provide a positive report about our factory. They don't care whether factories are maintaining the labour and environmental rules. If any factory maintains these rules, they still want money. So most owners do not want to invest when instead they can satisfy the inspectors and auditors.

The above example revealed that suppliers engaged in socially, environmentally, and ethically irresponsible business practices because of the counterproductive behaviour of regulatory agencies. This finding is in accordance with a previous study by Huq et al. (2014), who suggested that suppliers directly blamed some institutional actors such as auditors for their decoupling of formal SSM practices. The following participant T2-S6 acknowledged the confrontation between actors, and also pointed out the counterproductive behaviour of trade union leaders:

> Trade union leaders in Bangladesh are not honest in most cases when they deal with factory management to bargain for workers' benefits. Although they speak up about workers' rights, they demand 50% commission from workers after receiving money from the owners. Even union leaders are managed by owners. Unfortunately, they use general workers to promote their own interests and benefits. They do not think about the real benefits of workers at all.

The above participant's view demonstrated that suppliers raised critical concerns about trade union leaders, who were opportunistically taking advantage of both owners and general workers. One key informant from DA agreed with the above argument and explained the reason behind the opportunistic behaviour of the trade union:

> The history of our trade union is not good. Trade union leaders have direct connections with political parties, which is the core problem to ensure general workers' rights…Only

> 4% of the total workers are members of the trade unions. Workers don't feel motivated to associate with trade unions, because workers feel trade union leaders are blackmailing general workers and owners for their own benefit.

The above participant's comment revealed that trade union leaders were mostly politically motivated and served the purposes of other organisations through addressing general workers' issues. This finding is consistent with previous studies which found that the activities of trade unions are highly politicised in the Bangladeshi apparel sector (Haque & Azmat, 2015). Prior research also suggested that the majority of workers perceived trade union leaders as uncooperative in ensuring workers' rights (Soundararajan et al., 2018). As a result, the majority of workers were reluctant to connect with any trade union due to trade union leaders' double standard in ensuring workers' rights and well-being in factories. This finding relating to the duplicitous behaviour of trade union leaders contrasts with a previous study by Campbell (2007), who argued that trade unions are recognised as one of the key catalysts for firms to behave in socially responsible ways.

5.4.2.3 Manipulation

The third key theme that emerged under decoupling approaches was *manipulation*. The findings further suggested that to remove institutional pressures from buyers and other institutional actors, several second-tier suppliers directly influenced general workers' voices as well as controlling their associations. For example, the manager T2-S7 stated:

> We have a workers' participation committee (WPC) which is selected [not elected] by factory management and owners. We tell the new workers to communicate their problems to the WPC. The WPC regularly listens to workers about their complaints and presents them to the factory management and our managing director. We then try to solve these problems.

The above participant's argument revealed owners' preference to select and control the WPC and its activities. However, one key informant TU-2 queried the actual achievement of such committees' purposes:

> Factory owners do not allow trade unions. Instead they form a participation committee which is made up of both representatives from the factory management and owners. Is it possible for factory workers to raise their voice in front of their owners and factory management?...I don't think a PC committee is an effective platform to ensure the rights of general workers.

It is clear from the above participant's view that suppliers applied manipulative approaches to decouple the implementation of workers' rights since the formation and activities of workers' participation committees were mostly flawed. Moreover, most workers remained silent in an informal group discussion to which they were invited to discuss their working conditions and rights issues. Interestingly, worker WD explained the reason behind their silence:

> There is no one who will listen to our problems. If we protest or make any demands, we get tear-gassed by the police. It is not possible to fight with strong businessmen. We feel it is better to shut our mouths.

The above worker's view clearly demonstrated that owners and managers of the second-tier suppliers were using WPCs as a manipulative platform to control the behaviour of general workers. This finding resonates with the findings of a previous study by Soundararajan et al. (2018) who argued that small and medium sub-contracting suppliers influenced troublesome workers through accumulating autonomy and political strength.

5.4.3 Decoupling: Third-tier Suppliers

In terms of heterogeneous responses to institutional pressure at the third-tier supplier level, there was evidence of owners and managers using three thematic decoupling approaches: avoidance, defiance, and manipulation.

5.4.3.1 Avoidance

With regard to *avoidance*, three participants from third-tier suppliers indicated that they often hide serious violations. For example, participant T3-S1 stated:

> [...] I am not sure whether compliant factories are verifying workers' bio data. For example, most of our workers do not have enough educational qualifications. They show

> us a national identification card or birth certificate. You know they can forge it in a computer shop. Truly, it's difficult to check workers' real age.

In a similar vein, participant T3-S4 remarked:

> We sometimes hide the real age of some workers. The age of some helpers is below 15 since we can hire them at BDT 3000 or 4000. The age of most operators is above 18 years though.

The above participants' views highlighted that some third-tier suppliers were still employing child workers through hiding their actual ages. Hiring cheap labour was identified as the key motive behind this decoupling practice. Following this argument, business owner T3-S3 pointed out the evidence of excessive work hours: "Sometimes workers work more than 12 hours a day. They get payment for additional hours separately. It is a usual practice for suppliers like us." The view of the participant clearly revealed the ground-level realities about excessive work beyond regular work hours which differed from the documented practices. This finding is in accordance with previous studies (Soundararajan & Brown, 2016; Soundararajan et al., 2018), which found evidence of a complete breakdown of global supply chain governance practices at developing country sub-contracting supplier level. For example, Soundararajan et al. (2018) argued that small and medium suppliers often decouple ethically and socially responsible business practices through maintaining a second false set of records for auditing purposes.

Furthermore, the findings highlighted that multiple tiers of apparel suppliers were involved in the manufacturing process, which tended to violate transparent and ethical business practices. As the owner T3-S1 commented:

> […] Apparel supply factories [first-tier or second-tier suppliers] give our company infrequent orders. They directly receive business orders from the main foreign buyers. They have to produce these products within a specific period. However, some factories don't have capacity to fulfil all of their buyers' orders. Then they transfer some of their work to us at a low rate. The condition is that we have to maintain quality. The reality is foreign buyers don't know that we have participated in the production process through supplying grey fabrics to local apparel factories.

The above owner's comment demonstrated that global buyers were often unable to track the activity records of every tier of upstream suppliers. As a result, some first-tier and second tier suppliers took the opportunity to subcontract some part of their work to further low-cost small suppliers, which were not visible to the main buyers. This finding supports the findings of previous studies, which argued that buying firms are not concerned about and may not even be aware of the sustainability practices of upstream lower-tier suppliers (Choi, Dooley, Rungtusanatham, 2001; Meinlschmidt et al., 2018; Tachizawa & Wong, 2014).

5.4.3.2 Defiance

In terms of *defiance*, the majority of owners and managers of third-tier suppliers blamed local apparel factories as well as regulators for the decoupling of SSM practices since these institutional actors did not exert any coercive pressure on them. For example, T3-S3 explained:

> Local apparel factories select our company on the basis of personal connection, experience, quality, price, on-time delivery and machine quality. We don't have any strong focus on social or environmental practices except the on-time salary issue…Even regulators do not exert any strict pressure on our factory.

Similarly, one key informant from buyer B2 justified the above argument in this way:

> We sometimes go to the print or embroidery facilities to inspect their sustainability activities. But when it comes to other accessories [second-tier suppliers] or one layer down [third-tier suppliers] it becomes difficult for anyone to monitor their activities.

The above participant's comment highlighted the complexities and challenges embedded in further upstream sub-suppliers, which facilitated the decoupling of SSM practices at third-tier supplier level. This finding supports the findings of previous studies, which argued that the contextual complexity of these diverse manufacturing activities reduces global buyers' ability to monitor lower-tier suppliers' SSM practices (Kim & Davis, 2016; Meinlschmidt et al., 2018).

5.4.3.3 Manipulation

In terms of *manipulation*, some factory management of third-tier suppliers disclosed the existence of fake trade unions or workers' participation committees in factories. For example, the participant T3-S3 stated:

> There is no workers' association or trade union in most factories. Some medium sized factories like us have a workers' association in documentation [pocket committee] but no real activities at all. These associations are not active.

The above participant's view suggested that there was an absence of workers' participation committees and trade unions at the third-tier supplier level. If there was such a committee, it was a falsely documented committee for box-ticking purposes. Following this similar argument, one key informant TPA-1 admitted it in the following way:

> It is interesting to note that some factory owners are very clever. They form trade unions or workers' participation committees in a way that the majority of members of the committee are their relatives and friends. They even sometimes form three different shadow committees because the law permits at most three committees in a factory.

The above informant's view clearly indicated that the WPCs at third-tier supplier level were mostly made up of family members and friends of factory owners. The following section focuses on institutional logics that explain the decoupling of multi-tier suppliers' formal SSM practices.

5.5 Institutional Logics

This section illustrates the findings relating to the institutional logics that are conflicting and complementary at each tier of the apparel suppliers towards the implementation of SSM practices. As displayed and summarised in Table 5.4, the overall findings indicated three core institutional logics – social, environmental and economic – across multi-tier apparel suppliers. 'Social logic' was identified as the concern for integrating social sustainability practices that were needed to improve social standards whereas 'environmental logic' aims to focus on implementing environmental sustainability practices. In contrast, 'economic logic' focuses on profitability, and only involved social and environmental sustainability if they tended to increase sales or decrease costs. Within the supply chain sustainability context, Glover et al. (2014) and Sayed et al. (2017) found roles played by a multiplicity of institutional logics (sustainability versus economic/financial logics) across multi-tier supply chains. Some issues with regard to 'economic logic' have also been underlined as instrumental drivers in Chapter 4 and further discussed in Chapter 6. In this section, while Table 5.4 only displays sample quotes from some of the participants across multi-tier suppliers, these quotes were further confirmed by the other participants from supply firms as well as key informants from different stakeholder groups in the right-hand columns of the same table, as discussed below.

Table: 5.4 Key themes relating to institutional logics across the multiple tiers of apparel suppliers

Supply Chain Tier	Sub-themes under institutional llogics		Sample illustrative quotes	Interviewees with this prevailing logic	Key informants of stakeholder groups supporting this view
First-tier Suppliers	**Conflicting**	Social logic versus economic logic	"…How can we invest in sustainability activities if we have a shallow profit margin? I talked about this issue to one representative of a well-known British brand in a buyers' forum. The buyer replied that business is very competitive and retailers want goods at cheaper rates. So they [buyers, sourcing agents and buying houses] don't want to increase prices. Look, if buyers earn 25 cents profit, they [buyers] can easily increase the price by 2 cents, which we can easily use for the successful implementation of these [sustainability] practices." (T1-S6-2)	T1-S1, T1-S3, T1-S6-2, T1-S5-2, T1-S10, T1-S12, T1-S13, T1-S16	DA, TA-1, TPA-2, TU-1, LM, HEI, TU-2, NGO, IA-1
		Environmental logic versus social and economic logic	"… The costs of implementing environmental practices are higher than social activities. We have 34 meters such as water flow meter, waste water meter, steam meter, energy meter and so on. Each meter costs a minimum of 3 lac. These meters have increased costs greatly so some owners and managers do not want to invest in them." (T1-S10)		
	Complementary	Social logic and economic logic	"The psychological impact of engaging in CSR activities is high. For example, at the factory level we encourage financial support for education of the workers' children and medical facilities for them, even for their children's weddings. They may be small things if we compare them but they have greater psychological impact. You can find employees who have been working here for the last 16 or 17 years. These [CSR] activities persuade them to remain with us. So the workers' turnover rate in our factories is comparatively low." (T1-S6-2)	T1-S1, T1-S2, T1-S3, T1-S4-1, T1-S4-2, T1-S5-2, T1-S6-2, T1-S6-3, T1-S7, T1-S8-1, T1-S8-2, T1-S9, T1-S11, T1-S17	TU-1, DA, B1, B2
		Environmental logic and economic logic	"Recently we have started to implement EMS 14001. We have projected energy and water reduction targets of 5% from the present level by 2020. We are yet to choose a method to achieve this target. We believe our company will financially benefit". (T1-S3)		

Second-tier Suppliers	**Conflicting**	Social logic versus time and economic logic Environmental logic versus economic logic	"[...] I can say from the last month's record, several medium and small factories closed their operations in this area. The main reason was the Accord [buyers' consortium] pressure to adopt safety standards. It is not possible for a running factory like us to implement the Accord's and Alliance's instant safety suggestions [to change fire doors, electrical system and building structure] which may cost 1 or 1.5 crore BDT. In the meantime, buyers have stopped giving orders due to delay in incorporating the Accord's requirements." (T2-S5) "The capacity of our factory building is small. With a low price from our buyers it is a challenge to set up and use the ETP properly. Say for example, we got 5 BDT (Bangladeshi taka) for washing and dyeing one piece of apparel while the minimum wage for workers was 930 BDT. Now the minimum wage as per law is 5300 BDT. Nevertheless, the price for the same activities has remained the same [5 BDT]. Buyers should increase prices." (T2-S4)	T2-S2-1, T2-S2-2, T2-S4, T2-S5, T2-S6, T2-S7	TPA-2, TU-1, TU-2, LM, HEI, NGO, IA-1
	Complementary	Social and economic logic	"We provide workers with regular benefits and overtime payments on time...We have dining facilities for workers which increase their job satisfaction. The worker turnover is low in our factory. We know if the workers' leaving rate increases, we have to hire new workers. We need to train new workers to bring them up to a professional level. It is a waste of money. I think a low workers' turnover rate means higher productivity." (T2-S8-2)	T2-S2-2, T2-S3, T2-S4, T2-S8-2, T2-S9-1, T2-S10	TPA-2, B1, B2
Third-tier Suppliers	**Conflicting**	Social versus economic logic	"…Price is a barrier for my factory. If foreign buyers increase prices for the direct local suppliers, we will get more knitting charges [price] because we are dependent on their businesses [first-tier and second-tier direct suppliers]. Then, we can look forward to the implementation of solutions to workers' safety and security issues." (T3-S1)	T3-S1, T3-S2-1, T3-S4, T3-S5-1	TPA-2, LM

5.5.1 Institutional Logics: First-tier Suppliers

5.5.1.1 Conflicting institutional logics

The findings suggested that the resistance to implementing SSM practices was stemming from the conflict between the buyers' consortiums' demand for sustainability improvements and first-tier suppliers' desire for increasing profit margins. Some factory owners and managers perceived social logic and economic logic as competing, which indicated that improving health and safety standards may increase costs and diminish profits. For example, the following comment from the director T1-S6-2 reflected this situation:

> […] How can we invest in sustainability activities if we have a shallow profit margin? I talked about this issue to one representative of a well-known British brand in a buyers' forum. The buyer replied that business is very competitive and retailers want goods at cheaper rates. So they [buyers, sourcing agents and buying houses] don't want to increase price. Look, if buyers earn 25 cents profit, they [buyers] can easily increase the price by 2 cents, which we can easily use for the successful implementation of these [sustainability] practices.

The above participant's view raised two key critical concerns about buyers. First, buyers were consistently decreasing product and service prices. Second, they often failed to fairly share supply chain profit for the purpose of improving suppliers' sustainability standards. This finding is in accordance with previous research by Barrientos (2013), which found that institutional contradictions arise due to buyers' demands for higher compliance and lower-priced apparel from suppliers. The findings further suggested that buyers did not provide any

assurance of giving their production orders to the compliant supply factories. As one key informant from buyer B1 confirmed:

> We have some points of view with regard to selecting suppliers: we see quality, price and social compliance. While a supplier is good at compliance, it does not guarantee we must select that supplier. We see everything, because business profit is important at the end of the day.

The above participant's comment demonstrated that in the case of supplier selection, economic logic was competing with social sustainability logic. This finding is consistent with a previous study which found that purchasing managers of multi-national buying firms face the trade-off between sustainability and cost in selecting new suppliers (Reuter, Goebel, & Foerstl, 2012; Xiao et al., 2019). Accordingly, there is no consistent selection approach that applies to all suppliers. This is because buying firms also face contradictions by either "pushing a 'one-size-fits-all' solution onto suppliers…[or] by adjusting to the specific circumstances of specific suppliers" (Egels-Zandén et al., 2015, p. 102). Following this argument, the findings further suggested that several buyers were expecting suppliers to comply with environmental requirements in addition to social and economic requirements. Likewise, the manager T1-S3 remarked: "Nowadays buyers are focusing on and rating the environmental compliance of the factory. Brands say if you want to maintain a long-term relationship and do business with us, you have to get a full score in environmental aspects." However, some managers and owners argued that implementing environmental sustainability practices was very expensive, even more than social sustainability improvements. The following comment from manager T1-S10 highlighted this argument:

> […] The costs of implementing environmental requirements are higher than social requirements. We have 34 meters such as water flow meter, waste water meter, steam meter, energy meter and so on. Each meter costs a minimum of 3 lac Bangladeshi Taka. These meters have greatly increased costs, which result in some owners and managers not wanting to invest.

It is clear from the above participant's view that high implementation costs of environmental sustainability tended to create supplier resistance to institutional pressures. In this decoupling situation, several owners and managers seek financial support from their partners, particularly buyers. For instance, the director T1-S6-2 stated: "There is a huge responsibility of buyers to support us [suppliers] with regard to appropriate implementation of sustainability improvements because it requires high fixed costs. I don't need any monitoring help if buyers support us through…increasing prices", whilst the manager T1-S5-2 remarked:

> We want implementation with regard to the safety and well-being of our workers. We seek high CM [Cutting and Making charges from buyers] for our increased costs. As a partner, buyers need to share it. Friendship would be good and sustainable.

The above finding is consistent with the finding of prior research by Soundararajan and Brown (2016) who claimed that high costs of compliance as well as the absence of rewards are major reasons for suppliers' lapses in global supply chain governance. In a similar vein, one key informant from trade association TA-1 supported this claim through highlighting the unintended consequences of ignoring economic logic:

> Cost is a big factor. Buyers should increase their prices to meet sustainability requirements…Otherwise, suppliers may use marketing tactics [hiding violations] to survive in the market. For example, if one owner has five factories, he/she will build one good factory and the rest of the factories will be bad factories. Then, he will get business orders by showing the good factory, and divide them across all five factories.

The above participant's view resonates with the findings of a previous study which found that compliance-related cost pressures encouraged the same developing country supplier to operate multiple units under different names (with the help of friends and family) along the global supply chains (Soundararajan et al., 2018).

5.5.1.2 Complementary institutional logics

Furthermore, several owners and managers of first-tier suppliers perceived the proactive implementation of social sustainability practices as a means of improving the economic and operational performance of the factory. This view was explained for example by participant T1-S6-3:

> A factory generates huge quantities of dust from cutting fabrics which can affect workers' health through lung diseases. Say for example, 5 workers are affected by Tuberculosis (TB) among 50 workers. This disease takes a long time to cure. In the meantime, we cannot deliver our shipments to the buyers due to a production shortage. In this case, our business will be finished. So workers' good health is related to good production.

Similarly, some participants further perceived the economic benefits of complying with environmental sustainability requirements. For example, the manager T1-S3 justified it in this way:

> Recently we have started to implement Environmental Management System (EMS) 14001. We have projected energy and water reduction targets of 5% from the present level by 2020. We are yet to choose the methods to achieve this target. We believe our company will financially benefit.

The above manager's comment indicated that adopting an EMS can bring economic benefits in terms of reducing operation costs such as energy and water consumption. This finding is in accordance with the findings of prior research, which argued that EMS are perceived as the most important requirement for improving environmental performance (Xu, Mathiyazhagan, Govindan, Haq, Ramachandran, & Ashokkumar, 2013). Thus, social and environmental sustainability logics were likely to complement economic sustainability logic, which may lead to SSM implementation.

5.5.2 Institutional Logics: Second-tier Suppliers

5.5.2.1 Conflicting institutional logics

In terms of conflicting institutional logics at second-tier supplier level, the findings suggested that the majority of owners and managers experienced financial difficulties in investing in social sustainability (meeting fire safety standards and paying the minimum wage) as well as environmental sustainability (installing ETP) related practices. For example, the manager of T2-S2-1 explained the reason behind this conflict:

> The buyer's rate is decreasing day by day…Compliance requirements and their maintenance costs have increased significantly more than ever before. Factories like our company cannot maintain servicing of smoke detectors and fire doors since the maintenance costs are very expensive. Only 10% to 20% of the total apparel factories are good factories that maintain such servicing. The other factories are just trying to get documented pass marks in engineering assessment. The assessment process is just lip service.

The above manager's comment demonstrated the conflict between social logic and economic logic, which tended to decouple actual social sustainability improvements at second-tier supplier level. Similarly, as the sample evidence showed in Table 5.4, some owners and managers identified that the initial large investment for safety improvements created an enormous economic challenge for many second-tier suppliers. This may be because the buyers' consortium demanded immediate financial commitment to rectify suppliers' non-compliance with safety requirements. Due to such onerous financial commitment, the majority of medium and small second-tier suppliers were forced to close their apparel businesses. Likewise, one key informant of an auditing firm TPA-2 confirmed this concern in the following way:

> Market competition is high now. Small factories cannot carry social and environmental development costs…Low or competitive price is a fact behind the low adoption of sustainability practices by lower-tier apparel suppliers.

To overcome the above-mentioned suppliers' tendency to decouple formal SSM practices, several key informants from stakeholder groups suggested "fair prices from buyers". As for

instance one participant TU-1 commented: "A fair price from buyers is a good solution to reduce apparel suppliers' non-compliance with sustainability practices". In the context of the buyers' viewpoint, Grimm et al. (2016) also suggested the significance of business partners' financial and technical involvement to ensure the effective implementation of SSM practices at sub-supplier levels.

5.5.2.2 Complementary institutional logics

In terms of complementary institutional logics at second-tier supplier level, the findings indicated that several participants perceived social improvements as a way to gain more sales and profits. Following this argument, the participant T2-S4 confirmed:

> We are now a C category compliant supplier [BSCI audit rating based on individual factory conditions]. Our next target is to move forward to B category and then A category…If we can implement all social requirements, the health and well-being of workers will be improved. Workers will be motivated and stay well. Our business orders and productivity will automatically grow.

It is clear from the above participant's view that factory management had a consistent tendency to fully engage in implementing social sustainability practices. This was mainly due to their perception of higher economic and operational returns. As such, social logic was likely to complement economic sustainability logic, which may lead to greater SSM implementation at second-tier supplier level.

5.5.3 Institutional Logics: Third-tier Suppliers

5.5.3.1 Conflicting institutional logics

The findings suggested that the majority of owners and managers of third-tier suppliers perceived *conflicting logics* as the only key theme that emerged under institutional logics. Like first-tier and second-tier suppliers, third-tier suppliers illustrated their economic struggles with the implementation of social sustainability practices. As an example of the findings in support of resistance to institutional pressures, the factory owner T3-S1 explained that:

> We are working as a sub-contractor of second-tier suppliers…We cannot focus on social compliance practices since we make a marginal profit. For example, if we get a price of 10 BDT for each piece of grey fabric, our production cost for that piece is 9 BDT. We get only 1 BDT as profit. How can we focus on these practices? I think only direct suppliers can handle buyers' criteria.

The above owner's comment demonstrated that cost and price-related resistance was a key concern that prevented them from integrating all social sustainability practices. Although some third-tier suppliers were investing in improving some safety structures in the workplace, the majority of suppliers cannot meet all requirements expected by institutional actors. Following this argument, the participant T1-S3 pointed out the reason behind this conflict:

> Safety structure has improved a lot in recent years although many factories have been closed down due to non-compliance. The main challenge is high fixed cost. Besides, prices are still low. Wages are increasing every year as it is mandatory. Many sub-

> contracting firms are almost failing. It is not possible for them to ensure all safety requirements demanded by international buyers due to the high investment involved.

The above participant's view revealed that small and medium sub-contracting suppliers were in danger since they were not able to invest in the installation of fire protection and prevention systems. Moreover, these suppliers were required to maintain the minimum wage, which subsequently increased production costs and reduced their profit margins. In contrast, the only exception was the owner T3-S3, who argued that social improvements may increase economic benefits.

> My company pays workers' salaries, overtime payments and attendance bonuses on time. I think if we continue this practice, business will grow. We will get more good accounts [secure orders from second-tier local garment buyers].

Except for the above example, all other participants perceived no tangible benefits from the social sustainability-related development expenses. One key informant TPA-2 justified it in this way: "Manufacturers feel the implementation of sustainability development-related initiatives as costs rather than investments". This finding is consistent with previous research, which argued that small and medium sub-contracting manufacturers perceived social compliance mechanisms as too expensive to implement (Soundararajan & Brown, 2016). As such, economic logic, as the dominant institutional force, came first when making decisions about the social improvements at third-tier apparel supplier level. Interestingly, there was no evidence from the discussion with participants from third-tier suppliers who focused on environmental sustainability logic. This may be because these suppliers focused merely on some specific social sustainability practices.

While this current section of the chapter revealed the conflicts and synergies among social, environmental and economic logics, Chapter 6 also critically examines the implementation of social and environmental supply chain sustainability practices and their specific linkages with SSM performance in detail.

5.6 Conclusion

This chapter focused on the mechanisms involved in embedding SSM practices across multi-tier apparel suppliers in Bangladesh. To this end, this chapter examined the key research questions concerning how institutional pressures have an impact on the implementation of SSM practices across multi-tier apparel suppliers, and why these suppliers decouple formal SSM implementation practices. An institutional theoretical lens, specifically the sub-themes of institutional pressures, decoupling and institutional logics, were adopted to frame and scrutinise the research questions. In terms of institutional pressures, managers and owners of first-tier and second-tier suppliers experienced more coercive pressures than mimetic and normative pressures. The identified key collective coercive pressures were stemming from selection and assessment requirements of direct buyers, followed indirectly by third-party auditor assessment requirements, buyers' consortium requirements and government legal obligations. The mimetic pressures came from competition and the tendency to join best-practice sharing alliances and networks. Finally, normative pressures were stemming from collaborative platforms for supplier development where suppliers participated in awareness-raising training and workshops in collaboration with direct buyers and other non-traditional stakeholders such as NGOs, DA and industry associations. Interestingly, while third-tier suppliers perceived some coercive and mimetic pressures, the findings revealed that they did not perceive any normative pressure for implementing SSM practices. This may be because

third-tier suppliers lack resources as well as willingness to engage in awareness-raising training and workshops.

The findings further indicated that managers and owners of multi-tier apparel suppliers applied several decoupling approaches in response to institutional pressures for SSM implementation. This may be due to shifts in institutional pressures and uncertainties, which resulted in the evidence of avoidance, defiance and manipulation tactics. In particular, several owners and managers of multi-tier suppliers applied several avoidance tactics such as voluntarily concealing violations, cheating through further sub-contracting buyers' orders without their consent, and mock compliance with buyers. Moreover, in terms of defiance tactics, owners and managers of multi-tier suppliers often blamed institutional actors such as buyers, auditors, government inspectors and trade union leaders who demanded the effective implementation of SSM practices. In terms of manipulation tactics, the findings further revealed that owners and factory management influenced general workers and their associations through preparing false documentation during selection and assessment. Overall, the owners and managers' tendency to decouple formal implementation of SSM practices was greater at the second-tier and third-tier supplier level than at first-tier supplier level.

Furthermore, the findings identified three institutional logics – social, environmental and economic – that were perceived to conflict with the implementation of SSM practices. As such, economic logic dominated the thinking of owners and managers, thus leading to superficial implementation of SSM practices across multi-tier apparel suppliers. This may be because the majority of suppliers experienced the money required for social and environmental improvements as costs, not investments. To tackle this institutional conflict, the majority of multi-tier suppliers alongside key informants from stakeholder groups

demanded fair prices from buyers to implement sustainability improvements. Nevertheless, except for participants from third-tier suppliers, several owners and managers of first-tier and second-tier suppliers perceived the social and environmental improvements as a way of increasing economic and operational benefits. Some scholars, such as Greenwood et al. (2011) and Sayed et al. (2017), also argued that organisations could be decoupling formal SSM practices as a result of having multiple, and conflicting, institutional logics. Finally, the findings of this chapter will be further expounded in detail in the discussion chapter.

CHAPTER 6

Multi-tier Suppliers' Social and Environmental Supply Chain Sustainability Practices and Outcomes

6.1 Introduction

This chapter examines how multi-tier apparel suppliers integrate social and environmental issues to improve SSM outcomes. In Chapter 4 the drivers and barriers to SSM were discussed, while Chapter 5 examined how institutional pressures, decoupling and logics affect the implementation of SSM practices across multi-tier apparel suppliers. This is the third chapter discussing the findings on social and environmental practices that Bangladeshi multi-tier apparel suppliers are embedding to accomplish SSM outcomes. While empirical research on environmental aspects of sustainability is an extensively explored area in SCM literature, research on social sustainability issues is still evolving (Sodhi & Tang, 2018; Yawar & Seuring, 2017). However, little is known about the SSM implementation practices and outcomes from the viewpoint of multi-tier suppliers in Bangladesh, an important global apparel outsourcing hub. Against this background, this chapter has the following objectives:

- To investigate the social and environmental practices of Bangladeshi multi-tier apparel suppliers;
- To identify the level of implementation of social and environmental practices at each supplier tier; and
- To examine SSM outcomes as a result of implementing such social and environmental practices.

To achieve the above objectives, this chapter is organised into four sections. The first section presents the chapter overview, the second section focuses on the implementation of social supply chain sustainability practices and its linkage with SSM outcomes, the third section focuses on the implementation of environmental supply chain sustainability practices and its linkage with SSM, and a conclusion is provided in the last section.

6.2 Overview of the Chapter

The findings of this chapter were guided by the two main issues of SSM, specifically social sustainability and environmental sustainability. As shown in Table 6.1, the key themes, namely *social supply chain sustainability practices* and *environmental supply chain sustainability practices* and sub-themes were derived from the existing literature. All of the codes emerged inductively from the empirical data. More particularly, the chapter explores six sub-themes, which are covered under *social supply chain sustainability practices*. These are *workers' health, safety and well-being*, *rights in the workplace*, *work hours and wages*, *social protection*, *workers' training and skill development*, and *community involvement and development*. Furthermore, the chapter identifies three sub-themes covered under *environmental supply chain sustainability practices*, which comprise *managing resource consumption*, *pollution emissions and waste management*, and *green factory projects and certifications*. Furthermore, multi-tier suppliers adopted numerous social and environmental practices that enabled them to enhance SSM outcomes. As shown in Table 6.1, each of the key emergent themes and sub-themes relating to SSM practices and outcomes is elaborated in the following sections of this chapter. Relevant comments from the participants are presented, and where appropriate, findings are compared with the existing relevant literature.

Table 6.1 Key themes and codes used for analysing social and environmental supply chain sustainability practices and outcomes

Key Thematic Area (identified from the literature)	**Sub-themes** (that deductively emerged from the literature)	**Explanations** (based on literature)	**Second-cycle Codes** (that inductively emerged from data)	**Initial Codes** (that inductively emerged from data)
Social supply chain sustainability practices and outcomes	**Workers' Health, Safety and Well-being**	It includes physical and mental health which are directly related to safety, hygiene and well-being of the workforce at factory level.	Workplace Safety	Fire Safety (fire detection and prevention system) Electrical Safety (lighting and wiring protection system) Structural and Building Safety (detailed engineering assessment and load plan)
			Workers' Physical Safety	Personal protective equipment such as masks, ear plugs, safety glasses, needle guards, machine safeguarding Use of non-hazardous materials
			Health, Hygiene and Well-being	Cleanliness of workplace Safe drinking water Toilet and washing facilities Ventilation system (adequate air flow) Lighting improvement Sanitary napkins for female workers Medical facility Day-care facility for workers' children Dining and prayer facilities Transportation facilities
	Rights at Workplace	It includes fundamental rights of workers, including freedom of association, non-discrimination in work, and the absence of forced and child labour in abusive conditions.	Equity and Inclusion	Non-discrimination Equal opportunity for employment No physical harassment and abuse Humane treatment Gender equality in recruitment and promotion
			Labour rights and worker committees	Opportunity to form workers' associations Rights to report problems to the authorities Grievance procedure Ensuring other labour rights
			Child and Forced labour	No child labour No forced or bonded labour
	Work Hours and Wages	It refers to working conditions of the workers, which includes work hours, minimum wages and other related incentives.	Work Hours	Regular work hours Overtime as per law
			Wages and incentives	Minimum wage On-time basic wage payment

				Overtime payment and bonuses
	Social Protection	It embodies effective social security in cases that prevent a person from working and gaining a stable income, such as old age, sickness, disability, and unemployment.	Unintended leave and related benefits	Maternity leave and benefits Compensation for injuries and accidents in the workplace Sickness or injury leave
			Social Security	Group Insurance Provident Fund Retirement benefits Financial compensation for workplace-related death
	Workers' Training and Skill Development	It includes all types of initiatives that develop awareness, skills and capabilities of workers.	---	Training facilities Education Facilities Skill development opportunities Motivational programmes
	Community Involvement and Development	It includes philanthropic donations to community, educational and government development initiatives.	----	Establishing and funding educational institutions Donations to community support activities Supporting government-sponsored campaigns Other special community-related activities
Environmental supply chain sustainability practices and outcomes	**Managing Resource Consumption**	Factories reduce the consumption of non-renewable resources and promote the use of renewable resources to remain sustainable for the future.	Reduction in non-renewable resources	Reduce energy use Reduce water consumption The use of energy-efficient green technologies Measurement and tracking of resource use
			Use renewable resources	Natural lighting Solar panel system Rain water use
	Pollution Emissions and Waste management	These include monitoring pollution emissions and discharge of solid and liquid waste to preserve the environment and mitigate their long-term effects on climate.	Managing Pollution Emissions	Reduction in air emissions Carbon Neutrality Reduction in water emissions Reduction in land/soil emissions Reduction in noise/sound emissions
			Waste management and recycling	Waste water treatment /Effluent Treatment Plant (ETP) Refining used chemicals Recycling solid waste
	Green Factory Projects and Certifications	Factories are complying with certified green building projects and adopting environmental management systems that help to manage the negative impact of their activities on the environment.	Green Factory Projects	Design buildings with low carbon-dioxide emissions Use of local material for construction Use of recyclable contents in construction materials Sustainable factory sites/locations
			Environmental Standards and Certifications	ISO 14001 Certification/EMS Organic Cotton/Cotton USA Higg Index, Sedex, WRAP, and Oeko-Tex Certifications

6.3 Suppliers' Social Supply Chain Sustainability Practices and Outcomes

In this section, the focus is on the implementation of social sustainability issues and practices of Bangladeshi multi-tier apparel suppliers and its linkage with SSM. Social issues and practices in the supply chains are defined as "product or process related aspects of operations that affect human safety, welfare and community development" (Klassen & Vereecke, 2012, p. 103). Based on the findings, this section illustrates the emergent six sub-themes and their respective codes under social sustainability practices and outcomes. These findings are summarised in Table 6.2. While Table 6.2 only displays sample quotes from some of the participants across multi-tier suppliers, these quotes are further confirmed by the other participants from supply firms, as discussed below.

6.3.1 Workers' Health, Safety and Well-being

One of the sub-themes under social supply chain sustainability is *workers' health, safety and well-being*. Research suggests that health and safety comprises physical and mental health, which are directly related to security, hygiene and well-being of the workforce at factory level (Page & Vella-Brodrick, 2009; Yawar & Seuring, 2017). As the sample evidence shows in Table 6.2, the majority of owners and managers indicated that first-tier (20 out of 23) and second-tier (10 out of 16) suppliers were keen to ensure *workers' health, safety and well-being*. For instance, the manager T1-S4-1 stated:

Table: 6.2 Key sub-themes and their relevant sample quotes under social supply chain sustainability across the multi-tier apparel suppliers

Supply Chain Tier	Sub-themes	Sample illustrative quotes	Interviewees with a similar view, and the level of implementation
First-tier Suppliers	**Workers' Health, Safety and Well-being**	"Our company has emergency treatment facilities for workplace-related sickness, injuries and accidents which are provided by doctors and nurses at our own factory's medical centre. We also arrange transportation to pick up and drop off near workers' homes alongside lunch and snack facilities. We have recently opened a pre-primary school for workers' children." (T1-S1) "Our company maintains worker welfare and well-being with amenities such as a canteen for dining; a medical centre equipped with beds, doctors and nurses; and a child care centre". (T1-S2)	T1-S1, T1-S2, T1-S3, T1-S4-1, T1-S4-2, T1-S5-1, T1-S5-2, T1-S6-1,T1-S6-2, T1-S7, T1-S8-1, T1-S9, T1-S10, T1-S11, T1-S13, T1-S14, T1-S15-1, T1-S15-2, T1-S16, T1-S17 (20 out of 23) (High level of implementation)
	Rights in the Workplace	"We have a strong employment policy of non-discriminatory practices during hiring and promotion. Our company does not consider several aspects such as race, religion, age, nationality, ethnic origin, sexual orientation and political opinion as the basis for salary benefits and advancement...Each worker is treated with dignity and respect. Factory management play a strong role in preventing all forms of violations including physical and verbal harassment and abuse." (T1-S5-2) "Our factories do not allow workers to join any union of their own since we have many prior bad examples of trade unions. However, two grassroots-level workers' committees, particularly the workers' participation committee (WPC) and safety committee are operating at our factories. These two committees collect all grievances and suggestions regarding labour conditions from general workers. Recently these committees have collected complaints regarding health and safety issues which we solved accordingly." (T1-S10)	T1-S1, T1-S2, T1-S3, T1-S4-1, T1-S5-1, T1-S6-1,T1-S6-2, T1-S7, T1-S8-1, T1-S9, T1-S10, T1-S15-2, T1-S17 (13 out of 23) (Moderate level of implementation)
	Work Hours and Wages	"Our company pays regular and overtime wages to workers as per gazette notification of the government of Bangladesh. Also, we strictly follow working hours as per labour law (8 hours regular work and 2 hours overtime per day), and 1 day off within a week...Basic regular salary, overtime payment, house rent, transport and other allowances are clearly shown in the salary sheet [pay slip] of each worker." (T1-S5-2)	T1-S1, T1-S2, T1-S3, T1-S4-1, T1-S4-2, T1-S5-1, T1-S5-2, T1-S6-1,T1-S6-2, T1-S7, T1-S8-1, T1-S9, T1-S10, T1-S11, T1-S14, T1-S15-2, T1-S16, T1-S17 (18 out of 23) (High level)
	Social Protection	"...We provide benefits and a provident fund as per government law. In the case of health insurance, we comply with BGMEA policy for which our company pays an insurance premium on behalf of workers." (T1-S11)	T1-S1, T1-S2, T1-S3, T1-S4-1, T1-S4-2, T1-S5-1, T1-S5-2, T1-S6-1,T1-S6-2, T1-S7, T1-S9, T1-S10, T1-S15-2, T1-S17 (14 out of 23) (Moderate level)
	Workers' Training and Skill Development	"[...] Training sessions are conducted to upgrade practical knowledge of the employees. We have a training and development department which arranges regular training about fire drills and extinguishers, chemical safety and first aid where necessary." (T1-S5-1)	T1-S1, T1-S2, T1-S3, T1-S4-1, T1-S4-2, T1-S5-1, T1-S5-2, T1-S6-1,T1-S6-2, T1-S7, T1-S8-1, T1-S9, T1-S10, T1-S11, T1-S14, T1-S15-1, T1-S15-2, T1-S16, T1-S17 (19 out of 23) (High level)

	Community Involvement and Development	"We support preservation of cultural heritage sites as well as preventing the extinction of Bengal tigers." (T1-S3). "There is a big madrasah [religious school] near our factory where around 200 orphans are living. Our company bears all costs of running that madrasah." (T1-S9)	T1-S1, T1-S2, T1-S3, T1-S4-2, T1-S5-1, T1-S5-2, T1-S6-1,T1-S6-2, T1-S7, T1-S8-1, T1-S9, T1-S10, T1-S17 (13 out of 23) (Moderate level of implementation)
Second-tier Suppliers	**Workers' Health, Safety and Well-being**	"We use a range of chemicals for dyeing purposes. To ensure the physical safety and health of the workers when using chemicals, we provide masks, gloves, special shoes, and eye glasses." (T2-S1) "Our factory is small…However, we try to provide a better working environment for the workers. We focus on cleanliness and hygiene when we arrange lunch for the workers. We arrange a pure drinking water jar for the production floors." (T2-S3)	T2-S1, T2-S2-1, T2-S3, T2-S4, T2-S5, T2-S6, T2-S8-2, T2-S9-1, T2-S10, T2-S11-1 (10 out of 17) (High level of implementation)
	Rights in the Workplace	"We think creating a good relationship between workers and management is required to effectively run the factory. We have two committees. One is the participation committee and the other is the safety committee. We sit down with the participation committee every two months. The participation committee identifies common workers' problems and shares them with us in the regular meeting. The safety committee and factory management discuss ways to tackle risks in occupational health and safety." (T2-S8-1)	T2-S1, T2-S2-1, T2-S3,T2-S4, T2-S5, T2-S6, T2-S7,T2-S8-1 (8 out of 17) (Moderate level of implementation)
	Work Hours and Wages	"We now try to meet workers' basic needs such as regular salary payments including overtime payments. We are more concerned about overtime work hours than previously." (T2-S6)	T2-S1, T2-S2-1, T2-S3, T2-S4, T2-S5, T2-S6, T2-S7,T2-S8-2, T2-S9-1, T2-S10, T2-S11-1 (11 out of 17) (High level of implementation)
	Social Protection	"We provide casual and sick leave. If any worker needs 15 days above our company policy [12 days maximum] due to physical sickness, we approve it. We also give maternity leave to the female workers alongside a medical care allowance." (T2-S1)	T2-S1, T2-S2-1, T2-S7 (3 out of 17) (Limited level of implementation)
	Workers' Training and Skill Development	"We send managers as well as workers to attend health and safety-related training and awareness programmes organised by the trade association...We also train them internally at our factory about how to ensure safety during earthquakes or major accidents." (T2-S1)	T2-S1, T2-S4, T2-S7 (3 out of 17) (Limited level of implementation)
Third-tier Suppliers	**Workers' Health, Safety and Well-being**	"Workers are using masks and gloves during work since they have to use dyeing chemicals. We told them how to use fire extinguishers during accidental fires for their physical safety." (T3-S2-1) "We cannot provide medical and transportation facilities for the workers. Honestly, we are not alone, there are so many factories like us who do not provide these benefits." (T3-S1)	T3-S1; T3-S2-1 (2 out of 7) (Limited level of implementation)
	Work Hours and Wages	"We do not follow the minimum wage rule but we try to pay workers' wages on time. Sometimes we provide advance salary to some workers as a loan which we retrieve accordingly from the monthly payment… We provide holiday leave benefits as per law. We know if we do not give any leave, they may be upset." (T3-S2-1)	T3-S1; T3-S2-1; T3-S4 (3 out of 7) (Limited level of implementation)

> Ensuring safe and healthy workplace conditions is one of the prime concerns to our company. To ensure that the workforce working on the sewing floors are comfortable in the workplace, evaporative cooling pads are installed accordingly. Moreover, water dispensers are provided on each floor to make certain that the workers on the production floors do not suffer from dehydration or heat exhaustion…We want to utilise their [workers] full efforts for optimum productivity.

Moreover, the director T2-S8-2 also pointed out a few health and well-being initiatives:

> Our factory is in a congested city area. So we have set up rooftop dining and relaxation facilities for the well-being of the factory workers. We have registered doctors and full-time nurses to provide free healthcare services to workers on the production floors.

The above participants' views suggest that suppliers are concerned about health, safety and well-being of the workers to improve their productivity. In connection with the sub-theme under *workers' health, safety and well-being*, three second- cycle thematic codes emerged from the data: *workplace safety*, *workers' physical safety*, and *health, hygiene and well-being*. The first thematic code relates to *workplace safety* initiatives. The findings suggested that the high number of fatalities due to the 2013 Rana Plaza collapse in Bangladesh served as a wake-up call regarding safety issues throughout the apparel supply chains. Monitoring bodies including government and buyers put intense pressures on apparel suppliers to guarantee the safety of workers. Afterwards, except for third-tier suppliers, most owners and managers of first-tier and second-tier suppliers stated their immediate actions for implementing safety initiatives in factories. As the manager T1-S1 said:

> Our factory is a mass people-oriented [labour-intensive] organisation. After the Rana Plaza incident, we are truly required to work on the implementation of workers' safety issues as per national law alongside buyers' standards. In fact, we are working with two buyers' consortium teams – the Europe-based Accord team and the America-based Alliance team – to improve workplace safety. They basically assessed three key safety areas of our factory: fire safety, electrical safety, and structural and building safety. For example, the Accord identified some safety concerns particularly the urgency of installing fire smoke detection, a hydrant system, a sprinkler system, and a clear evacuation map and route. Now we have fully implemented Accord's corrective action plan (CAP)...our ultimate purpose is to retain our buyers as well as workers.

The above manager's view demonstrated that first-tier suppliers significantly improved safety conditions in factory production floors. The identified outcomes of such initiatives were retention of workers and buyers as well as gaining legitimacy within society. In a similar vein, the following comment of the manager T2-S6 demonstrated the radical change in recent years regarding the fire, electric and building safety conditions at the second-tier apparel supplier level:

> We are not directly involved in rectifying our factory building and structural issues as required by the Accord and the Alliance. Nevertheless, we met the standard requirements to ensure fire and electrical safety. We have unlockable fire doors, smoke detectors, and fire extinguishers to detect and prevent accidental fires. Both owner and workers are aware of safety issues. The radical change regarding workplace safety and security has been happening since the Tazreen factory fire [in 2012] and the Rana Plaza collapse [2013].

The above manager's view is consistent with previous research which found that after the tragic incident of the Rana Plaza collapse in 2013, the enforcement and monitoring with regard to health and safety has been significantly improved in Bangladesh's apparel supply chain (Moazzem & Sehrin, 2016). While there have been many safety improvement initiatives at first-tier and second-tier supplier level since the major industrial disasters, the implementation of safety initiatives was inadequate at third-tier supplier level. For example, the owner T3-T1 stated:

> After the Rana Plaza incident, I purchased only one fire extinguisher to prevent any accidental fires. But we do not have any fire doors or smoke detectors.

It is clear from the above participant's view that there existed a variety of prevailing unsafe and unhygienic conditions in third-tier supply factories. This situation reflected the tendency of owners and managers of third-tier suppliers to ignore two important social thematic sub-issues: *workers' physical safety,* and *health, hygiene and well-being.* As the owner T3-S1 remarked:

> We cannot provide medical and transportation facilities for the workers. Honestly, we are not alone; there are so many factories like us who do not provide these benefits.

In contrast with the above view, first-tier suppliers and second-tier suppliers suggested that they were keen to promote diverse initiatives and facilities to ensure *physical safety* as well as *health, hygiene and well-being* for the factory workers. For example, the manager T1-S4-1 stated "All workers are provided with personal protective equipment (PPE) to ensure physical health and safety in the workplace", whilst another manager T2-S2-1 confirmed:

> We give personal protective equipment such as gloves and masks to the workers since some workers are required to work closely with chemicals during the production process. We arrange free medical treatment and diagnosis for them. For instance, we have assigned a lung specialist who is responsible for checking 167 workers' health including blood tests, urine tests, x-rays and other types of tests.

Likewise, the manager T1-S8-1 also pointed out several programmes:

> [...] Our factory has a lifestyle centre which comprises a 6 bed mini-hospital with fulltime doctors and nurses for workers, a day care centre for children with trained child-care assistants, an indoor game centre with satellite TV, a large canteen with subsidised lunch, a spacious prayer hall and a world class training centre with multimedia facilities…All of these facilities help us to reduce workers' turnover and enhance their work commitment.

The above participants' views indicated that except for third-tier suppliers, the majority of multi-tier suppliers are implementing various health, safety, hygiene and well-being initiatives as a means of reducing employee turnover and improving their work performance. The reported findings are in accordance with previous research by Huq et al. (2014) and Perry et al. (2015), which found that the adoption of health and safety initiatives reduces employee turnover and absenteeism, increases workers' commitment to factory productivity, and provides suppliers with legitimacy within society. In a similar vein, workplace well-being is considered a component of workers' psychological health, which has a direct connection with employee turnover, job satisfaction and performance (Page & Vella-Brodrick, 2009; Wright & Bonett, 2007).

6.3.2 Rights in the Workplace

One of the sub-themes under social supply chain sustainability was *rights in the workplace*. This theme refers to fundamental rights of workers, including freedom of association, non-discrimination at work, and the absence of forced and child labour in abusive conditions (Ghai, 2003; Somavia, 1999). Accordingly, three thematic codes were initiated in connection with rights in the workplace: *equity and inclusion*, *labour rights and worker committees*, and *child and forced labour*.

The first thematic code relates to *equity and inclusion*. Some aspects such as not denying rights to any worker based on religion, gender, age, race, or caste were considered under *equity*. Moreover, other activities such as humane treatment, inclusion of marginalised and disabled people, and following fair and non-discriminatory employment policies during recruitment and promotion were emphasised by participants as being important *equity and inclusion* aspects of supplier social sustainability. For example, the manager T1-S4-1 stated:

> We recruit, train and promote the most qualified workers who are chosen regardless of their religion, gender, age, sex, race or physical disability. Information regarding pregnancy, ethnicity, religion, caste or marital status is omitted during the recruitment process in order to provide an equal opportunity to all. We currently provide work for more than 100 physically challenged people.

Another manager T1-S10 supported the above participant's view: "We employ transgender as well as disabled workers. We did a contract with the Centre for Rehabilitation of the Paralysed (CRP) Bangladesh to nominate one disabled worker every month." Furthermore,

several owners and managers of second-tier suppliers argued that factory management were treating workers as family members and preventing all forms of physical and verbal mistreatment of them. As the owner T2-S5 commented:

> Owners should understand that workers are our family members. To manage our reputation and legitimacy, we should ensure their social demands such as basic rights, fair wages, and no physical torture. We are running our machines and businesses by using them. We are nothing without them. Actually, there was a tradition in the apparel industry to physical and verbally abuse female workers to speed up production. Now if you survey a thousand apparel factories you will not get this kind of behaviour from owners and factory management.

The above owner's view shows that there was a practice of physical and verbal harassment in the apparel sector. This finding supports the critical concerns raised by an international NGO that found that female workers who worked for the 2012 Olympics sponsor brands were physically and verbally mistreated (War on Want, 2012). However, the findings also suggested that there is a growing interest among first-tier and second-tier suppliers to stop any form of harassment and encourage equity and inclusion in the workplace. The majority of participants perceived that instead of harassment and abuse of workers, equity and humane treatment at factory level can ensure productivity including attracting workers and giving a social license to operate. This finding is consistent with previous studies (Carter & Jennings, 2004; Hutchins & Sutherland, 2008; Perry et al., 2015; Winter & Lasch, 2016) which argued the significance of equity and diversity aspects and their impact on social sustainability supply chain outcomes such as managing image and legitimacy within society.

The second thematic code under rights at work was *labour rights and worker committees*. ILO conventions recognise the right of all workers to form and join trade unions and bargain collectively (Egels-Zandén & Lindholm, 2015). Two key activities such as the opportunity to form workers' participation committees and the right to report problems to the authorities were emphasised by most participants under *labour rights and worker committees*. For instance, the manager T1-S1 remarked:

> Trade unions are not compulsory for factories in the export-processing zone area. However, we have a workers' participation committee (WPC) within our factory where leaders are elected by general workers. This election is strictly monitored by the regulatory authority...The workers' association creates a bridge between management and workers...Every two months we sit down with them along with top management and discuss their issues and demands regarding salary, overtime, work environment, or other areas of grievance...I think we [WPC and factory management] are happy to work with each other.

The above manager's view demonstrated that joining a trade union is not mandatory for all multi-tier suppliers. However, there is an alternative opportunity in place to form workers' committees where leaders are elected by factory workers. This workers' committee works as a facilitator between general workers and the factory management. This finding supports the evidence of similar quasi-union initiatives such as employee representative councils in Sri Lankan garment sourcing networks (Perry et al., 2015).

Nevertheless, the findings further suggested that members of workers' committees were mostly being selected by the top management at second-tier supplier level and beyond, which

undermined the actual participation of workers' representatives. As the manager T2-S7 explained:

> We have a worker's participation committee which is selected by factory management and owners. We tell the general workers to communicate their problems to the WPC. The WPC then presents these complaints in front of the factory management including our managing director. We try to solve these problems.

While the above manager's view suggests the existence of WPCs at the first-tier and second-tier supplier level, there are no WPCs at third-tier supplier factories. For example, the owner T3-S1 confirmed: "My factory is a small sub-contracting grey fabric supply firm. There are no workers' association or trade union activities." This finding is consistent with previous studies which found that the activities of trade unions are commonly weak and highly politicised in the Bangladeshi apparel sector (Haque & Azmat, 2015).

The third thematic code under rights at work was *child and forced labour*. ILO conventions prohibit work by children either under the age of 15 that inhibits school attendance or under the age of 18 that is physically and psychologically unsafe for the child (Yawar & Seuring, 2017). Moreover, forced labour refers to bonded or prison labour (Egels-Zandén & Lindholm, 2015). The findings of this study also suggested that the majority of first-tier and second-tier suppliers prevented child and forced labour in the workplace. For example, the manager T1-S4-1 stated:

> To maintain our business reputation, our factory prohibits all forms of forced labour and child labour. With regard to forced labour, several policies are in place to keep

> overtime as low as possible: not more than 12 hours a week. With regard to child labour, the medical centre checks age and verifies all certificates during the recruitment process, especially the national identification number and birth registration certificate.

Another manager T2-S8-1 supported the above manager's view: "We do not employ any child workers in our factory. We also do not force any worker to work beyond the law". Although labour laws do not permit child labour, there is evidence of child and forced labour at third-tier supplier level. As the manager T3-S2-1 pointed out:

> We ask workers to bring bio-data before conducting an interview. We do not recruit anyone below eight class [under 15 years old] since the dyeing section requires at least some technical knowledge. Sometimes we select one or two normal age workers [children below the age of 15] if they are good.

The findings from the above participant revealed the opposite picture with regard to managing child labour issues at third-tier supplier level. In spite of this fragmented situation at third-tier supplier level, social practices relating to the removal of child and forced labour across first-tier and second-tier suppliers were in a good position in the apparel sector. This may be because the amended Bangladesh Labour Act 2013 has endorsed and enforced several core labour standards set by the ILO including the removal of child and forced labour (Haque & Azmat, 2015; Moazzem & Sehrin, 2016). However, previous research argued that eliminating child workers from this highly regulated apparel sector may divert them to other, less regulated and more unsafe sectors such as construction (Huq et al., 2014).

6.3.3 Work hours and Wages

Work hours and wages emerged as another sub-theme under social sustainability practices. In particular, many participants from multi-tier suppliers discussed a variety of *work hours* and *wages*-related issues such as regular and additional work hours, minimum wage, regular payment, overtime payment (double payment of regular wage rate), other incentives and bonuses. For example, one manager T1-S10 commented: "Our company does not engage any worker to work more than the legally prescribed 60 hour limit (inclusive of 12 hours overtime) and one day off in a week", whilst another manager T1-S7 added:

> The government declared a minimum wage of BDT 5300 [Bangladeshi taka] in 2013. We are following this minimum wage rule. We initially faced some problem in ensuring the minimum wage for novice workers [starting from day 1 without any experience] and experienced workers [who have worked for several years] who are working in the same position [helper or operator]. If we give the same amount to all workers at the same level, dissatisfaction amongst experienced workers may arise. We adjusted and increased the salary such as 500, 1000, 1500 BDT…along with the minimum wage rule based on their work experience so that no worker's effort is treated unfairly.

The above managers' views demonstrate that first-tier suppliers are keen to promote the fair implementation of work hours and wage-related benefits in their factories, which may result in greater satisfaction amongst experienced workers. This finding is in accordance with previous research which found that regular wage-related benefits such as fair periodically paid bonuses help retain skilled workers (Perry et al., 2015).

However, the findings suggested that the majority of second-tier and third-tier suppliers were not complying with the law associated with work hours and wages. For example, the manager T2-S1 said: "If any worker works an additional two days in a fortnight above the regular work days, we pay double wages for those extra days." This view of the manager reveals that some workers do not get any days off for two weeks, which is a serious violation of laws. This kind of violation in terms of payment was identified from some participants' conversations. As the manager T3-S2-1 remarked:

> We do not follow the minimum wage rule but we try to pay workers' wages on time. Sometimes we provide advance salary to some workers as a loan, which we retrieve accordingly from the monthly payment.

Several workers confirmed the above manager's view during the informal group discussion. For instance, one worker WD said:

> We have to work additional hours and don't get any leave if there is huge work pressure on the production floors…We do it because our regular salary is very low compared to what is required for daily life. So we are dependent on overtime work.

This view of the worker endorses the fact that the wages in the Bangladeshi apparel industry (minimum wage 68 USD or 5,300 taka per month) are the lowest in the world which has been considered economic exploitation of workers (Haque & Azmat, 2015; Stotz & Kane, 2015). In a similar vein, several other scholars (Huq et al., 2014; Soundararajan & Brown, 2016) argued that the level of implementing standard working conditions at sub-contracting supply factories is low in developing countries such as Bangladesh and India because of excessive

work hours as well as exploiting workers with very low wages. The reasons behind this kind of non-adoption (decoupling) of standard practices relating to *work hours and wage* issues was also discussed earlier in Chapter 5.

6.3.4 Social Protection

Social protection refers to the procedures for establishing effective social safeguards against circumstances that prevent a person from working and gaining a stable income, such as aging, sickness, disability, and unemployment (Frey, 2017; Somavia, 1999). According to the findings, two thematic codes of social protection were *unintended leave and related benefits* and *social security.* Several participants highlighted that multi-tier suppliers were providing *unintended leave and related benefits* such as maternity leave and benefits, sickness or injury leave, and compensation for injuries and accidents in the workplace. For example, the manager T1-S4-1 stated:

> Our company guarantees all kinds of leave benefits including injury and accident-related compensation. In the previous year [2016] more than 250 pregnant women workers received maternity benefits, which comprised medical check-ups, treatments, medicine and counselling.

Another manager T1-S1 confirmed the above manager's view:

> […] Our organisation provides group insurance, contributions to a provident fund and compensation due to workplace injuries and minor accidents. For death and other major casualties, family members of the workers obtain benefits from government and

> trade associations [BGMEA] as each factory is automatically required to deposit money [3%] against export revenue.

The above managers' views demonstrate that the majority of first-tier suppliers embraced diverse social protection schemes such as group insurance, injury-related compensation, contributions to a provident fund, and retirement benefits along with common sickness and maternity leave benefits. In the case of severe factory accidents and even deaths, major industry associations on behalf of member suppliers were committed to providing necessary technical support as well as financial compensation to the survivors and their family members. This is consistent with the results of a recent technical research report by Prentice (2018), which found that survivors of apparel factory accidents (for example, the 2013 Rana Plaza collapse and the 2012 Tazreen factory fire) and their family members were being compensated with the commitment and collaboration of industry-led multiple-stakeholder initiatives including trade associations and government. However, except for serious accident-related compensation, other social security schemes were only designed for full-time permanent workers. As the manager T2-S2-1 remarked:

> We arrange casual and sick leave payment. Honestly we provide bonuses to workers who have been working in our company for a long time. We consider this bonus only during termination or retirement.

While the above manager's comment indicates the minimal social security initiatives at second-tier supplier level, there was no social protection scheme for workers in place amongst third-tier apparel suppliers. This finding partly supports previous research (Soundararajan & Brown, 2016; Soundararajan et al., 2018), which claimed that developing

country small suppliers arranged social security schemes such as provident funds for only an insignificant percentage of workers. Moreover, these small suppliers often tried to avoid these schemes through fake records (Soundararajan et al., 2018).

6.3.5 Workers' Training and Skill Development

Workers' training and skill development was another sub-theme under social supply chain sustainability which included all types of initiatives that enhance awareness, skills and capabilities of workers. Research suggests that organisations arrange various training and skill development initiatives for their workforce as they have a direct impact on individual and organisational performance (Noe, 2013). Accordingly, the majority of owners and managers (19 out of 23) of first-tier suppliers acknowledged the importance of implementing various training and skill development practices. For example, the manager T2-S4 pointed out:

> Factory management arranges different training for the workers such as basic orientation about first aid, workers' rights and benefits, fire drills and fire extinguisher training. To minimise production-related injuries, we also train workers in how to properly use personal protective equipment. Another important training is related to chemical handling and safety. For example, we say if you [workers] mix hydrogen and acid or hydrogen peroxide and acid, a fire will happen. We teach them how to segregate hazardous chemicals into different places.

The above manager's argument indicates that health and safety training reduce workplace-related accidents, injuries, and illness. The findings further indicated that several first-tier

suppliers viewed workers as valuable resources for the factories. The manager T1-S3 justified it in this way:

> We feel employees are our vital assets. So we inspire personal and career growth of factory workers through providing elaborate training and skill development programmes.

Furthermore, the manager T1-S2 supported the above view through highlighting several performance issues and remarked:

> [...] I think if we want to keep our steady business performance up, a human resource management system (HRMS) is a very important part. There are two parts of HRMS. One part is relating to factory workers [lower operation level] and another part is concerned with factory management-related employees [mid and upper level]…We regularly follow up their skill development aspects through different training and awareness programmes such as health, safety and hygiene since their first day as beginners in our factory. These programmes improve employees' motivation and commitment towards our factory.

The above manager's comment demonstrated that training programmes for human resources were motivated by supplier business performance. In particular, the participant suggested that human resource development through training and awareness-raising workshops played a key role in improving workers' loyalty and motivation. As such, this argument is consistent with previous studies which found the positive influence of educational initiatives in the form of workers' training and skill enhancement on suppliers and supply chain sustainability

performance (Perry et al., 2015; Sureeyatanapas, Yang, & Bamford, 2015). For example, Perry et al. (2015) claimed that human capital development through proactive organisational training helps retain skilled workers.

While the participants identified the significance of *workers' training and skill development* programmes as an important theme in social supply chain sustainability, the majority of them repeatedly highlighted occupational health and safety-related training. This may be because of the intense public scrutiny and the establishment of the buyer-directed multiple-stakeholder initiatives such as the Accord for Fire and Building Safety in Bangladesh after the 2013 Rana Plaza factory collapse (Reinecke & Donaghey, 2015). Nevertheless, the findings suggested that only a limited number of managers (3 out of 16) from second-tier suppliers implemented some safety-related training initiatives. Like other social issues, the participants from third-tier apparel suppliers did not mention their involvement relating to training and skill development initiatives. This is mainly due to the fact that the pressures from the Accord and other stakeholders on third-tier suppliers are almost absent, which was also reported in Chapter 5 (see section 5.3). Moreover, the abilities and commitment to invest in training and skill development initiatives are yet to be addressed by third-tier apparel suppliers.

6.3.6 Community Involvement and Development

The final sub-theme under social supply chain sustainability was *community involvement and development*, which included philanthropic donations to community, educational and government development initiatives. According to Carroll (1991, p. 42), philanthropic responsibilities – including donating resources voluntarily to communities and enhancing a

community's quality of life – have been acknowledged as the best strategic way to "be a good corporate citizen". Within the supply chain sustainability context, Hutchins and Sutherland (2008) also endorsed Carroll's (1991) conceptualisation of philanthropic responsibility and suggested its performance indicators. Accordingly, the owners and managers (13 out of 23) of first-tier suppliers discussed their social contributions to a variety of philanthropic activities such as renovating and preserving national and cultural heritage, offering donations to educational institutions (schools, madrasahs, and universities) and community support activities, and financially supporting key government-sponsored social campaigns. For example, the manager T1-S2 commented:

> We regularly sponsor several events and causes relating to the protection of national heritage, sports and cultural events and women's equality and empowerment. We contributed a good amount of money to the Prime Minister's National Relief Fund (PMNRF) which is helping flood-affected people during natural disasters.

Another manager T1-S4-1 supported the above manager's view through adding other community development initiatives:

> We have a good reputation since our company significantly contributes to the community and society through different programmes, focusing on healthcare and education of children. For instance, we frequently arrange free eye camps, gynaecological camps, health camps and blood donation programmes for the local community. Additionally, we have built a state-of-the-art information technology laboratory for a university, and a computer and science laboratory for a school.

The above manager's view demonstrates that first-tier suppliers incorporate diverse philanthropic practices into their social supply chain sustainability outcomes such as obtaining a good corporate image and community respect. This finding is in accordance with previous studies (Goger, 2013a; Perry et al., 2015; Winter & Lasch, 2016), which claimed that apparel suppliers are implementing philanthropic activities such as donations to local orphanages or building schools as a means of gaining goodwill, and community admiration alongside a license to operate within society. However, like some other social thematic issues, the participants from second-tier and third-tier suppliers did not connect their involvement with community development or philanthropic activities. This may be because the underlying key motive of these suppliers was only economic responsibilities. As such, this finding is consistent with a previous study (Haque & Azmat, 2015), which argued that managers of developing country suppliers perceived philanthropic responsibilities as a distraction from their organisations' key goals.

To sum up, the overall themes indicated that there was similar implementation of social supply chain sustainability practices across first-tier suppliers and second-tier suppliers (see also Table 6.2). However, the level of implementation varied across first-tier and second-tier suppliers. Moreover, the implementation of social sustainability practices by third-tier suppliers was still very low since owners and managers only discussed two sub-themes: *work hours and wages*, and *workers' health, safety and hygiene*. Furthermore, in connection with the implementation of social supply chain sustainability practices, several SSM outcomes were identified by the participants. They are *reduced labour turnover (retaining experienced workers), increased workers' motivation and loyalty*, *reduced absenteeism due to injuries, accidents, and illness, enhanced supplier image and reputation, attracting and retaining buyers*, and *legitimacy and respect within society*. As discussed, Figure 6.1 below

summarises the implementation of social supply chain sustainability initiatives and practices and its links with SSM outcomes.

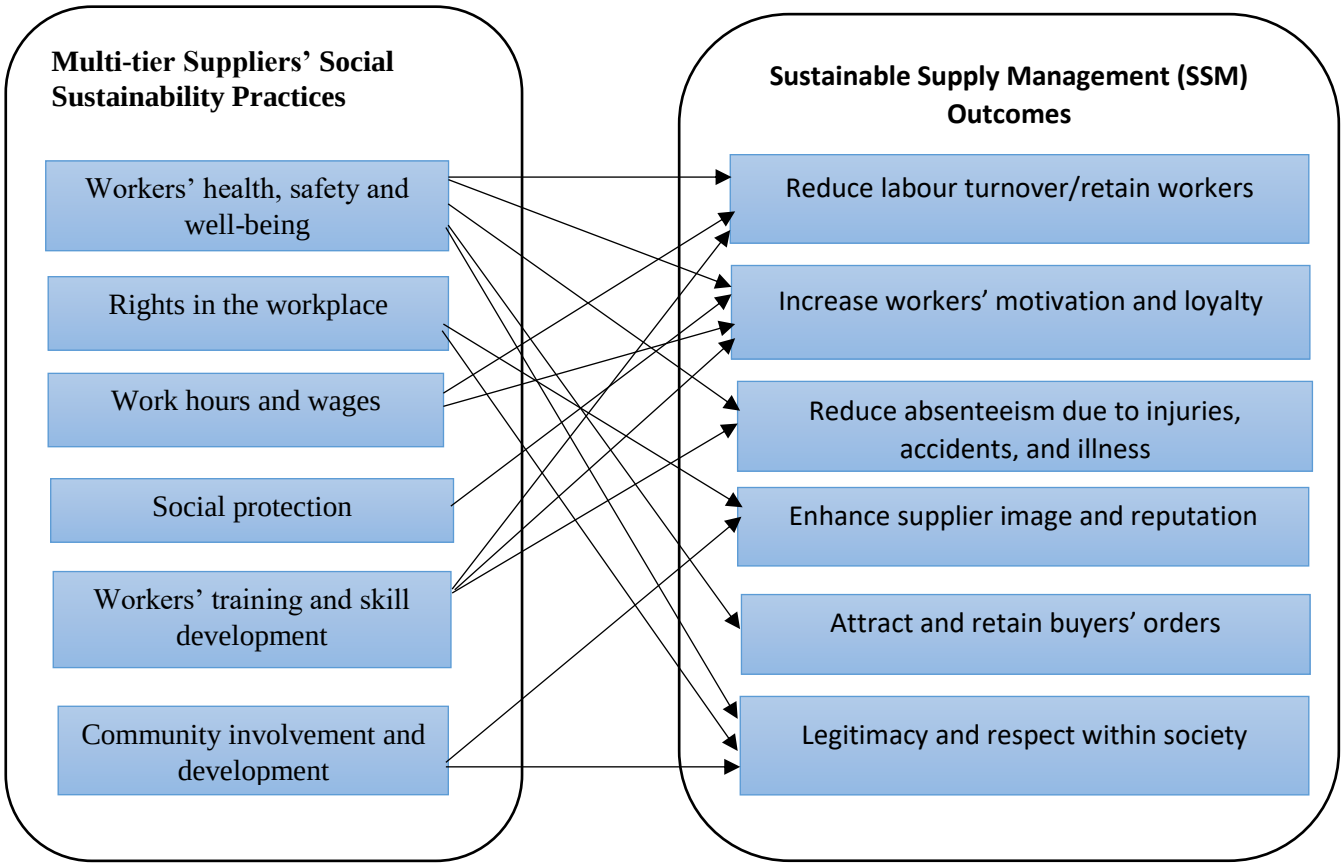


Figure 6.1 Summary of multi-tier apparel suppliers' social sustainability practices and their links with SSM outcomes (constructed based on empirical findings of this current study)

6.4 Suppliers' Environmental Supply Chain Sustainability Practices and Outcomes

In this section, the focus is on the implementation of environmental sustainability issues and practices of Bangladeshi multi-tier apparel suppliers and its linkage with SSM. Prior studies suggest that environmental sustainability issues and concerns in the supply chains include reduction in resource consumption, reuse and recycling, pollution reduction, and ISO 14001 certifications which directly influence supply firm economic and environmental outcomes (Baskaran, Nachiappan, & Rahman, 2012; Green Jr, Zelbst, Meacham, & Bhadauria, 2012). In terms of thematic identification of environmental sustainability practices and assessment of SSM outcomes, two very different situations were revealed across multi-tier apparel suppliers. According to the findings, the first situation indicated that first-tier suppliers adopt environmental practices to improve a variety of environmental sustainability outcomes, most of which were discussed during conversations and incorporated in annual CSR or sustainability reports. On the other hand, the second situation indicated that second-tier (with some exceptions) and third-tier suppliers were not yet adopting formal environmental practices and their outcome measures. This section illustrates these two situations under three emergent sub-themes and their respective codes relating to environmental supply chain sustainability practices and outcomes. Accordingly, the overall findings are summarised in Table 6.3. While Table 6.3 only displays sample quotes from some of the participants across multiple tiers of suppliers, these quotes are further confirmed by the other participants from supply firms, as discussed below.

Table: 6.3 Key sub-themes and their relevant sample quotes under environmental supply chain sustainability across the multi-tier Bangladeshi apparel suppliers

Supply Chain Tier	Sub-themes	Sample illustrative quotes	Interviewees with a similar view, and the level of implementation
First-tier Suppliers	**Managing Resource Consumption**	"The primary energy source for this company is natural gas. Generators, boilers, domestic lines and machinery are operating with this gas. To save gas and energy, we have taken various measures such as de-scaling the boiler and a leak repair system. Besides, our company has already been using energy-efficient lights instead of traditional lights as well as replacing servo motors with clutch motors." (T1-S10)	T1-S1, T1-S2, T1-S3, T1-S4-1, T1-S4-2, T1-S5-1, T1-S5-2, T1-S6-1,T1-S6-2, T1-S6-3, T1-S7, T1-S8-1, T1-S8-2, T1-S9, T1-S10, T1-S11, T1-S14, T1-S15-2, T1-S17 (19 out of 23) (High level of implementation)
	Pollution Emissions and Waste Management	"We have an environmental policy and strategies. The policy suggests certain ways to prevent water and sound pollution. The policy also suggests how to handle waste and chemicals in order to preserve the environment....Recently we have completed a project named the 'Sustainable Action & Vision for a Better Environment (SAVE)' in order to increase resource efficiency and minimise waste." (T1-S4-1) "Our company has taken a specific initiative to recycle solid wastes such as fabrics, cartons and paper through our recycling contractors. These contractors recycle our solid waste and sell it as raw materials to the export-oriented textile industry. As part of our agreement with contractors, they collect and recycle 910 tons per year of solid fabrics, paper, metal, batteries, plastic, medical waste and other wastes." (T1-S10)	T1-S1, T1-S3, T1-S4-1, T1-S4-2, T1-S5-1, T1-S5-2, T1-S6-1,T1-S6-2, T1-S6-3, T1-S7, T1-S8-1, T1-S8-2, T1-S9, T1-S10, T1-S14, T1-S15-2, T1-S17 (17 out of 23) (High level of implementation)
	Green Factory Projects and Certification	"Our company pays attention to the preservation of the environment for future generations. We are working on a green factory project where we will use solar panels for electricity. This factory is being constructed according to LEED requirements which will be operational in 2019. The impact of that factory's operations on the environment will be very low. For example, the building design facilitates the use of natural sunlight." (T1-S6-3)	T1-S3, T1-S4-1, T1-S4-2, T1-S5-1, T1-S5-2, T1-S6-3, T1-S7, T1-S8-1, T1-S8-2, T1-S9, T1-S10, T1-S15-2, T1-S17 (12 out of 23) (Moderate level of implementation)

Second-tier Suppliers	**Managing Resource Consumption**	"We do not have a dyeing facility. So we have less focus on the environmental sustainability side. However, we try to reduce water consumption. We have a standard water use target for either 6 months or 1 year. We then estimate how much water is consumed by 500 workers per day. We assess the excess water use issues such as misuse rate by workers or faulty water taps and then take corrective action to balance the target." (T2-S6)	T2-S2-1, T2-S4, T2-S6, T2-S9-1 (4 out of 17) (Limited level of implementation)
	Pollution Emissions and Waste Management	"We only assess our factory generators via a third-party engineering firm every year to monitor and control the noise emission level as per law". (T2-S2-1) "Since we produce zippers, buttons and colour thread, we have a dyeing section. We are operating an effluent treatment plant (ETP) to treat waste water. We have an environmental clearance certificate which we are required to renew each year. We do not pollute water since we have an ETP". (T2-S1)	T2-S1, T2-S2-1, T2-S4, T2-S6, T2-S8-2, T2-S9-1, T2-S10 (7 out of 17) (Limited level of implementation)
	Certification	"Our raw materials do not contain any harmful substances particularly hazardous chemicals. We have Okeo-Tex certification which makes sure we are using standard materials in manufacturing". (T2-S5)	T2-S1, T2-S5, T2-S2-2; T2-S8-1 (4 out of 17) (Limited level of implementation)
Third-tier Suppliers	**No Environmental Initiatives**	"Many local sub-contracting firms like our factory are grey fabric suppliers. We have financial constraints. Besides, we do not use any chemicals... Actually we do not focus on any environmental initiatives". (T3-S3)	T3-S1; T3-S3 (No implementation)

6.4.1 Managing Resource Consumption

One of the sub-themes under environmental supply chain sustainability practices and outcomes was *managing resource consumption.* It refers to the reduction of non-renewable resource consumption and the promotion of renewable resource consumption to remain sustainable for the future (Baskaran et al., 2012; Steurer et al., 2005). According to the findings, two thematic codes that emerged were *reduction in use of non-renewable resources* and *use of renewable resources.* As the sample evidence shows in Table 6.4, the majority of owners and managers (19 out of 23) indicated that first-tier suppliers were keen to promote the consumption of renewable resources and the reduction in non-renewable resources consumption. For example, the manager T1-S1 stated: "Now it would not be sufficient to focus on social compliance. We have to address environmental issues. We have to take care of our water, energy and waste." The manager T1-S8-1 justified the above view in the following way:

> We are more environmentally conscious than ever before...We have a special focus on reducing energy and water consumption. To achieve this, we use energy-efficient machinery...such as servo motors which reduce power consumption by 50% and LED [light-emitting diode] lights which reduce energy demand by 80% over the traditional system. If you see around our factory we have a 65 kilowatt capacity solar plant with highly efficient mono crystalline panels which produces 13% of the total factory power required. In the second floor of our factory you can see skylights [44 signature series prismatic dome] for ambient lighting during the daytime. We have a pond for reserving rain water which we are using for toilets and washing. We use efficient water fixtures such as an automatic sensor water tap [stops within 10 seconds of every push] and dual flush and taps to reduce water use.

The above manager's view clearly demonstrates that an environmentally conscious first-tier supplier is adopting different green and efficient technologies, which result in reducing a significant amount of non-renewable resources such as water and energy alongside promoting the use of renewable resources such as solar panels and daylight. Similarly, the manager T1-S10 argued that:

> Our factories are using environmentally friendly and efficient technologies to manage overall water and energy consumption. Some of these are, for example, a process machine using a double outlet system, a hot water transport pipeline system, using servo motors, T5 tube lights, an inverter system, an automatic water pump, skylight facilities.

Likewise, another manager T1-S12 remarked:

> Our country has a shortage of electricity. So we changed all of our previous tube lights. Now we have energy-saving modern tube lights. Also, sewing machines are fitted with servo motors, which are proven to consume less energy. Previously we paid 3 lac (BDT) for our electricity bill. Now we are paying around 1 lac and 20 thousand BDT. We are saving the rest of the money.

It is clear from the above participants' views that the resource management systems and sophisticated environmentally friendly technologies enable improved economic and environmental outcomes. This finding resonates with the findings of prior empirical studies (Caniato et al., 2012; Grant, Trautrims, & Wong, 2015; Meehan & Bryde, 2011; Tate, Ellram, & Kirchoff, 2010), which argued that energy efficiency technologies help firms to reduce the

drain on financial resources (costs), energy and water consumption alongside generating renewable energy (wind and solar systems). For example, while Meehan and Bryde (2011) identified energy consumption (central heating and energy) as one of the dominant environmental issues relating to sustainable procurement practices, Tate et al. (2010) identified the alternative sources of energy such as wind and solar as more efficient environmental efforts in supply chain sustainability. Similarly, Caniato et al. (2012) argued that green practices such as the adoption of low energy consumption facilities and cleaner technologies for production processes are directly linked with environmental supply chain sustainability outcomes.

However, only some participants (4 out of 16) from second-tier suppliers (with a few exceptions) indicated their limited focus on the environmental dimension of sustainability. One of the exceptions was a second-generation owner T2-S9-1 who remarked:

> Our factory is an environmentally friendly factory. If you compare our factory with other factories, the amount of electricity and water consumption is low. I think we have reduced water use by 45% which is a big figure. We are using all LED lights instead of traditional lights. Machines are operating with energy-efficient motors. Even though our initial investment is high, operating expenditure is comparatively lower than others.

The above owner's view demonstrates the comparative benefits of embracing energy-efficient and eco-friendly initiatives in apparel manufacturing factories. Interestingly, several participants from second-tier small and medium suppliers said that they considered

environmental sustainability practices and assessments to be valuable for their supply chains, but had a very narrow focus in practice. As the manager T2-S6 remarked:

> We do not have a dyeing facility. So we have less focus on the environmental sustainability side. However, we try to reduce water consumption. We have a standard water use target for either 6 months or 1 year. We then estimate how much water is consumed by around 550 workers per day. We assess the excess water use issues such as misuse rate by workers or faulty water taps and then take corrective action to balance the target.

The above finding is consistent with the previous study by Caniato et al. (2012), which found that the key critical concern for small knitwear firms is the level of water consumption. Furthermore, all participants from third-tier suppliers indicated that they were not focusing on the environmental dimension of sustainability due to the nature of their operations and financial concerns. For example, the owner T1-S3 confirmed this argument: "Many local sub-contracting firms like our factory are grey fabric suppliers. We have financial constraints. Besides, we do not use any chemicals. We do not focus on any environmental initiatives at all." This owner's view is in accordance with previous research, which argued that upstream small suppliers do not comply with environmental practices in reality since they often lack financial resources to set up innovative green technologies (Preuss, 2001, 2005).

6.4.2 Pollution Emissions and Waste Management

The second sub-theme under environmental supply chain sustainability practices and outcomes was *pollution emissions and waste management*. *Pollution emissions and waste*

management refer to the monitoring of pollution emissions and discharge of solid and liquid waste to preserve the environment and mitigate their long-term effects on the climate (Baskaran et al., 2012; Winter & Lasch, 2016). In connection with the assessment of environmental sustainability practices and outcomes, two thematic codes were identified under this key theme. One of the thematic codes related to *managing pollution emissions*. Some activities such as reduction in air/carbon emissions, water emissions, land/soil pollution, and sound/noise pollution were emphasised by a number of participants as being important *pollution emissions* aspects of supplier environmental sustainability. For example, the manager T1-S5-1 commented on a few carbon reduction initiatives:

> [...] Carbon is emitted by burning gas and diesel. We measure and keep track of our greenhouse gas (GHG) emissions in our GHG inventory sheet. The main purpose is to keep emissions at a certain level as per law [environmental]. We are also aware that workers who do not live near our factory use bicycles to reduce carbon emissions.

The above manager's view suggests the direct linkage between energy consumption (the usage rate) and greenhouse gas emission. As such, energy related eco-efficiency reduces carbon emissions, which in turn, protects human health and the environment (Hoffman, 2005). The manager T1-S10 justified it this way: "[…] Energy efficiency reduces the operating costs of the factory, improves human health by reducing greenhouse gas emission, improves outdoor air quality, and reduces acid rain. The reduction of this emission [GHG] is good for the surrounding environment." This finding resonates with the finding of prior research by Ageron et al. (2012) who found that reducing their carbon footprint is one of the important environmental practices for greening upstream supply chains. In a similar vein, the manager T1-S8-1 stated:

> We have a CFC [Chlorofluorocarbon]-free air cooler for refrigerators, air conditioning and insulation. We know CFC contains ozone-depleting substances that contribute to global warming. We have installed carbon dioxide sensors to track the level of CO2 [Carbon dioxide] in the occupied areas. If we find any problem regarding emissions, we immediately try to solve it.

The above manager's view supports prior research by Hutchins and Sutherland (2008), which highlighted the measurement of different emissions (water, air, and land) from inventory data and their potential damage and risks such as global warming, ozone depletion and acidification. They also argued that these potential kinds of damage can directly and indirectly affect human health and ecosystem quality. Following the above arguments, the manager T1-S1 emphasised the need for controlling mechanisms to reduce noise pollution:

> [...] We have generators and boilers. We regularly test the air emission and noise level of these components to make sure we are under the legal limit of emission. We rectify the limit through control devices if air emissions and noise levels cross the legal limit.

Similarly, the manager T1-S1 further explained the underlying reason for the regular monitoring of different emission levels:

> We have an environmental policy which is based on the environmental law of Bangladesh 1997. Since we are required to obtain an environmental clearance certificate after a certain period, we regularly test our water emission, air emission and sound emission levels and try to keep these [emissions] within the permissible levels as per law.

The above manager's comment demonstrates that as per government environmental law as well as organisational environmental policy and strategy, first-tier apparel suppliers undertake specific environmental actions to monitor, measure and reduce different types of pollution emissions. As such, beyond the economic and environmental advantages, first-tier suppliers achieve legitimacy from the regulators and other institutional forces through embedding ecological initiatives (Preuss, 2001; Tate et al., 2010). Furthermore, the manager T1-S3 pointed out some environmental initiatives to balance ecological footprints:

> Our company has integrated certain strategies to reduce its operational impact on the environment with the purpose of minimising our ecological footprint. Since the year 2000, we have planted around 2 million trees and created 17 reservoirs that conserve approximately 360 million gallons of rain water.

The above participant's view is in accordance with the findings of an earlier empirical study, which found that green international firms achieve carbon neutrality through some distinctive initiatives: minimising emissions from the production process, and planting new trees and generating renewable resources (Caniato et al., 2012).

Despite the greater explicit participation of several first-tier suppliers in pollution emission reduction initiatives, the majority of participants amongst second-tier and third-tier suppliers were either silent or discussed their limited initiatives and actions to minimise environmental impacts concerning pollution emissions. For example, the manager T2-S2 justified it this way: "We only assess our factory generators via a third-party engineering firm every year to monitor and control the noise emission level as per law."

Interestingly, with reference to the second thematic code, namely *waste management and recycling*, the implementation of environmental practices and initiatives such as waste water treatment, refining used chemicals, and recycling solid waste was relatively visible at the second-tier supplier level. A few (6 out of 16) participants from second-tier suppliers mentioned their specific waste management and recycling initiatives, which were playing a vital role in the implementation of environmental supply chain sustainability practices. For example, the director T2-S8-2 stated:

> We systematically manage our factory wastage. We store different waste types separately. For example, we keep used electric lights in one place and fabric waste in another place. We keep medical waste and chemicals in a designated area so that they do not contaminate each other. We have some agreements with third-party waste collectors who collect these every 6 months for disposal. Third-party fabric contractors use cotton fibres for making colourful beds or mattresses.

Likewise, another manager T2-S4 supported the above manager's view through highlighting their own waste water treatment and reusing practices:

> As a washing factory we produce a huge amount of waste water. We have an approved ETP [Effluent Treatment Plant] which properly treats waste water. We are required to obtain an environmental certificate from the government...so we segregate all waste water and then keep that water in chemical drums for six months before draining them. Otherwise, immediate discharge of waste water can pollute the environment...Now we are focusing on reuse of treated waste water for car washing

> and toilets. We are aware that Bangladesh is facing enormous challenges due to climate change.

Furthermore, a reasonable number of owners and managers (10 out of 23) from first-tier suppliers indicated a variety of environmental strategies and initiatives to manage and recycle organisational liquid and solid waste. For instance, the manager T1-S4-2 pointed out a few specific recycling and waste management strategies:

> Our company is always committed to environmental responsibility. Protecting the environment from the harmful by-products of our factories' operations encouraged the sustainability team to start a number of initiatives that not only save resources but are also cost effective for the company. The main focus is to follow GRI (Global Reporting Initiative) guidelines and incorporate the 3 R's – Reduce, Reuse and Recycle – into all initiatives. Some of the initiatives include re-using treated water, harvesting rain water, reusing utility water, recovering heat and recycling organic waste.

It is clear from the above manager's view that top-level management show their dedication to complying with GRI guidelines concerning environmental protection to improve their environmental sustainability outcomes. GRI guidelines are one of the recognised frameworks for evaluating and reporting firm environmental sustainability (Caniato et al., 2012; Sureeyatanapas et al., 2015). Following GRI guidelines, the above participant also highlighted some examples of re-use, recycling and waste management, which also appeared in the same apparel supplier's (T1-S4) recent annual sustainability reports in the following way:

> Treated waste water from the ETP is re-used for daily toilet flushing by 9000 workers in the premises, saving almost 100 million litres of underground water per year. Also, exhaust from the 5 MW gas generator is re-used for cooling purposes, saving substantial energy and reducing carbon emissions at the same time. 30 tons of organic compost fertiliser is produced monthly. Leftovers from employees' lunches along with kitchen waste from the surrounding area, cotton dust from the spinning mill, cow dung, water hyacinths and other natural ingredients are used to make the fertiliser.

The above findings are consistent with prior research by Ageron et al. (2012) who argued that waste reduction and savings from packaging were addressed as major environmental issues for greening upstream supply chains. Similarly, the manager T1-S5-2 supported the above argument, emphasising the need for systematic collection, segregation, and recycling of non-hazardous materials and hazardous materials:

> We have three environment-friendly certified ETPs. We only discharge treated water which is not harmful to the local rivers and environment. We also reuse some water for washing and toilets...We keep a record of all types of our factory waste for recycling purposes. These types of waste include non-hazardous materials such as cutting and sewing jhut [apparel waste], tape, elastic, care labels, hangtags, cartons as well as hazardous materials such as used chemicals, lights, and batteries in the waste inventory sheet. We basically collect all types of waste from production floors and segregate these into our waste store. We then hand over the waste to the approved waste contractor who is responsible for recycling.

In accordance with the above findings from the manager's view, the supply chain management literature acknowledges a variety of waste management and recycling strategies and initiatives including waste storage and segregation, treatment of discharge water, product and process redesign, repair, the use of recycled parts and organic materials, and limited and returnable sustainable packaging (Caniato et al., 2012; Rinaldi & Testa, 2017; Zailani et al., 2012). For instance, in the context of fashion supply chains, Caniato et al. (2012) found that global clothing firms are emphasising environmental sustainability practices and performance issues, particularly recyclable materials in the product design, using them for manufacturing and packaging, and paying attention to waste management. As such, environmental supply chain management practices are the best ways to achieve better supply chain performance outcomes including reducing environmental deterioration, air emissions, water waste, and solid waste, as well as decreasing the use of hazardous materials (Geng et al., 2017; Zailani et al., 2012).

6.4.3 Green Factory Projects and Certification

The final sub-theme under environmental sustainability practices and outcomes was *green factory projects and certification.* The findings suggested that supply factories were complying with certified green building projects and adopting environmental management systems that facilitated managing the negative impact of their activities on the environment. Two thematic codes emerged under this key theme: *green factory projects*, and *environmental standards and certification*. Some activities such as designing buildings with low carbon dioxide emissions, use of local material for construction, use of recyclable content in construction materials, and sustainable factory sites were emphasised by a number of participants as being important aspects of the *green factory projects* theme. As the sample

evidence shows in Table 6.4, several managers (13 out of 23) indicated that only first-tier suppliers were keen to promote green factory projects as they involved huge financial investment as well as considerable commitment by owners and factory management. For example, the manager T1-S4-2 stated:

> We have a sustainability policy. Among our three green projects, we completed two LEED [Leadership in Energy and Environmental Design]-certified gold category green factories. We are also working on another green factory which would be in the platinum category. In all cases, our factory management selected sustainable factory sites and covered all criteria to become LEED-certified green factories from land development to final construction. The green landscaping embedded in the architecture along with the use of natural light and the air being recycled continuously creates a serene environment of creativity and encourages optimum efficiency.

Similarly, the manager T1-S8-1 supported the above view in this way:

> Our factory is a LEED-certified platinum green factory [One of the top three green factories in the world based on LEED scores]. We have carefully chosen a sustainable location with all essential facilities and amenities. We used Forest Stewardship Council (FSC)-certified wood, paints and local materials for building construction to minimise the environmental impact resulting from transportation as well as to support the local community. Around 20% of the materials utilised for construction have been recycled.

The above finding is in accordance with previous research, which argued that green factories gain recognition for their environmental responsibility in the early stages of the production process and facility design such as buildings with low carbon dioxide emissions, low impact construction techniques and resource reduction (Tate et al., 2010).

Furthermore, some participants pointed out the economic and environmental benefits of building green factories. For example, the manager T1-S6-3 commented: "…A green factory increases profits and reduces costs through minimising energy use including electricity, gas, and water consumption". It is clear that through perceiving environmental and financial benefits, many business owners of first-tier suppliers have a tendency towards the development of green factories. Moreover, competition amongst first-tier suppliers is another reason behind the growing interest for establishing green factory projects, which has been discussed in Chapter 5 (see section 5.3).

Interestingly, the findings further revealed that beyond economic and environmental sustainability outcomes, environmental practices in terms of implementing LEED-certified green factories also offered social sustainability outcomes. In particular, most LEED-certified buildings have two storeys, which ensures greater workplace safety for factory workers during fires and earthquakes. Furthermore, green factories provide better health and hygiene working conditions for the workers since the outdoor air quality is very good due to reduction of harmful greenhouse gas emissions. Following this, a similar view was expressed in interviews with the DA expert:

> A certified green factory generates a range of benefits…increased return, reduced operating cost, decreased staff health costs, tax and loan facilities, sustainable

> financing [Economic]… peace of mind relating to workplace safety, reduced absenteeism and staff turnover, and improved health and hygiene [Social]…reduced carbon emissions and use of energy, water and materials, addressing the consequences of global warming such as floods/cyclones, temperature change… [Environmental].

The above participant's view supports the findings of a previous study which claimed that the TBL concept has been put into practice due to the emergence and growing popularity of USGBC LEED-certified green factory projects (Wu & Pagell, 2011). In a similar vein, Tate et al. (2010) and Caniato et al. (2012) argued that large global firms with green-certified LEED buildings improve supply chain sustainability performance in terms of saving energy and water consumption alongside reducing costs through waste elimination.

Environmental standards and certification was another thematic code under green factory projects and certifications. Some certifications, standards and awards such as ISO 14001, EMS, organic cotton, GOTS, Sedex, WRAP, Higg Index (assessing environmental sustainability performance) and Oeko-Tex standard 100 were highlighted by a number of participants as being vital aspects of supplier environmental sustainability. For example, the manager T1-S4-2 pointed out a few accreditations and memberships:

> We are a proud member of the UN Global Compact network and follow its ten principles. We have several certifications such as Organic Cotton, Cotton USA, Sedex, WRAP, and Oeko-Tex standard. Also we have received awards from different local and global reputable organisations, for example, 'Social and Environmental Excellence Award 2012', and 'Sustainability Award 2012'. These awards highlight

> the exceptional performance reputation of our company in driving environmental sustainability and social responsibility.

Likewise, the manager T1-S3 supported the above manager's view through highlighting their own company's commitment to implementing ISO 14001 principles and commented:

> We have ISO 14001 certification. We are proactively committed to implementing an EMS locally and globally. We have already projected our production for 2018 and 2019. Accordingly we forecasted our target for energy and water reduction and other parameters. Our company is solvent. We don't have financial pressure to implement this [EMS].

It is clear from the above managers' views that first-tier suppliers with strong financial resources are proactively complying with a variety of environmental standards and certifications to improve their supply chain's environmental outcomes. Several participants also indicated that the majority of first-tier suppliers were adopting EMS since buyers considered this a key environmental sustainability tool. This finding is consistent with the findings of prior research which argued that EMS is perceived as the most important selection requirement for improving environmental performance (Xu et al., 2013). The key focus of the EMS is to establish a logical process by which firms identify and manage environmental practices to achieve better environmental outcomes (Steger, 2000). The environmental outcomes in the supply chain include reducing supply firms' energy consumption and material usage, waste management, recycling and improving reputation (Baskaran et al., 2012; Gimenez & Sierra, 2013; Miemczyk et al., 2012). Furthermore, in accordance with the findings from the interviews, prior research identified further evidence of environmental

certifications of suppliers in fashion supply chains such as organic cotton, GOTS, WRAP, Oeko-Tex standard 100 and Higg Index (Caniato et al., 2012; Turker & Altuntas, 2014; Winter & Lasch, 2016). Thus, the adoption of green factory projects and environmental certifications was growing amongst upstream first-tier apparel suppliers in GSCs.

To sum up, the overall findings suggested that three sub-themes were identified from the perspectives of owners and managers of first-tier suppliers whereas participants from second-tier suppliers discussed two sub-themes under environmental supply chain sustainability practices and outcomes (see also Table 6.3). However, the reported findings suggested that third-tier suppliers were not adopting any environmental sustainability practices across the supply chain. Furthermore, in connection with environmental supply chain sustainability practices, several SSM outcomes were identified by the participants. These overall SSM outcomes included *minimal energy and water consumption*, *reduction of costs and other economic benefits*, *improvement of human health and safety*, *recognition and better reputation*, *reduction of absenteeism and staff turnover*, *improved peace of mind*, *reduced potential environmental impacts (such as global warming and floods)*, *carbon neutrality*, *attracting more business opportunities*, and *legitimacy from regulators and other institutional actors*. As previously discussed, Figure 6.2 below summarises the implementation of environmental sustainability supply chain practices and its linkage with SSM outcomes.

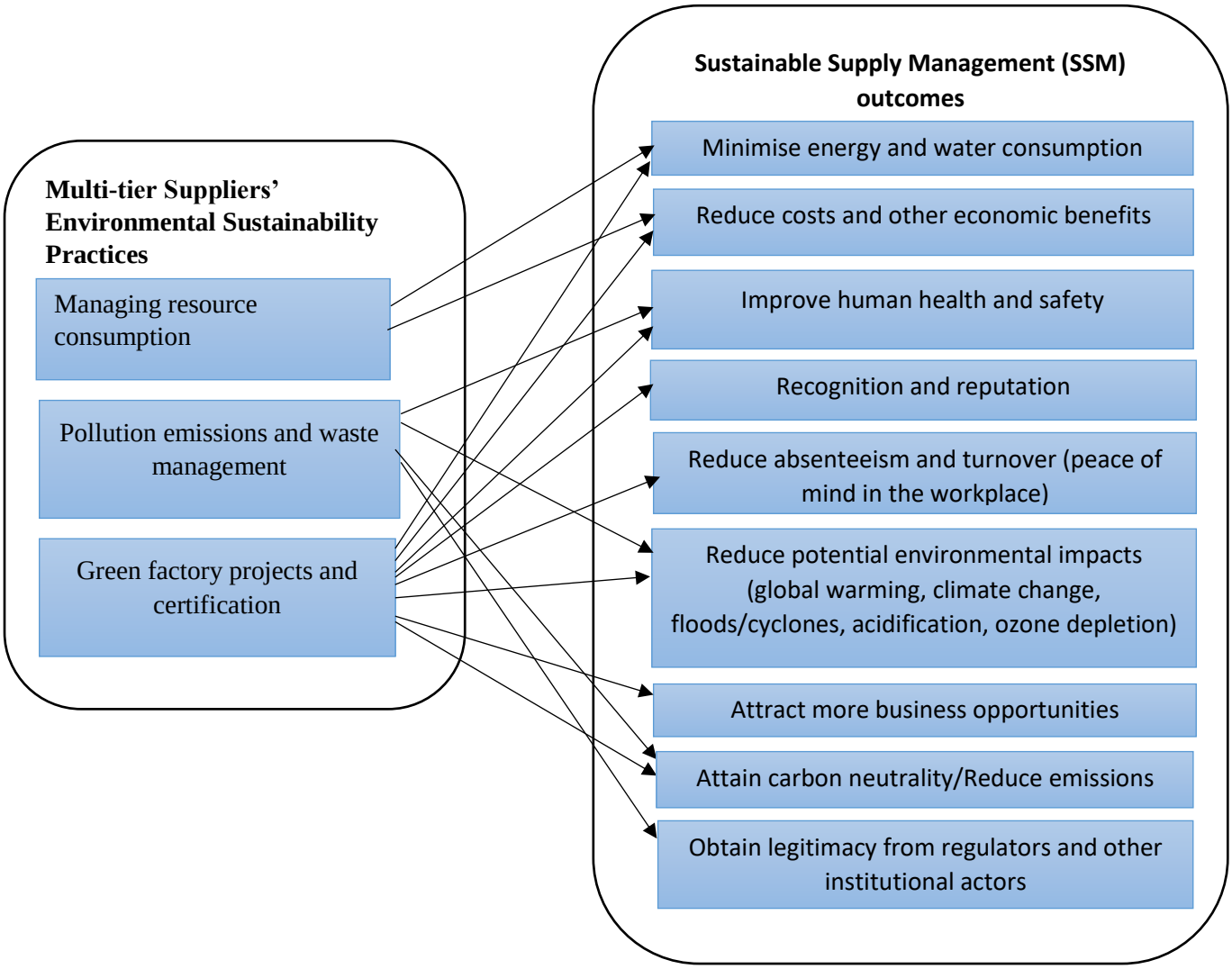


Figure 6.2 Summary of multi-tier apparel suppliers' environmental sustainability practices and their links with SSM outcomes (constructed based on empirical findings of this current study)

6.5 Conclusion

This chapter has examined how multi-tier apparel suppliers address social and environmental sustainability issues to improve SSM outcomes in GSCs. The findings showed that multi-tier apparel suppliers implemented a variety of social and environmental supply chain sustainability initiatives and practices. While the level of implementation of such social and environmental practices is relatively high within first-tier supplier firms (adopting social practices and promoting environmental practices), second-tier suppliers adopted several social practices but symbolically implemented environmental practices on an ad hoc basis. Conversely, the majority of third-tier suppliers did not implement either social (a few exceptions) or environmental supply chain practices. The drivers, barriers and institutional logics behind this fragmented implementation of social and environmental practices across multi-tier suppliers have been demonstrated in Chapters 4 and 5. Therefore, one of the key findings discussed in this chapter is that the implementation of social and environmental sustainability practices differs depending on context-dependent institutional factors such as firm-specific assets including supplier firm size and financial resources, types of industrial supply tiers, suppliers' location, regulations, capability and SSM knowledge of owners and top-level factory management.

Furthermore, multi-tier suppliers adopted numerous social practices that enabled them to enhance economic and social outcomes. Moreover, several multi-tier apparel suppliers adopted various environmental practices that helped to enhance TBL outcomes, specifically economic, environmental, and social outcomes. As such, one of the significant findings of this chapter is that beyond economic and environmental sustainability outcomes, environmental practices were perceived to improve social sustainability outcomes.

CHAPTER 7

Discussion

7.1 Introduction

This chapter incorporates the findings from the preceding three chapters and develops links with the theoretical framework proposed in Chapter 3. The objective of the chapter is to discuss and reflect on the empirical findings of the study in relation to the research questions, research approach, literature, and theoretical perspectives. In particular, following an abductive approach, integrative stakeholder theory, institutional theory and contingency theory conceptually guide the analytical iteration processes between theory and data. Accordingly, a series of propositions are suggested in parallel with the theories, findings and critical discussion. The key findings regarding the different SSM implementation thematic areas are then transformed into a holistic SSM framework, which contributes to SSM theory in the context of a developing country's multi-tier suppliers.

The remainder of the chapter is organised as follows. It begins with an overview of SSM implementation drivers and barriers with regard to integrative stakeholder theory, institutional theory and contingency theory. The second section elucidates the influence of institutional pressures, decoupling and logics of institutional theory on multi-tier apparel suppliers' SSM implementation. The third section describes how multi-tier suppliers integrate social and environmental practices to improve SSM outcomes in GSCs. The application by multi-tier suppliers of these SSM practices is then critically analysed with reference to contingency theory. The final section presents a holistic theoretical framework developed from the findings of the previous sections.

7.2 Drivers for and Barriers to SSM Implementation

The drivers for and barriers to implementing SSM practices amongst multi-tier apparel suppliers were examined in Chapter 4. Integrative stakeholder theory has been predominantly used to explain the drivers and barriers of SSM implementation. However, based on the fieldwork evidence presented in Chapter 4, it is also clear that the perspectives offered by institutional theory and contingency theory are useful to develop a rich understanding of the factors that drive or impede multi-tier apparel suppliers' embedding of SSM practices. Accordingly, this section summarises the interpretation of the empirical data and explores how these three theoretical perspectives are compatible with the findings of this study.

7.2.1 Drivers for SSM Implementation

Based on the reported findings of this study (see Chapter 4), the internal and external drivers have been recognised on the basis of descriptive, instrumental and normative aspects of integrative stakeholder theory. Previous studies suggest that both conceptual and empirical research often draw on these three aspects of integrative stakeholder theory while investigating the internal and external drivers of SSM implementation (Hoejmose & Adrien-Kirby, 2012; Hörisch et al., 2014; Huq et al., 2016; Klassen & Vereecke, 2012; Sajjad et al., 2015; Schneider & Wallenburg, 2012).

Accordingly, the findings suggest clear evidence that most multi-tier apparel suppliers in the sample embrace SSM implementation based on the argument of instrumental stakeholder theory (see Chapter 3). In terms of both internal and external drivers, the findings of this study indicated several sub-themes – *increased factory production, cost reduction and*

improved price, risk and resource management, and *external opportunities for loans and tax incentives* – as instrumental drivers. These findings support previous studies, which suggest that improved factory productivity (Huq et al., 2014; Perry et al., 2015), reducing total costs and efficient resource management (Chkanikova & Mont, 2015; Giunipero et al., 2012; Nidumolu et al., 2009), risk management (Ageron et al., 2012; Roehrich et al., 2014; Sajjad et al., 2015), and government incentives (Giunipero et al., 2012) are critical instrumental factors that drive companies to implement SSM practices. However, participants of this present study across different tiers of apparel suppliers expressed their varied perceptions of the importance of internal instrumental driving factors that propel them to adopt SSM practices. For example, while owners and managers of first-tier suppliers mentioned *increased factory productivity* as the key dominant internal instrumental driver for adopting SSM practices, participants from second-tier and third-tier suppliers perceived *risk and resource management* as the most important internal instrumental driver. Thus, the findings of this study clearly support the instrumental aspects of integrative stakeholder theory by suggesting that most owners and managers across multi-tier apparel suppliers take into account stakeholders' SSM interests in "the achievement of corporate objectives" (Hörisch et al., 2014, p. 330).

Interestingly, despite prior evidence in the literature (Ageron et al., 2012; Grimm et al., 2016; Hofmann et al., 2018), the majority of participants in this study except for first-tier suppliers' factory management did not report normative drivers such as *top management values, learning and commitment* as central to SSM implementation. Rather the commitment and values of top management were perceived in the reported findings as less-cited drivers for SSM implementation (only 4 and 2 times by second-tier and third-tier suppliers respectively). However, during interviews, a significant number of participants from first-tier suppliers

revealed the opposite viewpoint. This is because most participants from first-tier suppliers perceived owners' ethical values and commitment, the involvement of the top-level factory management and most notably, education and experience of second-generation owners and managers as encouraging them to operate their businesses ethically and responsibly. These findings are consistent with the previous studies (Ageron et al., 2012; Giunipero et al., 2012; Huq et al., 2014; Sajjad et al., 2015) which indicated that sustainability values of top management and their personal commitment, educational background and experience drive suppliers to adopt SSM practices. Thus, these findings are in accordance with the normative assumptions of integrative stakeholder theory that provide the moral justifications for why top-level factory management should take into account stakeholder interests (Donaldson & Preston, 1995; Hörisch et al., 2014).

Furthermore, the findings of this study clearly support the significance of descriptive aspects of stakeholder theory by indicating how organisations are identifying pertinent external stakeholders and mutually managing their expectations and competitive interests regarding sustainability issues (Donaldson & Preston, 1995; Hoejmose & Adrien-Kirby, 2012; Hörisch et al., 2014). As shown in Table 4.1 (Chapter 4), the findings indicated that most owners and managers of multi-tier suppliers integrated SSM practices in apparel supply chains to meet their *buyers' and others external stakeholders' requirements*. In particular, the requirements and expectations of external stakeholders including government, supranational organisations, media, NGOs, buyers and consumers were reported by the respondents as external drivers of SSM. These findings are in accordance with prior supply chain sustainability research (Hoejmose & Adrien-Kirby, 2012; Sajjad et al., 2015; Schneider & Wallenburg, 2012). For example, Sajjad et al. (2015) found in their qualitative study of the SSCM context that large companies experience expectations and pressures from different external stakeholders such as

customers, the community, media and NGOs as driving forces for implementing sustainability practices. Interestingly, in line with previous studies (Acosta et al., 2014; Tachizawa & Wong, 2014), it can be argued that these findings point to a connection between stakeholder theory and institutional theory. Similarly, Pagell and Shevchenko (2014) strongly argue that "the planet's ability to provide some natural resources is running out at the same time that many stakeholders are demanding action on a range of issues from climate change to working conditions in supplier factories in developing countries" (p. 45). However, the findings of this study also revealed that second-tier and third-tier apparel suppliers experienced fewer requirements and expectations from external stakeholders. This finding supports the previous finding of a study by Huq et al. (2014), which reported that external stakeholders such as government and NGOs play a lesser role in stimulating developing country suppliers to embed SSM practices. From these discussions, the following propositions can be made:

Proposition 1a: Bangladeshi multi-tier apparel suppliers experienced a wide range of internal and external driving factors that encourage their efforts towards SSM implementation in GSCs.

Proposition 1b: While first-tier apparel suppliers perceived internal and external driving factors as influencing SSM implementation, the presence of external driving factors at second-tier and third-tier apparel supplier level is either weak or invisible.

7.2.2 Barriers to SSM Implementation

Moving on to the internal barriers to SSM implementation, two key themes – *cost and resource concerns* and *gaps in values, learning and commitment* – in relation to both

instrumental and normative aspects of stakeholder theory were identified in the reported findings. With regard to internal barriers, the findings revealed that *cost and resource concerns*, particularly fixed investments for sustainability improvements and increased production-related costs were the most significant internal barrier preventing multi-tier apparel suppliers from implementing SSM practices. While first-tier suppliers have the capacity to invest in health and safety improvements, the majority of second-tier and third-tier suppliers find it difficult to integrate these improvements due to resource constraints. These findings are consistent with previous research which found that initial supplier investment (Giunipero et al., 2012), higher financial costs (Ageron et al., 2012; Chkanikova & Mont, 2015), and resource constraints of small firms (Hervani et al., 2005; Jenkins, 2006; Oelze et al., 2016) were the most cited internal barriers to implementing SSM practices. However, procedural justice, particularly global buying firms' economic and non-economic support of suppliers can facilitate the successful implementation of SSM practices (Boyd et al., 2007).

Furthermore, except for several first-tier suppliers, most owners and managers of multi-tier suppliers perceive the expenses for improving health and safety in the workplace as costs, not investments. As such, internal barriers such as *resource concerns, lack of commitment* and *negative attitudes* dominate the thinking of the majority of managers and owners of multi-tier suppliers regarding adoption of SSM practices. This finding is also supported by the prior research, which found that financial concerns are influential disincentives amongst suppliers along the multi-tier supply chains (Sayed et al., 2017). Likewise, managerial attitudes concerning economic uncertainty as opposed to social or environmental sustainability value negatively influence the implementation of SSM practices (Giunipero et al., 2012; Sajjad et al., 2015). In this sense, normative factors such as *gaps in values, learning and commitment*

of top management intensify internal difficulties regarding the implementation of SSM practices.

However, in line with previous research (Andersen & Skjoett-Larsen, 2009; Furlan Matos Alves et al., 2017; Walker & Jones, 2012; Wilhelm et al., 2016), the findings also highlighted that multi-tier apparel suppliers' adoption of SSM practices is determined by context-dependent internal factors such as company history, size of the company, the structure of its GSC, financial resources, reputation and knowledge resources. Following this, Grimm et al. (2014) asserted the relevance of contingencies such as (lack of) financial resources, personnel commitment, competencies and skills when investigating the critical factors for sub-supplier management within multi-tier food supply chains. As such, these findings concerning internal barriers clearly support the significance of contingency theory (Lawrence & Lorsch, 1967), which "suggests no single organisational structure is inherently more efficient than all others" (Walker & Jones, 2012, p. 16).

Moving on to the discussion of external barriers to SSM implementation, the findings of this study reported three major barriers as a result of having *gaps in regulatory framework*, *complexity involved in sustainability standards*, and *power and trust gaps between actors*. In particular, the findings suggested that inadequate enforcement and corruption of regulators were the major challenges to implementing sustainability practices. The findings further revealed that global buyers were often unable to assess the sustainability activities of every tier of upstream suppliers due to the complexity involved in supply chains. There was even a lack of consistency in assessing sustainability standards by both buyers and their direct first-tier suppliers. These findings are in agreement with the findings of previous studies, which suggested that uneven enforcement of laws as well as lack of industry-wide consistent

sustainability standards create an obstacle to implementing sustainability practices amongst suppliers (Giunipero et al., 2012; Hamilton-Hart & Stringer, 2016; Hofmann et al., 2018; Huq et al., 2014; Lund-Thomsen & Lindgreen, 2014; Silvestre, 2015b; Soundararajan et al., 2018). As such, the findings clearly support some basic assumptions of institutional theory. For example, Busse et al. (2016) and Huq et al. (2016) argue that the institutionalisation of apparel supplier firms in Bangladesh is lacking due to institutional uncertainty and complexity (laws that are enforced unevenly). In a similar vein, scholars have argued that the effective implementation of sustainability practices across multi-tier supply chains is dependent on several contingency factors including assessment complexity in lower-tier sustainability management (Meinlschmidt et al., 2018; Wilhelm et al., 2016) and cultural distance and regulatory differences (Meinlschmidt et al., 2018) and the sustainability management capabilities of buyers and suppliers (Wilhelm et al., 2016). Therefore, it can be argued that some reported findings show an overlap between the fundamental assumptions of institutional theory and contingency theory in the implementation of SSM.

As the evidence showed in Chapter 4, the majority of managers and owners of the first-tier suppliers faced more external barriers such as *trust and power gaps between actors* than internal barriers such as *cost and resource concerns*. In contrast, owners and managers of second-tier suppliers and third-tier suppliers encountered more internal barriers such as *cost and resource concerns*, and *gaps in moral values, learning and commitment* than external barriers such as the *complexity involved in sustainability standards*. From these discussions, the following propositions can be made:

Proposition 2a: Bangladeshi multi-tier apparel suppliers experience a wide range of internal and external contextual barriers that hinder them from effectively implementing SSM practices.

Proposition 2b: While first-tier apparel suppliers perceive more external barriers than internal barriers during the SSM implementation process, second-tier and third-tier apparel suppliers experience more internal barriers than external barriers.

7.3 Implementation Mechanisms for Embedding SSM Practices

Chapter 5 investigated how institutional pressures and mechanisms affect the implementation of SSM practices across multi-tier apparel suppliers, and why these suppliers decouple formal SSM implementation practices. Institutional theory was used to explain the institutional pressures and mechanisms (see section 5.3), decoupling (see section 5.4) and institutional logics (see section 5.5) influencing the SSM implementation at three different tiers of the apparel suppliers. Furthermore, it has been found that the perspective offered by contingency theory is useful to develop a rich understanding in some overlapping areas of institutional decoupling and logics. Accordingly, this section summarises the interpretation of the empirical data and explores how institutional theory and contingency theory are compatible with the findings of this study.

7.3.1 Institutional Pressures and Mechanisms

The findings suggested that institutional pressures and mechanisms – coercive, mimetic and normative – were varied across upstream multi-suppliers, thereby affecting their divergent implementation of SSM practices. As shown in Table 5.2 (see Chapter 5), the first group of institutional pressures and mechanisms was ‘coercive pressures and mechanisms’. In terms of

coercive pressures, selection and assessment of buyers and third parties in the form of direct visits, supplier audits and certification were the strong governance mechanisms that had an impact on multi-tier suppliers' implementation of sustainability practices. This finding supports the findings of a significant body of research (Grimm et al., 2016; Huq et al., 2014; Sayed et al., 2017; Soundararajan & Brown, 2016; Wu et al., 2012), which found that coercive pressures on suppliers mainly stem from powerful buyers' specific codes of conduct as selection and assessment requirements to obtain production orders. For example, in their study on two buyers – Hewlett-Packard (an Information Technology company) and Migros (a Swiss retailer) – Grimm et al. (2016) argued that first-tier suppliers and their sub-suppliers' sustainability practices are assessed against buyers' codes of conduct through on-site visits and sub-suppliers' self-assessments. In addition, the findings of previous studies indicated that auditors from certification bodies and third parties regularly assess social and environmental compliance practices of first-tier suppliers to improve suppliers' SSM practices (Ciliberti et al., 2009; Huq et al., 2016; Kauppi & Hannibal, 2017). Thus, both direct (buyers' selection and assessment) and indirect (third-party assessment) governance pressures were used to drive implementation of SSM practices by multi-tier suppliers.

Interestingly, the findings of this study also suggested strong governmental pressures on first- and second-tier suppliers (with some exceptions). This finding is partly in contrast with some previous studies, which found that legal obligations have less influence on implementation of sustainability practices by developing country sub-suppliers (Haque & Azmat, 2015; Huq et al., 2014; Soundararajan et al., 2018). However, in line with some other prior research (Esfahbodi et al., 2017; Lim & Phillips, 2008; Wu et al., 2012; Zhu & Sarkis, 2007), the findings indicated that a significant number of owners and managers from first-tier and second-tier suppliers perceived legal obligations from the government agencies as a coercive

pressure to adopt SSM implementation practices. These consistent legal pressures on direct suppliers may be driven by ever-increasing expectations of the government from industry-based multiple stakeholder consortia such as the Accord and the Alliance after the 2013 Rana Plaza tragedy in Bangladesh (Campaign, 2018; de los Reyes Jr et al., 2017). Such a unique collective industry-based model may be effective in the socio-economic context of Bangladesh (Reinecke & Donaghey, 2015) where the government is increasingly highly dependent on apparel exports, which comprised approximately 84% of national exports in 2017/2018 (BGMEA, 2018). The findings of this study also suggested that government agencies and apparel industry associations played a facilitating role between buyers and suppliers through monitoring the safety improvement process under the Accord. This finding is line with earlier studies (Islam & Deegan, 2008; de los Reyes Jr et al., 2017; Lund-Thomsen & Nadvi, 2010; Park-Poaps & Rees, 2010), which suggested that industry associations play an important role in implementation of sustainability practices. For example, Lund-Thomsen and Nadvi (2010) found government, international regulatory frameworks, and buyers' and industry associations were dominant collective forces influencing highly visible suppliers' sustainability practices. From these discussions, the following proposition can be formed:

Proposition 3: Collective coercive pressures by means of supplier selection and assessment mechanisms from institutional actors such as buyers, third-party auditors, industry-based consortium platforms, and government agencies increase the tendency of Bangladeshi first-tier and second-tier apparel suppliers' responses to align, hence leading to SSM implementation.

With regard to coercive pressures on third-tier suppliers, owners and managers indicated two key findings that have an impact on their decisions to implement SSM practices. First, these participants did not perceive any coercive pressures from government agencies and other non-supply chain actors such as NGOs, media, and trade unions. This finding is consistent with prior research, which argued that lower-tier suppliers tend to experience fewer sustainability pressures from wider external stakeholders (Awasthi et al., 2018; Lee, Plambeck, & Yatsko, 2012; Meinlschmidt et al., 2018; Tachizawa & Wong, 2014). This is because lower-tier suppliers are mostly small and medium suppliers (Lee et al., 2012; Tachizawa & Wong, 2014), whose sustainability activities are invisible to the buyers (Meinlschmidt et al., 2018) and are often neglected by wider stakeholders (Schneider & Wallenburg, 2012). Second, only coercive pressures from first-tier and second-tier suppliers have an impact on third-tier suppliers' adoption of sustainability practices. In line with this finding, Wilhelm et al. (2016) argued that first-tier suppliers play a facilitating role between buyers and their immediate sub-suppliers in monitoring the implementation of sustainability practices along the supply chains. From these discussions, the following proposition can be formed:

Proposition 4: Only coercive pressures by means of supplier selection and assessment mechanisms from buyers' nominated direct suppliers increase the tendency of Bangladeshi third-tier apparel suppliers' responses to align, hence leading to diffusion of SSM implementation.

The second group of reported institutional pressures and mechanisms was 'normative pressures and mechanisms'. The findings of this study revealed that normative pressures and mechanisms for adopting SSM practices were coming from diverse sustainability-related

awareness training sessions, workshops and capacity-building projects in *collaboration with other external stakeholders* such as government, donor agencies, supranational organisations, NGOs and consortium platforms like the Accord. This finding is consistent with prior studies (de los Reyes Jr et al., 2017; Lund-Thomsen & Nadvi, 2010; Reinecke & Donaghey, 2015), which found that multiple stakeholder collaboration for extensive worker awareness-raising training in the apparel sector acts as a normative force to develop sustainability standards. For example, collaboration among BGMEA, ILO and UNICEF helped to monitor the implementation of first-tier suppliers' social sustainability practices, particularly the elimination of child labour from the apparel sector (Lund-Thomsen & Nadvi, 2010; Nielsen, 2005). In their recent study, de los Reyes Jr et al. (2017) also argued that the Accord, as a newly emerging normative pressure source, usually has robust grounds for demanding lawfulness alongside informational benefits that connect together various stakeholders in the workplace safety improvement process. From the above findings and discussion, the following proposition can be made:

Proposition 5: Collaborative normative pressures from cross-sector institutional actors by means of supplier development-related awareness-raising training, education and learning increase the tendency of Bangladeshi first-tier apparel suppliers' responses to align, hence leading to SSM implementation.

As shown in Table 5.2 (see Chapter 5), the findings indicated that owners and managers of third-tier suppliers did not perceive any normative pressures from institutional actors such as NGOs, media, government agencies, and trade unions. Additionally, while the evidence shows the existence of several sustainability-related collaborative projects between second-tier suppliers and non-profit donor agencies, the normative pressure from NGOs and trade

unions is less noticeable at second-tier factory level. This finding is in line with a previous study by Soundararajan and Brown (2016). This situation raised questions about the effective implementation process because several participants from NGOs and donor-based agencies wondered about the continuation of their collaborative capacity-building projects at the lower-tier supplier levels, once their sustainability improvement-related projects finish. To tackle this contingent circumstance, several participants also argued the importance of formal and informal continuous support and financing of employee education and training initiatives. This finding supports the result of prior research, which indicated that contingency factors such as knowledge-enhancing mechanisms, particularly reflexive organisational learning and educational initiatives in the form of employee awareness-raising training, workshops and dialogue (Andersen & Skjoett-Larsen, 2009; Boström et al., 2015; Oelze et al., 2016) are required to ensure SSM governance amongst second-tier apparel suppliers. From these discussions, the following propositions can be formed:

Proposition 6a: The role of normative pressures influencing the Bangladeshi second-tier apparel suppliers' SSM implementation is likely to be limited.

Proposition 6b: Collaborative normative pressures from cross-sector institutional actors as well as suppliers' knowledge-enhancing mechanisms by means of reflexive awareness-raising training, education and learning increase the tendency of Bangladeshi second-tier apparel suppliers' responses to align, hence leading to SSM implementation.

The third group of institutional pressures was 'mimetic pressures and mechanisms'. As the evidence showed in Table 5.2 (Chapter 5), multi-tier apparel suppliers had a tendency to follow the sustainability norms of a peer supplier to effectively implement SSM practices. One of the key sources was peer competition to obtain buyers' production orders. This

finding is consistent with earlier studies, which found that competition for orders pressured suppliers to follow and implement the SSM practices of their rival firms (Ageron et al., 2012; Bondy et al., 2012; Hofmann et al., 2018; Park-Poaps & Rees, 2010). Interestingly, the findings also indicated that the majority of first-tier suppliers were participating in best-practice sharing groups and voluntary frameworks, particularly the United States Green Building Council (USGBC). This may be because financially solvent first-tier suppliers have the opportunity to obtain first-mover advantages through joining USGBC. This finding also supports the results of prior studies (Grob & Benn, 2014; Matten & Moon, 2008; Sancha et al., 2015; Zhu & Sarkis, 2007), which found that mimetic pressures and tendencies through voluntary frameworks, systems, and alliances are pressuring suppliers to embrace sustainable sourcing practices. For example, Sancha et al. (2015) argued that mimetic pressure is the only significant institutional pressure which effectively implements sustainable supplier development practices. From the above findings and discussion, the following propositions can be made:

Proposition 7a: Increased mimetic pressures resulting from similar competitors through joining a certified green factory council and following its best practices increase the tendency of Bangladeshi first-tier apparel suppliers' responses to align, thus leading to SSM implementation.

Proposition 7b: Increased mimetic pressure resulting from peer competition for obtaining production orders increases the tendency of Bangladeshi second-tier and third-tier apparel suppliers' responses to align, thus leading to SSM implementation.

7.3.2 Institutional Heterogeneity or Decoupling

In terms of decoupling, this study has examined how the implementation of multi-tier apparel suppliers' actual SSM practices differs in response to institutional pressures. As shown in Table 5.3, multi-tier apparel suppliers used different strategies, namely avoidance, defiance and manipulation, which increased their tendency to decouple SSM implementation practices.

The first type of decoupling strategy used by multi-tier apparel suppliers was 'avoidance'. At the first-tier supplier level, several managers indicated that first-tier suppliers and buyers mutually allowed workers to work excessive hours in the case of emergency shipments. This is consistent with prior studies by Soundararajan and Brown (2016) and Huq et al. (2014), which found that buyers and suppliers were engaged in mock compliance, mutually compromising the responsibility for maintaining codes of conduct. In their study, Wilhelm et al. (2016, p. 54) acknowledged this decoupling situation as a contingency factor where buying firms' low degree of internal alignment between sustainability and purchasing functions leads to "a detrimental effect on the information transparency" between the buying firms and their extended suppliers. In a similar vein, Locke et al. (2013) pointed out that buyers' poor functional alignment encourages the intentional violation of formal SSM practices such as last-minute order changes and supplier capacity overloading at supplier level. Thus, this situation reciprocally allowed both buyers and suppliers to hide problematic compliance findings (for example, excessive overtime at first-tier supplier T1-S2 in section 5.4) from the actual audits.

At the second-tier and third-tier supplier level, the findings revealed that the majority of owners and managers intentionally concealed serious violations including regularly using child and forced labour with fake documents, further sub-contracting buyers' orders to

unauthorised sub-contractors, and discharging chemical waste without proper treatment. These findings are in accordance with previous studies (Soundararajan & Brown, 2016; Soundararajan et al., 2018), which found the evidence of a complete breakdown of GSC governance practices at developing country sub-contracting supplier level. For example, Soundararajan et al. (2018) argued that small and medium suppliers often decouple ethically and socially responsible business practices through maintaining a second false set of records for auditing purposes. According to further reported findings, some second-tier suppliers informally engaged in production with unauthorised sub-contracting apparel firms because global buyers often did not bother to trace the sustainability activities of every tier of upstream suppliers. This finding is consistent with prior studies (Hofmann et al., 2018; Kim & Davis, 2016; New, 2015), which argued that in the case of 'opaque' supply chains, buyers often do not know about unauthorised third-tier suppliers and their regular engagement in forced labour during the production process. This decoupling situation can be explained through two contingency factors.

In the context of this study, the first key contingency factor is 'supply chain complexity' which requires a high level of coordination by the buying firms, therefore posing substantial challenges in managing sub-suppliers' (second-tier and beyond) sustainability implementation practices (Wilhelm et al., 2016, p. 202). Another factor is 'transparency', which refers to the situation where suppliers' non-compliance with social sustainability practices such as using child labour and excessive work hours are harder to detect than expected by the buying firms and even third-party auditors (Wilhelm et al., 2016, p. 202). By examining supply chain transparency outcomes of a Swedish garment retailer, Egels-Zandén et al. (2015, p. 101) also found a similar case where "managers either did or did not know the names of the suppliers (traceability) and whether or not audits had been conducted

(sustainability)". Previous research has described this situation as information and knowledge gaps (Boström et al., 2015; Pagell & Wu, 2009), which challenge the effective governance of sustainable GSCs. From these discussions, the following proposition can be formed:

Proposition 8: Changes in institutional pressures and context-specific complexity by means of avoiding serious violations – such as intentional mock compliance with avoiding excessive work hours and child labour, and maintaining duplicitous records for audit purposes – increase the tendency of Bangladeshi multi-tier apparel suppliers' responses to decouple, hence leading to limited or no SSM implementation.

The second type of decoupling strategy used by multi-tier apparel suppliers was 'defiance'. The findings revealed the existence of confrontations between multi-tier suppliers and the actors associated with institutional demands for SSM implementation. As the evidence showed in Table 5.3 (Chapter 5), some of the findings indicated suppliers' critical concerns about the problematic assessment practices of third-party auditors. This was because of auditors' lack of professionalism and their commercial insistence on providing a positive report in exchange for supplying electrical and fire safety products from their own recommended firms. This finding supports the findings of previous studies by Soundararajan and Brown (2016) and Egels-Zandén and Lindholm (2015), which argued that factory social audits executed by independent and third-party auditors are mostly based on flawed and superficial observations. Following this argument, in their recent meta-analysis of 17,000 global supplier audits, Short, Toffel, and Hugill (2016, p. 1878) have pointed out that "auditors report fewer violations when individual auditors have audited the factory before, when audit teams are less experienced or less trained…when audits are paid for by the audited supplier". Furthermore, Huq et al. (2014) also found confrontational relationships

between first-tier suppliers and auditors during the social sustainability improvement process. Thus, in the case of biased assessment, Boyd et al. (2007, p. 346) clearly noted that "high monitoring levels can reduce supplier autonomy, typically leading to buyer/supplier conflict".

Furthermore, the findings of this study facilitated a much deeper understanding of the decoupling of SSM implementation by drawing attention to the fact that not only auditors but also a range of other institutional actors such as trade union leaders, inspectors, media and even buyers played a counterproductive role in implementing upstream suppliers' SSM practices. For instance, trade union leaders were serving the interests of their politically affiliated organisations, and only defending the well-being of their member workers when their own benefits aligned. In line with this finding, prior research indicated that the activities of trade unions are highly politicised in the Bangladeshi apparel sector (Haque & Azmat, 2015; Khattak, Haworth, Stringer, & Benson-Rea, 2017). As such, trade union leaders were exploiting both workers and owners behind the scenes while showcasing workers' issues in public. This finding of two-faced behaviour contrasts with the previous study by Campbell (2007), which indicated that trade unions are recognised as one of the key catalysts for firms to behave in socially responsible ways. In addition, in line with the findings of this current study (Table 5.3, Chapter 5), Busse et al. (2016) argued that geographically distant suppliers in Bangladesh may decouple the formal implementation of sustainability practices such as poor labour practices due to institutional uncertainty (for example, different or weak enforcement of laws across and within countries). In a similar vein, Lund-Thomsen et al. (2016, p. 19) argued that lower-tier suppliers in a developing country have been considered "less visible global value chains" where social and environmental misconduct are extensive because of weak or non-existent institutional pressures and governance. Thus, context-

specific institutional differences matter when implementing sustainability practices in GSCs (Khattak et al., 2017). From these discussions, the following proposition can be formed:

Proposition 9: Changes in institutional pressures by means of defying the counterproductive behaviour of institutional actors – such as non-existence of transparent assessment and fair competition processes performed by auditors and buyers, inspectors' uneven legal enforcement, media and trade union leaders' opportunistic behaviour – increase the tendency of Bangladeshi multi-tier suppliers' responses to decouple, hence leading to limited or no SSM implementation.

The third kind of decoupling strategy used by multi-tier apparel suppliers was 'manipulation'. According to the findings, although most first-tier suppliers discussed the formal arrangement of workers' participation committees (WPC), several participants from second-tier suppliers indicated that they were applying WPC as a manipulative platform to control the behaviour of general workers. This finding resonates with the findings of a previous study by Soundararajan et al. (2018) who argued that small and medium sub-contracting suppliers influenced troublesome workers through accumulating autonomy and political strength. Furthermore, as the evidence showed in Table 5.3, the WPCs at third-tier supplier level were mostly made up of either family members of factory owners or falsely documented committees with no real activities at all. As such, ensuring workers' rights, particularly freedom of association and collective bargaining incorporated in the ILO's Core Convention is largely problematic and uneven in developing country apparel supply chains (Barrientos & Smith, 2007; Ruwanpura & Wrigley, 2011). From these discussions, the following proposition can be formed:

Proposition 10: Changes in institutional pressures by means of influencing the behaviour of workers through manipulated WPCs increase the tendency of Bangladeshi multi-tier apparel suppliers' responses to decouple, hence leading to limited or no SSM implementation.

7.3.3 Institutional logics

One of the major findings of this research was the additional empirical evidence related to the theoretical constructs surrounding institutional logics as introduced by Alford and Friedland (1985). Specifically, the findings suggested a multiplicity of logics (social, economic and environmental) across first-tier and second-tier apparel suppliers, which were conflicting or complementary. Both are a product of managerial decision making, which itself is contingent on the psychological framing of sustainability-related decisions (Haffar & Searcy, 2017). According to the findings of this study, the majority of participants indicated that economic logic, as an instrument for maximising profit, dominated the thinking of multi-tier suppliers towards the implementation of social and/or environmental sustainability practices. That means, while the economic, social and environmental logics were perceived to be in conflict, the economic logic overruled the social and environmental logics. This finding is consistent with a prior study by Glover et al., (2014), which found that financial logic (reducing cost and maximising profit) prevails at every tier of the dairy supply chain including suppliers. In their study on the UK public and private multi-tier food supply chains, Sayed et al. (2017) also claimed that only financial logic prevails at the supplier level during sustainability-related decisions. As the evidence showed in Table 5.4, some managers and owners of first-tier suppliers argued that implementing environmental sustainability practices was very expensive, even more so than social sustainability improvements. Similar conflicts between social sustainability (ensuring labour rights) and environmental protection (emission reductions) were also described by Holt and & Watson (2008) in the context of sustainable

sourcing decisions along the cut flower supply chains. This competing logic amongst suppliers may indicate difficulties in complementing sustainability practices (Sayed et al., 2017; Wijen, 2014) since a trade-off exists when addressing the adoption of standard practices in highly opaque GSCs (Wijen, 2014).

Nevertheless, the results indicated that several owners and managers of first-tier and second-tier suppliers viewed economic and environmental logics as complementary whilst others viewed economic and social logics as complementary. When these three logics were considered complementary, multi-tier suppliers were more likely to implement SSM practices along the supply chains. This finding is consistent with prior studies, which found that the management of social and environmental sustainability is considered a covert way of reducing costs, improving reputation and competitive advantage, hence leading to better long-term economic performance (Epstein, 2018; Klassen & Vereecke, 2012; Porter & Van der Linde, 1995; Vachon & Klassen, 2006, 2008). For example, Vachon and Klassen (2006) argued that green supply chain practices are well-matched with other efforts to incorporate partners throughout the supply chain network, indicating that economic and environmental goals complement each other. Similarly, Wu and Pagell (2011) showed how organisations make decisions to balance competing priorities between short-term economic goals and long-term environmental sustainability in their supply chain operations. Thus, the synergy amongst different institutional logics such as social, economic, and environmental logics reduces the willingness of multi-tier suppliers to decouple formal SSM practices.

Interestingly, only social and economic logics prevailed at the third-tier supplier level. In particular, social logic and economic logic were perceived to be in conflict, which immediately discouraged owners and managers of third-tier suppliers to fully align with social sustainability standards. Instead, third-tier suppliers focused on social practices on an

ad hoc basis as a result of having increased institutional pressures. However, if buyers want to ensure small suppliers' TBL performance, conflicts between economic and environmental sustainability logics may test the socioeconomic conditions of small suppliers by systematically excluding them from GSCs (Brandi, 2017). A similar argument has been made by Jamali, Karam, Yin, and Soundararajan (2017) through indicating that contradictory and conflicting institutional logics surrounding CSR are likely to be the reason for fragmented development outcomes in the developing world.

Additional findings suggested that the majority of third-tier suppliers faced financial barriers and mostly depended on local buyers' support to adopt environmental sustainability practices. This finding supports the result of an empirical study (Caniato et al., 2012) which suggested that the desire to guarantee the firm's economic security is perceived as stronger than environmental logic for small manufacturers. Following this argument, Andersen and Skjoett-Larsen (2009) claimed that firm-specific assets such as size of the firm and amount of resources influence the implementation of codes of conduct at the supplier levels. This argument points to an overlap between contingency theory and institutional theory in the implementation of SSM. Moreover, this discussion resonates with the similar finding of prior research by Soundararajan and Brown (2016, p. 83), who argued that the effective management of suppliers' SSM practices is contingent on "the presence of shared value that is often at odds with the realities of power, information asymmetry and compliance/reward systems inherent in the non-market coordination of global supply chains". In the context of Sri Lankan garment production networks, Ruwanpura and Wrigley (2011) also pointed out suppliers' contradictions regarding the uncertain distribution and returns from the costs of compliance that counter institutional pressures and governance mechanisms. In line with the reported findings in Table 5.4, unless buyers offer a higher price for production orders

(shared value) to Bangladeshi owners, suppliers are likely to engage in decoupling practices, that is, factory workers suffer from lower wages and poor safety conditions (Caro, Chintapalli, Rajaram, & Tang, 2018). In this regard, joint dependency (Hoejmose, Grosvold, & Millington, 2013) and business partner support (Grimm et al., 2016) play a vital role in successful implementation of multi-tier suppliers' SSM practices. From these discussions, the following propositions can be formed:

Proposition 11a: Where the social, environmental and economic logics are perceived to be conflicting at the Bangladeshi first-tier and second-tier apparel supplier levels, institutional pressures increase the tendency of owners and managers' responses to decouple, hence leading to limited or no SSM implementation.

Proposition 11b: At the third-tier supplier level, only social logic and economic logic are perceived to be in conflict, and institutional pressures increase the tendency of owners and managers' responses to decouple, hence leading to no SSM implementation.

Proposition 11c: Where the social, environmental and economic logics are perceived to be complementary at the first-tier and second-tier supplier level, institutional pressures reduce the tendency of owners and managers of first-tier and second-tier suppliers to decouple, hence reinforcing SSM implementation.

7.4 Multi-tier Suppliers' SSM Practices and Outcomes

Chapter 6 focused on social and environmental practices and initiatives that Bangladeshi multi-tier apparel suppliers are embedding to accomplish SSM. The results suggested that multi-tier apparel suppliers were implementing a variety of social and environmental supply chain sustainability initiatives and practices to improve SSM outcomes.

7.4.1 Multi-tier Suppliers' Social Practices and their Linkages with SSM Outcomes

As illustrated in Table 6.2, first-tier and second-tier suppliers had implemented several social practices which included *workers' health, safety and well-being*, *rights in the workplace*, *work hours and wages*, *social protection*, *workers' training and skill development*, and *community involvement and development*. These findings are in line with the results of previous studies (Ciliberti et al., 2009; Pedersen & Andersen, 2006; Turker & Altuntas, 2014; Winter & Lasch, 2016). For example, based on content analysis of nine European fast fashion buying firms' sustainability reports, Turker and Altuntas (2014) have identified a variety of social supply chain practices such as better wages, gender equality, upholding workers' and human rights, reduced overtime, promoting social dialogue, good working conditions, avoiding child labour and discrimination, supporting migrant workers, and buyers' sustainable supplier programmes to improve the well-being of people. However, the implementation of social sustainability practices among third-tier suppliers is still very low. In line with this finding, several scholars (Huq et al., 2014; Soundararajan et al., 2018) argued that the level of improvement of social standards at sub-contracting supply factories is low in developing countries such as Bangladesh and India because of allowing excessive overtime alongside exploiting workers with very low wages.

Furthermore, multi-tier suppliers adopted numerous social practices that enabled them to enhance economic outcomes (for example, attracting and retaining buyers' orders and increasing productivity) as well as social outcomes (for example, reducing absenteeism due to injuries, accidents, and illness, while gaining legitimacy and respect within society). While some studies have found no linkage between the social practices and the overall improvement

of suppliers' social conditions in global production networks (Jamali et al., 2017; Lund-Thomsen & Pillay, 2012), a number of other studies found positive linkages between the implementation of social practices and SSM outcomes either quantitatively (Hutchins & Sutherland, 2008; Yadlapalli et al., 2018) or qualitatively (Hofmann et al., 2018; Huq et al., 2014; Perry et al., 2015). In particular, suppliers' implementation of social practices is one of the effective ways to improve working conditions and reduce absenteeism in factories (Huq et al., 2014; Perry et al., 2015; Yadlapalli et al., 2018), increase workers' satisfaction and loyalty (Perry et al., 2015; Wright & Bonett, 2007), provide an advantageous position from which to bargain with buyers (Huq et al., 2014), and gain legitimacy and respect as socially responsible corporate citizens within the society where they operate (Hutchins & Sutherland, 2008; Perry et al., 2015; Tate et al., 2010). It is clear that the key findings of this study add value to the discussion of the least explored dimension of sustainability, that is, multi-tier apparel suppliers' social sustainability practices and their linkages with SSM outcomes. From these discussions, the following propositions can be formed:

Proposition 12a: Implementing social sustainability practices is likely to improve Bangladeshi first-tier and second-tier apparel suppliers' economic and social outcomes.

Proposition 12b: As the implementation of social sustainability practices at third-tier supplier level is very low, it is not clear whether such practices have a positive or negative linkage with economic and social outcomes.

7.4.2 Multi-tier Suppliers' Environmental Practices and their Linkages with SSM Outcomes

As the evidence showed in Table 6.3, first-tier suppliers implemented several environmental practices which included *reducing resources consumption and pollution emissions, waste management,* and *green factory projects and certifications*. Although the level of implementation of environmental practices was limited among second-tier suppliers, several owners and managers also identified their involvement with some environmental practices such as waste management and certifications. These findings are in line with the results of previous studies (Caniato et al., 2012; Hollos et al., 2012; Preuss, 2005; Winter & Lasch, 2016). For example, by examining six fast fashion branded retailers, Winter and Lasch (2016) have identified several environmental practices such as waste water treatment systems, use of environmentally friendly material, reduced carbon footprint and hazardous substance management. In this sense, the identification of environmental practices and initiatives from the perspectives of first-tier and second-tier suppliers seems similar to that of the perspectives of brand-owning buyers and retailers.

Moreover, several apparel suppliers adopted various environmental practices that helped to enhance SSM performance under the umbrella of the TBL perspective (see Figure 6.2), specifically economic performance outcomes (cost reduction and other economic benefits), environmental outcomes (minimal energy and water consumption), and social outcomes (improvements in human health and safety). This finding partly supports the results of previous studies because several scholars argued that implementing environmental practices has positive linkages with economic and environmental outcomes (Caniato et al., 2012; Green Jr et al., 2012; Khattak, Stringer, Benson-Rea, & Haworth, 2015), but not necessarily

social outcomes (Hollos et al., 2012; Luken & Stares, 2005). To this end, one of the reported key findings of this study was that beyond economic and environmental sustainability outcomes, environmental practices were perceived to improve social sustainability outcomes in apparel supply chains. This was mainly due to the design of most LEED-certified buildings, which not only reduced the harmful greenhouse gas emissions but also ensured better safety, health and hygienic working conditions for the workers.

However, owners and managers of third-tier suppliers did not report any environmental practices at their factories. Instead, these suppliers focused on specific social practices on an ad hoc basis, which are also dependent on some factors including type of suppliers' production activities, buyers' focus on the sustainability dimension, regulations and internal resources (see Table 6.3). For example, while factories involved with dyeing and washing were required to obtain an environmental clearance certificate from the government, factories only involved in grey fabric production did not require that certificate. This finding resonates with the prior research that the implementation of social and environmental supply chain sustainability practices differs depending on several contingency factors (Sousa & Voss, 2008) including firm-specific assets such as supplier firm size and resources (Ageron et al., 2012; Andersen & Skjoett-Larsen, 2009), extra costs and technological advances (Furlan Matos Alves et al., 2017), industry-specific regulations and organisational characteristics (Schneider & Wallenburg, 2012; Tachizawa & Wong, 2014), types of industrial clusters and suppliers' locations (Ageron et al., 2012; Giuliani, 2016). For example, Giuliani (2016) argues that while the level of implementation of socially responsible business policies and practices is high within rights-oriented supply firms (adopting CSR policies and promoting human rights), window-dressing supply firms symbolically adopt CSR policies but systematically violate human rights. Thus, these findings clearly provide strong support for

contingency theory regarding the implementation of multi-tier suppliers' SSM practices. From these discussions, the following propositions can be formed:

Proposition 13a: Implementing environmental sustainability practices is likely to improve Bangladeshi first-tier apparel suppliers' SSM outcomes, i.e. economic, environmental and social outcomes.

Proposition 13b: While third-tier suppliers have no visible environmental practices, implementing environmental practices is likely to improve second-tier suppliers' economic and environmental outcomes, which are dependent on contingency factors such as the nature of suppliers' activities and their sustainability, firm-specific assets, and industry-specific regulations.

7.5 A Holistic Framework for SSM Implementation

According to Kovács and Spens (2006), research adopting the abductive approach starts with basic theoretical knowledge, collects and analyses data, continues with theory matching, and concludes with suggesting propositions and expanding the existing theoretical framework with new knowledge. Following an abductive approach, this study was guided by a conceptual framework for SSM implementation, as proposed in Chapter 3. While the integration of sustainability and supply management frameworks was acknowledged in the literature (Gimenez & Tachizawa, 2012; Hoejmose & Adrien-Kirby, 2012; Sauer & Seuring, 2018; Tachizawa & Wong, 2014), the majority of these studies were based on developed country contexts. In particular, there is a lack of understanding regarding SSM implementation from the empirical perspectives of multi-tier suppliers located in challenging institutional contexts (Ageron et al., 2012; Grimm et al., 2016). This study, based on

empirical findings, addressed the empirical gap in SSM and multi-tier supply chains by confirming and extending the theoretical framework for SSM implementation.

The proposed holistic framework for SSM implementation is shown in Figure 7.1 and draws on the theoretical knowledge of integrative stakeholder theory, institutional theory and contingency theory. In particular, the integrative framework for SSM implementation shows three interrelated parts – drivers and barriers (Chapter 4), implementation mechanisms (Chapter 5), and multi-tier suppliers' SSM practices and outcomes (Chapter 6) – and their relation to each of the theoretical perspectives adopted in this research.

First, drawing on integrative stakeholder theory (Hörisch et al., 2014), the framework indicates that multi-tier apparel suppliers embed sustainability practices in their supply chains to meet the expectations and requirements of stakeholders, which are both internal and external to the supply firms. The fundamental premise of integrative stakeholder theory, which inextricably combines descriptive, instrumental and normative aspects, is that an organisation should respond to the concerns and expectations of dominant stakeholders (Donaldson & Preston, 1995; Freeman, 1984; Hörisch et al., 2014). According to Hörisch et al. (2014, p. 332), "business and ethics are not perceived as conflicting but as fundamentally interlinked" in managing stakeholder relationships and their sustainability interests. Based on the empirical findings (see Chapter 4) and earlier discussions (see section 7.2), this study confirms that the instrumental, descriptive and normative aspects of integrative stakeholder theory provide owners and managers of multi-tier apparel suppliers with guiding principles on why and how to successfully engage supply chain stakeholders towards SSM implementation. However, by adopting the contingency theory (Lawrence & Lorsch, 1967; Tachizawa & Wong, 2014; Walker & Jones, 2012), the framework shows that the

implementation of multi-tier apparel suppliers' SSM practices strongly depends on context-specific internal and external barriers including financial and knowledge resource concerns, supply chain complexity, power asymmetries and regulatory differences. As such, some findings concerning external drivers and barriers such as regulatory issues also support the basic assumptions of institutional theory (Busse et al., 2016; Hofmann et al., 2018).

Second, drawing on institutional theory (DiMaggio & Powell, 1983; Meyer & Rowan, 1977), the framework indicates how different institutional pressures and mechanisms – coercive, mimetic and normative – collectively increase the tendency of owners and managers' responses to align, thereby affecting multi-tier apparel suppliers' SSM implementation practices. Furthermore, the framework suggests that institutional pressures could encourage not only multi-tier suppliers' homogeneous responses to align but also their heterogeneous responses including avoidance, defiance and manipulation (Oliver, 1991; Sayed et al., 2017; Wilhelm et al., 2016). This supports the notion of decoupling as a result of different organisational responses to the institutional pressures (Acosta et al., 2014; Bhakoo & Choi, 2013; Greenwood et al., 2010). Based on the empirical findings (see Chapter 5), the framework also indicates a multiplicity of logics (social, economic and environmental) across multi-tier apparel suppliers, which are conflicting or complementary. As such, the idea of institutional logic is used to comprehend the reasons for this heterogeneity or decoupling (Thornton, 2004). Again, drawing on contingency theory, the framework suggests that the decoupling and institutional logics behind multi-tier suppliers' non-adoption of SSM practices can be explained through different contextual factors such as buying firms' low degree of alignment between sustainability and the purchasing function, supply chain complexity, transparency, institutional differences, firm size and resources. To tackle these decoupling issues, particularly at sub-supplier level, shared value from supply chain partners

is required beyond the collective institutional pressures and mechanisms in the form of direct and indirect assessment and collaboration.

The third part of the proposed framework focuses on SSM practices and their relations with SSM outcomes. Based on the findings (Chapter 6), the framework suggests that multi-tier apparel suppliers are implementing various sustainability initiatives and practices to improve SSM outcomes. However, the level of implementation of social and environmental practices and their linkages with SSM outcomes remain fragmented across multi-tier apparel suppliers. First-tier suppliers are integrating SSM practices very well. While second-tier suppliers and beyond focused on social supply chain sustainability practices, they only symbolically engaged in implementing environmental sustainability practices. Drawing on contingency theory (Sousa & Voss, 2008), the proposed framework confirms and suggests that the implementation of SSM practices and their performance outcomes differ depending on several contingency factors including firm-specific assets such as supplier firm size and resources, industry-specific regulations and organisational characteristics, types of industrial clusters and suppliers' location.

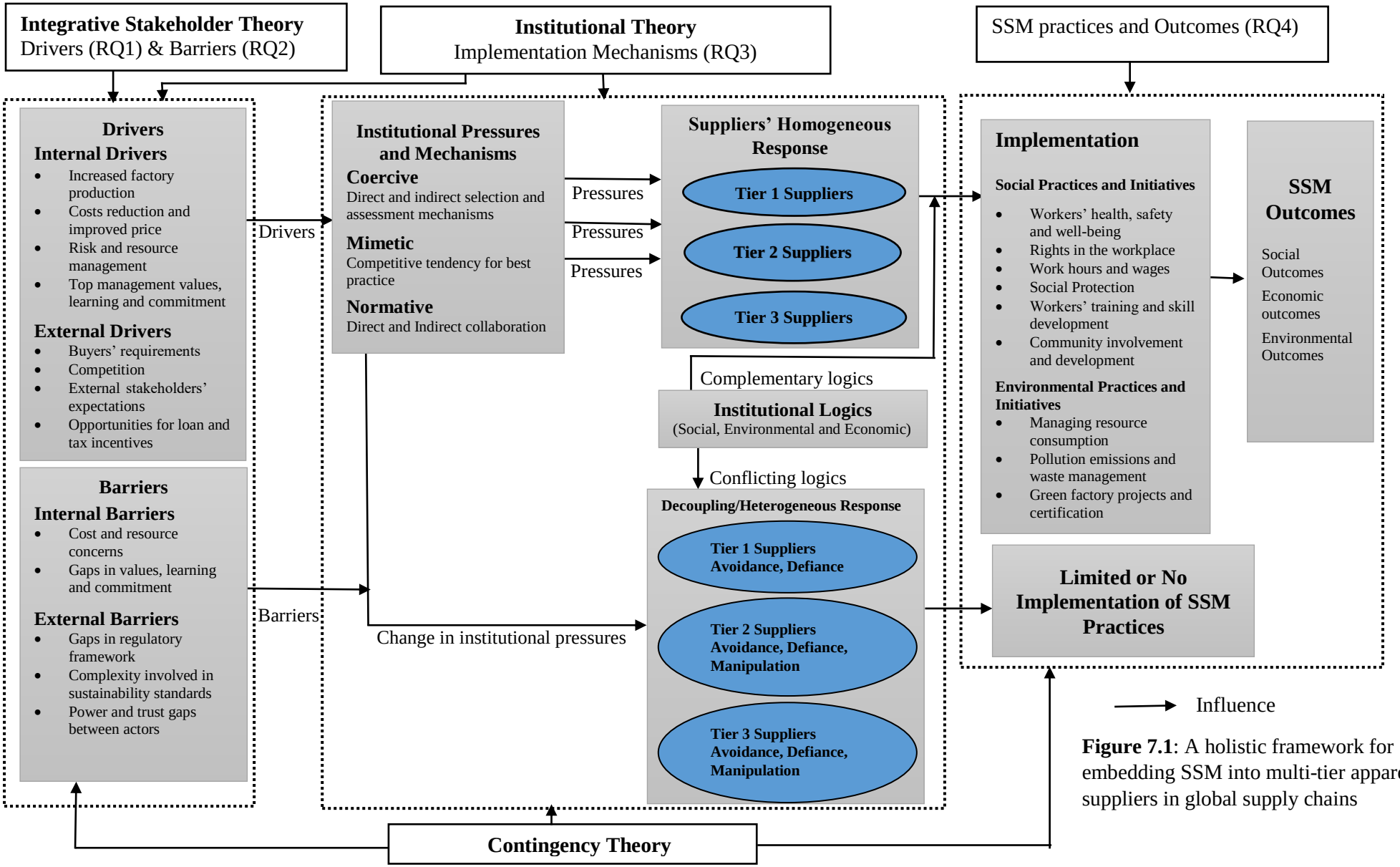


Figure 7.1: A holistic framework for embedding SSM into multi-tier apparel suppliers in global supply chains

7.6 Conclusion

This chapter integrates the findings of the three empirical chapters of the study, and links them to theories and the literature. Three major findings and a series of resulting propositions were discussed. First, this chapter discussed the drivers for and barriers to SSM implementation in relation to integrative stakeholder theory, institutional theory and contingency theory. It suggested that Bangladeshi multi-tier apparel suppliers experienced a variety of descriptive, instrumental and normative factors, both internal and external, that propel or inhibit their SSM implementation. It also highlighted that managerial decisions about SSM implementation are determined by context-dependent internal and external institutional challenges.

Second, the chapter discussed SSM implementation mechanisms in relation to institutional theory and contingency theory. From an institutional theory lens, it is suggested that collective institutional pressures and governance mechanisms by means of supplier selection, assessment, collaboration and heightened competitive tendencies influence multi-tier suppliers' SSM implementation. As such, there is evidence of interplay amongst different institutional pressures and mechanisms. Moreover, taken together, contingency theory and institutional theory allow better understanding of the local ground-level contextual realities, impediments, and institutional logics concerning suppliers' SSM practices. In this sense, it can be argued that there is no one best implementation mechanism to be followed by all kinds of multi-tier suppliers in all situations. Third, the chapter discussed multi-tier apparel suppliers' social and environmental practices and their SSM outcomes in relation to contingency theory. It is suggested that while first-tier suppliers are in an advantageous position, the level of implementation of SSM practices and their linkages with SSM outcomes are dependent on several contingency factors. Finally, the theoretical framework proposed earlier in the thesis was confirmed and expanded.

CHAPTER 8

Conclusion

8.1 Introduction

This study examines why and how Bangladeshi multi-tier apparel suppliers implement SSM practices in GSCs. This chapter concludes with the key empirical findings of this study and its contribution to theory and practice. The chapter is organised as follows. First, a brief overview of the study is highlighted. Second, a summary of the key research findings is presented. Third, the theoretical contributions of the research are provided. Then, the study's practical implications and limitations are pointed out. Finally, the directions for future research and the researcher's reflection are presented.

8.2 Overview of the Study

This study endeavoured to contribute to and expand the field of SSM by examining why and how Bangladeshi multi-tier apparel suppliers are integrating SSM practices in GSCs, and proposed a theoretical framework for SSM implementation. To accomplish this purpose, the following research questions were formulated (see Chapter 1).

1. Why do Bangladeshi multi-tier apparel suppliers embed sustainability practices into their supply chains?
2. What barriers do multi-tier apparel suppliers encounter while embedding SSM practices?

3. How do institutional pressures and mechanisms affect the implementation of SSM practices across multi-tier apparel suppliers, and why do these suppliers' responses to institutional pressures differ on factory production floors?
4. How do multi-tier apparel suppliers integrate social and environmental initiatives to improve SSM outcomes in supply chains?

To address the key research questions, the study adopted a qualitative and abductive approach. The data were collected from a total of 46 purposively selected semi-structured interviews with owners and managers across 33 multi-tier apparel suppliers, who were responsible for dealing with their organisation's CSR, sustainability and supply management-related duties. Additionally, to complement and triangulate the views of apparel business owners and managers, data in the form of interviews were obtained from a total of 15 key representatives of wide-ranging institutional actors. In this study, three theories – integrative stakeholder theory, institutional theory, and contingency theory – were adopted to conceptually guide the data analysis. In particular, integrative stakeholder theory and contingency theory were applied to explain the drivers for and barriers to SSM implementation. Moreover, institutional theory was applied to explain the institutional pressures and mechanisms, decoupling and institutional logics influencing multi-tier apparel suppliers' SSM implementation. Furthermore, this study suggested that the implementation of SSM practices and their performance outcomes differs depending on several contingency factors. Drawing on the overall findings and discussions, a series of propositions alongside a holistic framework of SSM implementation were suggested. The following section revisits and briefly summarises the key research findings of each empirical chapter (Chapters 4, 5 and 6) in relation to the formulated research questions.

8.3 Research Findings

8.3.1 Drivers for and Barriers to SSM Implementation

Chapter 4 examined the factors that either drive or obstruct multi-tier apparel suppliers' implementation of SSM practices. The findings demonstrated that managers and owners of first-tier and second-tier apparel suppliers experienced more drivers than barriers to SSM implementation. This finding may be explained by the fact that direct suppliers as well as buyers' nominated suppliers may potentially consider implementing SSM practices in their supply chains. With regard to overall reported drivers, owners and managers perceived more instrumental driving factors, such as *increased factory productivity, risk and resource management,* and *cost reduction and improved price* than descriptive and normative driving factors that propel multi-tier apparel suppliers to embed SSM. This may be due to classical viewpoints of stakeholder theory, which drive multi-tier apparel suppliers to embrace SSM practices as a way of maximising business profits and benefits. However, among them, several participants from first-tier suppliers revealed the opposite viewpoints. This is because first-tier suppliers perceived that normative driving factors such as *top management values, learning and commitment* and most exclusively, second-generation owners' higher education and experiences, encourage them to implement SSM. Thus, it is confirmed from empirical data that internal and external drivers for SSM implementation are certainly linked to descriptive, normative and instrumental aspects of integrative stakeholder theory.

Furthermore, the findings indicated that multi-tier suppliers face internal and external barriers that prevent effective implementation of SSM. Internal barriers such as *cost and resource*

concerns, and *gaps in values, learning and commitment* seem to be more visible than external institutional barriers such as *gaps in regulatory framework, complexity involved in sustainability standards*, and *power and trust gaps*. This may be because most owners and managers of multi-tier suppliers perceive the expenses for improving health and safety in the workplace as costs, not investments. However, the findings also indicated that the majority of managers and owners of the first-tier suppliers faced fewer internal barriers than external institutional barriers. A possible explanation for this might be that first-tier suppliers have the internal capability and commitment to better manage internal organisation-related barriers and challenges. One of the additional key research findings related to drivers for and barriers to SSM implementation is that multi-tier apparel suppliers' SSM implementation is determined by contingency factors such as supplier size, suppliers' types of business activities, power asymmetries, supply chain complexity, financial resources, knowledge resources and capabilities of sustainability management.

8.3.2 Implementation Mechanisms

Chapter 5 examined how institutional pressures and mechanisms have an impact on the implementation of SSM practices across multi-tier apparel suppliers, and why these suppliers decouple formal SSM implementation practices. The institutional theoretical lens, specifically the constructs of institutional pressures, decoupling and institutional logics, was adopted to frame and scrutinise the research questions. The findings suggest that institutional pressures and mechanisms – coercive, mimetic and normative – vary across multi-tier suppliers, thereby affecting their divergent implementation of SSM practices. The identified key collective coercive pressures were stemming from selection and assessment requirements of direct buyers, followed

indirectly by third-party auditor assessment requirements, buyers' consortium requirements and government legal obligations. The mimetic pressures were coming from competition and the tendency to join best-practice sharing alliances and networks. Finally, normative pressures were stemming from collaborative platforms for supplier development where suppliers participated in awareness-raising training in collaboration with direct buyers and other non-traditional stakeholders such as NGOs, DA and industry associations. As portrayed in an integrative framework in Figure 5.1 (Chapter 5), both direct and indirect governance pressures and mechanisms were used to encourage implementation of SSM practices by multi-tier suppliers.

The findings further indicated that managers and owners of multi-tier apparel suppliers applied three key decoupling approaches – avoidance, defiance and manipulation – in response to institutional pressures for SSM implementation. This may be due to changes in institutional pressures and context-specific barriers, including buying firms' low degree of internal alignment between sustainability and the purchasing function, supply chain complexity, gaps in supply chain transparency and traceability. One of the key findings, related to suppliers' heterogeneous responses, is that a range of institutional actors such as auditors, inspectors, media, trade union leaders and even buyers play a counterproductive role in suppliers' implementation of SSM practices. Furthermore, the findings suggested three institutional logics –social, environmental and economic – that were perceived to be conflicting and complementary regarding the implementation of SSM practices. To address the reported conflicts, it is argued that shared value from supply chain partners is required beyond direct and indirect institutional pressures and mechanisms.

8.3.3 SSM Practices and Outcomes

Chapter 6 examined how multi-tier apparel suppliers integrate social and environmental sustainability practices to improve SSM outcomes in GSCs. The findings indicated that multi-tier apparel suppliers implemented a variety of social and environmental sustainability initiatives and practices. Multi-tier suppliers have adopted social practices that helped them to enhance economic and social outcomes. Furthermore, one of the most significant findings was that beyond economic and environmental sustainability outcomes, environmental practices were perceived to improve social sustainability outcomes in supply chains. Although the level of implementation of such social and environmental practices is relatively high within first-tier supplier firms, second-tier suppliers and beyond either adopt specific social practices on an ad hoc basis or only symbolically implement environmental practices. The findings showed that this fragmented implementation of social and environmental practices across multi-tier suppliers was also dependent on context-dependent factors such as firm-specific assets, supplier firm size and their financial resources, types of industrial supply tiers, suppliers' location, regulations, and the SSM knowledge of owners and top-level factory management.

8.4 Theoretical Implications

This study contributes to filling the prior knowledge gaps on multi-tier supply chains and sustainable supply management theory in the challenging institutional context of a developing country. Specific theoretical gaps in the literature have been addressed, including the following.

First, one of the important contributions of this study is to expand the newly evolving research stream of multi-tier sustainable supply chains through the development of a holistic theoretical SSM framework (see Figure 7.1). Prior supply management research has explored SSM frameworks mostly based only on literature (Hoejmose & Adrien-Kirby, 2012; Sauer & Seuring, 2018; Schneider & Wallenburg, 2012; Tachizawa & Wong, 2014). There were a few exceptions (Ageron et al., 2012; Koplin et al., 2007) where scholars attempted to empirically develop SSM frameworks from the managerial perspective of developed country firms but did not explore the perspective of upstream multi-tier suppliers. To fill this knowledge gap, this study has offered a series of research propositions and developed a holistic SSM implementation framework based on an empirical investigation of multi-tier apparel suppliers' perspectives.

Second, according to the systematic review of literature, this is the first study which examines the drivers, barriers, institutional pressures, logics and mechanisms influencing the implementation of SSM practices from the perspectives of multi-tier apparel suppliers and their stakeholders. The review of literature identified the significance of implementing sustainability practices in upstream multi-tier suppliers, which has been considered 'the invisible side' of SSM (Kim et al., 2018; Tachizawa & Wong, 2014). However, there is a lack of empirical research exploring the implementation of SSM practices from the multi-tier suppliers' perspective, specifically in developing countries such as Bangladesh (Huq et al., 2014; Yawar & Seuring, 2017). Furthermore, prior studies on suppliers' sustainability practices have explored either social aspects (Huq et al., 2014; Soundararajan & Brown, 2016) or mostly environmental aspects (Geng et al., 2017; Gimenez & Sierra, 2013). There are a few exceptions (Grimm et al., 2016; Meinlschmidt et al., 2018; Wilhelm et al., 2016), which examined both aspects of sustainability

implementation. Nevertheless, most studies about SSM implementation are mainly limited to investigating the perceptions of buyers (Grimm et al., 2016; Meinlschmidt et al., 2018; Xiao et al., 2019) and Tier 1 suppliers (Ghadge et al., 2019; Huq et al., 2014; Wilhelm et al., 2016). Following this claim, Grimm et al. (2016, p. 1982) have called for future research to get a comprehensive understanding of the implementation of SSM practices "from the perspective of (sub-) suppliers". As such, the prior research ignored the extended suppliers' perspective (Tier 2 and Tier 3), which has been provided by this present study.

Third, in terms of methodological implications, this study contributes and responds to the call for more theory-grounded research in supply chain sustainability (Pagell & Shevchenko, 2014; Touboulic & Walker, 2015). Prior studies in the challenging institutional context of Bangladesh were limited to first-tier suppliers' social sustainability implementation, and adopted either an inductive case-based approach (Huq et al., 2016) or a deductive survey-based approach (Yadlapalli et al., 2018). However, deduction can be assessed because of potential theory falsification or verification whereas inductive reasoning is difficult to prove because of its commitment to letting theories emerge inductively (Alvesson & Kärreman, 2007; Peirce, 1878; Timmermans & Tavory, 2012). As such, both approaches have shortcomings in creating systematic discovery of knowledge (Timmermans & Tavory, 2012) and theory construction in SSM (Touboulic & Walker, 2015). These prior shortcomings have been addressed in this study through adopting an abductive approach (Kovács & Spens, 2005; Spens & Kovács, 2006) to empirically develop a holistic SSM framework drawing on established theoretical knowledge.

Fourth, another contribution of this research is the application of multiple theories – integrative stakeholder theory, institutional theory and contingency theory – to SSM implementation. Prior review studies of supply chain implementation or governance mechanisms to extend sustainability to suppliers mostly used the resource-based view (RBV), stakeholder theory and transaction cost economies (TCE) theory as their key theoretical lens (Touboulic & Walker, 2015; Zorzini et al., 2015). For example, Huq et al. (2014) examined the relationship between buyers and first-tier suppliers through applying TCE theory to determine the drivers and enablers behind the implementation of buyers' and suppliers' social sustainability practices. However, the authors did not capture the perceptions of the extended suppliers beyond first-tier suppliers. Furthermore, two recent studies (Meinlschmidt et al., 2018; Yadlapalli et al., 2018) adopted the TCE theoretical lens to examine the relationship between governance mechanisms and suppliers' sustainability performance. Nevertheless, Mena et al. (2013, p. 60) argued that TCE "does not help to explain the dynamics among multiple firms" since supply chain governance structures relate to multiple tiers of upstream suppliers. Against this backdrop, several studies have also called for the application of multiple theoretical perspectives to potentially explain the complexity involved in two broad research streams – sustainability and multi-tier supply chain management (Huq et al., 2014; Meinlschmidt et al., 2018; Sauer & Seuring, 2018). For example, in order to gain a deep understanding of the multi-tier supply chain and SSM phenomena, Huq et al. (2014) have suggested adopting both institutional theory and stakeholder theory whilst Meinlschmidt et al. (2018) have suggested institutional theory and network theory. More recently, based on theoretical knowledge of institutional theory and a review of literature, Sauer and Seuring (2018) have proposed a framework for multi-tier SSCM and recommended the application of contingency theory as an interesting and fruitful future theoretical lens. To fill this

knowledge gap, this study also adopted three theories to investigate multi-tier suppliers' SSM implementation.

Fifth, one of the major further contributions of this research, related to suppliers' decoupling responses, is that not only auditors and trade associations but also media, buyers and even trade union leaders play a counterproductive role in the implementation of upstream suppliers' SSM. For example, trade union leaders are serving the interests of their politically affiliated organisations, and only defending the wellbeing of their member workers when their own benefits align. As such, trade union leaders are exploiting both workers and owners behind the scenes though showcasing workers' issues in public. This finding of duplicitous behaviour contrasts with previous studies by Campbell (2007) and Tsoi (2010), which indicate that trade unions are recognised as one of the key catalysts for firms to behave in socially responsible ways.

Finally, another key significant finding to emerge from this study is that beyond economic and environmental sustainability outcomes, environmental practices are perceived to improve social sustainability outcomes in supply chains. Previous studies have suggested the importance of investigating the relationships, trade-offs and synergies amongst the three dimensions of sustainability (Haffar & Searcy, 2017; Hutchins & Sutherland, 2008). However, it is very challenging for firms to achieve all kinds of sustainability simultaneously (Pagell & Shevchenko, 2014; Xiao et al., 2019), which may require a paradigm shift from "instrumental logic" to "ecologically dominant logic" (Montabon et al., 2016, p. 11). Interestingly, the findings of this study also revealed that environmental practices in terms of adopting LEED-certified green

factories offered the opportunity to improve economic, environmental, and more importantly, social outcomes. Hence, this finding contributes and responds to the recent call for addressing the under-researched issue on how environmental "practices impact on social performance" in the context of developing countries (Geng et al., 2017, p. 255).

8.5 Implications for Practice

Reflecting on the overall findings, this study has important implications for practitioners including apparel factory owners/managers, brand-owning buyers, NGOs, and policy makers including the Bangladeshi government who seek to implement SSM practices in the apparel supply chains.

8.5.1 Implications for Multi-tier Apparel Suppliers

This study offers several implications for owners and managers of Bangladeshi multi-tier apparel suppliers. First, developing an improved understanding of drivers and barriers can help owners and managers of multi-tier apparel suppliers improve SSM implementation in their supply chains. For example, being aware of the major drivers including increased factory productivity, risk and resource management, tax and other instrumental benefits might help owners/managers embed SSM practice into their supply chains. Moreover, owners and managers can envisage the barriers and contextual challenges such as power asymmetries, cost and resource concerns they are likely to encounter in implementing SSM in their supply chains, permitting them to overcome these challenges and related decoupling behaviour. The ideal result would be that

multi-tier suppliers do not conceal violations. Instead they should cooperate with other business partners to accomplish SSM implementation in their supply chains.

Second, the empirical findings suggest that implementing SSM practices is beneficial for most first-tier and some second-tier suppliers. While SSM practices improve the economic and social outcomes of second-tier suppliers, these practices also ensure better TBL benefits for first-tier suppliers. For example, more first-tier suppliers may consider investing in either USBC LEED-certified green factories or the Accord and Alliance-certified factories in their supply chains since the economic, social and environmental benefits are clearly apparent in the long run. However, the managerial decision to implement SSM by means of taking green factory initiatives is determined by context-dependent factors such as supply firm-specific assets, supplier size, types of suppliers' business operations, and buying firms' sustainability requirements.

Third, apparel suppliers should develop their own capacities to continuously arrange factory based training and workshops in the area of SSM. For example, they should invest in SSM education and awareness-building programmes such as health and safety improvements not only for top and middle-level factory management but also for general workers on production floors. Accordingly, the managerial commitment to arrange internal training and workshops on production floors will develop suppliers' SSM norms and reduce external training-related costs.

8.5.2 Implications for Buyers and Branded Retailers

This study also provides some important implications for purchasing or procurement managers of buyers and branded retailers. First, the identification of institutional pressures and governance mechanisms can be utilised as a timely useful guide by managers of the global buying firms and retailers to help manage and effectively implement SSM strategies across the multi-tier supply chains. In particular, this study found that buying firms and their direct suppliers should emphasise collective institutional pressures by means of rigorous supplier selection, assessment and collaboration to implement the sustainability practices of the extended supplier network.

Second, managers from buying firms need to provide continuous support and commitment by assigning the necessary resources to implement multi-tier suppliers' SSM practices. For example, buyers may arrange health and safety training to enhance the skills and capabilities of top and middle-level supply factory managers who, in turn, can transfer their new expertise to their own factories. This is because the findings suggested that the support of apparel business owners and top-level factory management is crucial for implementing SSM practices.

Third, when apparel suppliers' poor SSM implementation in GSCs, like the 2013 Rana Plaza incident, are reported in the media, they become intimately associated with brand-owing buyers (chain liability or spill-over effects). For example, upper-tier suppliers, particularly third-tier suppliers, are so unregulated that they may present potential vulnerability for buyers and lead suppliers. A similar concern was identified in 2007 in the case of Mattel's issue with risky material substitution by third-tier subcontractors and toxic paint in China (Alexander, 2015; Hora, Bapuji, & Roth, et al., 2011). It is important for buyers to predict suppliers' conflicts and

decoupling behaviour, and consider how it can be discovered and further avoided. To minimise the transparency gaps, buyers can be directly involved in monitoring, assessment and multi-tier supplier development processes. For example, buyers can engage with each and every direct and indirect supplier to ensure the implementation of buyers' codes of conduct in the extended supply chains.

Fourth, buyers' collaboration with global and local NGOs, trade unions and local industry associations such as the Alliance and Accord platforms can help to improve understanding of traceability and reduce supply chain complexity through rigorous factory inspections. However, the scope of these collaborative platforms, particularly the Accord, is limited to fire and building safety improvements of first-tier suppliers rather than second-tier and third-tier suppliers (Jacobs & Singhal, 2017; Reinecke & Donaghey, 2015). Moreover, coercive pressures and mechanisms in the form of monitoring and assessment are necessary but not sufficient to ensure SSM practices across all tiers. In order to tackle suppliers' decoupling responses, buyers should be aware of several other factors such as shared value, procedural justice, trust and institutional differences. For example, the majority of participants from multi-tier suppliers including a wide range of stakeholders suggested "fair price from buyers" as one of the potential ways to minimise supplier conflict.

8.5.3 Implications for Policy Makers and Society

This study also provides practical recommendations for policy makers such as governments, trade associations, and supranational organisations to develop sustainability standards based on the needs of the multi-tier apparel suppliers. First, the Bangladeshi government should set and

continually enforce comprehensive regulatory guidelines to ensure the sustainability of the Bangladeshi apparel industry, the sole engine of the Bangladeshi economy. For example, the evidence indicated that gaps in regulatory frameworks were one of the key institutional challenges for implementing SSM across Bangladeshi multi-tier apparel suppliers. The labour and environmental laws in Bangladesh are weak and their enforcement is uneven due to political affiliations of factory owners (Ahmed et al., 2014; Jacobs & Singhal, 2017). However, the government should be aware of the potential consequences (for example, buyer departures and boycotts) if more disasters like the Rana Plaza collapse happen.

Second, the findings also suggest that although government policy makers are currently more vigilant at first-tier supplier level, they have limited capacity for inspecting all tiers of apparel suppliers, particularly second-tier suppliers and further upstream suppliers. In this regard, they can consider investing more resources, for example, increasing the number of factory inspectors for the purpose of effective monitoring and strict enforcement of social and environmental laws at sub-supplier levels (second and third-tier).

Third, other institutional actors such as trade associations, third-party auditors, trade unions, NGOs, donor agencies and supranational organisations can play an important role in implementing SSM practices across multi-tier apparel suppliers. For example, there is a critical need for trade unions, third-party auditors and NGOs to build trust with multi-tier apparel suppliers to overcome the defiant attitudes. Moreover, trade associations, NGOs and donor agencies should develop the SSM-related compliance capabilities of supply factories through educating factory managers and workers.

Finally, at the society level, the findings of this study suggest how SSM governance pressures and mechanisms can be a powerful way to address the concerns of the disadvantaged factory workers situated in distant institutional contexts. One factory worker (WD) justified it in this way: “I feel we previously worked in a volcano...Truly, implementing a corrective action plan regarding fire, electric and building safety at the production floors has not only ensured the safety of three or four thousand workers but also ensured the social safety of their dependent families.”

8.6 Limitations of the Study

While this study has successfully demonstrated its valuable contribution to SSM literature in the context of Bangladeshi multi-tier apparel suppliers, there are several limitations that need to be acknowledged.

The first limitation concerns generalisability. In particular, the data collection in this research was restricted to a particular region and a particular sector, the Bangladeshi apparel industry. Moreover, the unit of analysis of this study focused on a small number of sample participants across three-tier apparel suppliers. This is because it is challenging to collect data from a large number of participants beyond three-tier supply chains, which may require a significant amount of time, resources and accessibility (Bhakoo & Choi, 2013). The key purpose of this qualitative study was to gain rich and deep understanding of multi-tier apparel suppliers’ SSM implementation in their supply chains. While investigating SSM issues in the context of three-

tier suppliers of a specific industry in a single country produces a rich qualitative data pool, this potentially limits statistical generalisability. However, following the abductive approach, data collection and analysis continued by combining theoretical frameworks, which may achieve rigorous analytical generalisation rather than statistical generalisation.

The second limitation concerns transferability due to context-specific challenges. According to the findings of this study, drivers, barriers, pressures, institutional logics and the decoupling issues regarding the Bangladeshi multi-tier suppliers' SSM implementation are indeed context-specific. Research suggests that contextual dynamics play a critical role in SSM implementation and cannot be isolated from supply chains (Silvestre, 2015a). While this study's sample permitted greater control over contextual issues, the findings are limited to the Bangladeshi apparel supply industry and its surrounding institutional context. Thus, caution must be applied since the findings of this study might not be fully transferable to other supply chain contexts and institutional settings.

The third limitation concerns the exclusion of studies during the systematic literature review process. While there are numerous available search engines, only Scopus was considered for the search process. The review of literature might have excluded relevant papers during the search process since Scopus only covers scholarly and high quality data from 1996 onwards. However, Scopus "provides integrated results from a variety of databases, including Science Direct, Emerald Insight, Springer Link, Wiley Online Library, etc." and has been widely adopted for the systematic review of SSCM literature (Roy et al., 2018, p. 1094). To ensure the quality of the literature review, the research scope of the search process was limited to business and

management fields, and did not include other literature including mathematical and economic modelling papers, technical research reports and conference papers. Nevertheless, additional relevant articles that were not on the shortlist were added on the basis of highly cited articles' cross-references.

Fourth, this study involves data collection shortcomings. For instance, data was mostly gathered from interviews with top and middle-level factory management, in particular owners and managers, who made strategic decisions about SSM implementation. However, an informal discussion with several operational factory workers was conducted. Additionally, key informants from a wide range of stakeholders such as buyers, auditors, NGOs, government agencies, media, industry associations, and trade union leaders were interviewed since this could influence the quality of the findings.

The final limitation of this study relates to the research process. In particular, all interviews, transcription translation, coding and theme development were carried out entirely by a single researcher. While the findings were based on participants' explanations of the SSM implementation issues, a single researcher was also part of what was being investigated, which raised potential concerns of research bias in the interview process and data analysis. Several efforts were made to avoid it, but the issue of single research bias cannot be entirely eliminated from the research process. For example, a semi-structured interview guide was used to maintain research consistency. Moreover, to evade the unnecessary influence of the interviewer and to establish conformability of this study, a rigorous step-by-step audit trail of data collection and analysis processes was followed. Furthermore, multiple steps have been undertaken to confirm

that the collected information makes sense and research rigour was enhanced by using the data triangulation approach through factory visits, multiple stakeholder interviews, document analyses and discussion of findings with several interviewees.

8.7 Suggestions for Future Research

Despite these shortcomings, this study has proposed a series of research propositions and a holistic SSM implementation framework for Bangladeshi multi-tier apparel suppliers. Based on the foundation offered by this study, a range of avenues may be suggested as future research directions.

First, this study is an initial attempt to empirically develop a comprehensive SSM framework in the context of Bangladeshi multi-tier suppliers and their relevant institutional actors. Further work is needed to empirically test the suggested research propositions of this study against a large cross-sectional dataset in Bangladesh, which would allow drawing of more generalisable conclusions. As the study was focused only on a single country, more cross-country empirical research is needed to understand any differences in the emerging framework for SSM implementation. Thus, it would be interesting to investigate SSM implementation by considering more diverse labour-intensive industries and countries such as India or Brazil (leather products), Ghana (chocolate) and Thailand (plastics).

Second, the findings of this study do not provide a complete picture of all upstream apparel suppliers. In particular, the unit of analysis of this study was limited to three-tier apparel

suppliers, which suggests a potential need to investigate the perceptions of more upstream suppliers beyond third-tier suppliers, which may be located in other institutional contexts such as Uzbekistan (cotton) and accessories (India and China) in the apparel industry.

Third, a supply chain includes not only the upstream suppliers but also downstream consumers. Future research is needed to include downstream tiers including the actual consumers, for example, those located in Australasian, European and North American countries, to provide an inclusive understanding of SSM implementation along the global apparel supply chains. This is important because sustainability initiatives along the supply chains finally depend on the perceptions, awareness, activism and support from consumers.

Fourth, previous research suggests that a supply firm's poor sustainability standards could have an impact on the sales and reputation of a buying firm along the supply chains (Awasthi et al., 2018), also known as "chain liability effects" (Van Tulder, Van Wijk, & Kolk, 2009). There is scope for future research to quantitatively investigate the spill-over liability effects of developing country suppliers' social and environmental misconduct on the sales and reputations of apparel suppliers across other developing countries such as Vietnam, Cambodia, Ethiopia, India and Indonesia. Likewise, based on accounting or market-based secondary data, it would be interesting to see the trade shifts (change in exports and imports) across global apparel value chains after the 2013 Rana Plaza collapse. This is important because global apparel value chains link a series of buyers in developed countries and their multiple tiers of suppliers across different developing countries.

Fifth, the review of literature suggests that research on social sustainability as well as the integration of all dimensions of sustainability in the context of multi-tier supply chains is still emerging. While the measures of environmental sustainability practices are easy to observe and calculate, it is very difficult to quantitatively measure the social sustainability issues of multi-tier suppliers. Although the present study qualitatively shows the linkage between SSM practices and SSM outcomes, further work is needed to quantify the impact of social improvement on overall economic performance outcomes. Furthermore, since the decoupling of social issues relating to poor working conditions and human rights of developing country factory workers are contextually embedded in a particular institutional context, it would be interesting to conduct a longitudinal study or ethnographic study for the purpose of examining the long-term impact of social sustainability implementation on developing country factory workers and their dependent families.

Finally, in recent years the upsurge of artificial intelligence technology and robotics (automation) has transformed many functional areas of business – from sales to social media marketing and finance to SCM worldwide. Consequently, to tackle the sustainability challenges of distant suppliers, "nearshoring, automation and sustainability – establishing a demand-focused apparel value chain" has received much attention amongst procurement managers of top branded fashion retailers (McKinsey & Company, 2018, p. 1). While low labour costs of labour-intensive industries such as the apparel industry facilitate the rapid rise of outsourcing from upstream suppliers in Asia, it involves extensive social sustainability challenges including excessive work hours at multi-tier supplier level. The findings of this study indicated that supply chain transparency and contextual barriers regarding multi-tier suppliers' SSM implementation

appeared difficult to detect and rectify by global buying firms and other institutional actors. To this end, robotics and automation could reduce the involvement of labour or human workforces, which ultimately can address social sustainability challenges such as excessive work hours and violation of human rights on production floors. In this sense, it would be interesting to examine how automation can transform CSR and sustainability challenges in global apparel production networks.

8.8 Researcher's Reflection

My initial motivation in the arena of sustainability developed in 2013 when I conducted a study on sustainability of Bangladeshi export-oriented small and medium enterprises as my Master's thesis at Durham University in the United Kingdom. Coincidentally, the 2013 Rana Plaza apparel factory collapse in Bangladesh was persuasive in changing my thinking about and perception of the connection between export-oriented apparel businesses and society. In fact, this incident demonstrated many hidden and surprising issues concerning global supply chains and made me want to understand how Bangladeshi export-oriented apparel suppliers embed SSM practices into their supply chains. This aspiration was demonstrated in my New Zealand Development Scholarship agreement in 2015 under the Ministry of Foreign Affairs and Trade, New Zealand.

I encountered several challenges throughout my PhD research journey. The first challenge concerns the justification of my research context and inquiry in relation to the SSCM field. Based on a preliminary review of literature in 2016, I found that scholars had investigated

different areas of sustainability and supply chain management. I was struggling to identify the research gaps in the SSCM domain to justify the complex research context of my study. I was worried because I was required to explain to my supervisors why I selected Bangladeshi apparel supply chains as my research setting. Sometimes I thought I should work on both apparel buyers and suppliers in global supply chains. However, I found that very few Bangladeshi supply firms indirectly (mostly via Australia) export apparel products to New Zealand since it is a non-traditional apparel market for Bangladesh. In addition, as a full-time PhD student at Massey University, New Zealand, it was not practical to conduct in-depth interviews with sustainability managers of buyers across European countries and North America (the major buyers of Bangladeshi apparel suppliers). In the middle of 2016, I found some new review papers (for example, Quarshie et al., 2016) which called for more theory-grounded empirical study on the embryonic research stream of multi-tier sustainable supply chains. Indeed, there was a lack of empirical research discussion on SSM implementation from the perspective of developing country multi-tier suppliers. Based on my initial desire and preliminary review of literature, I refined my direction of research inquiry and then developed my main research purpose: why and how multi-tier apparel suppliers integrate SSM practices into their supply chains, thereby enhancing their SSM outcomes.

The second challenge of my research concerns timely data collection and access to the right sample participants. With regard to my pilot study, initially I approached several participants for Skype/telephone interviews from New Zealand. However, except for one, all of them declined because of time differences between New Zealand and Bangladesh and their reluctance to participate over Skype/telephone. For the purpose of conducting a Skype interview with the

agreed participant, I was awake until 2am New Zealand time. The one participant who agreed to participate later cancelled the appointment due to unannounced audits and an emergency meeting with a buyer. I realised the necessity of my physical presence in the field since getting access to and consent from the interviewees over Skype/telephone would be a great challenge.

However, the experience of conducting face-to-face interviews was not easy initially and rather time consuming. During my first pilot phase of physical data collection, it took a long time to finish one interview because I was required to repeat some questions, which appeared difficult for respondents to answer. During the data collection process, several participants cancelled their interviews due to their unexpectedly busy work schedule and some did not inform me. I remember I had been interviewing a manager for around 3 minutes but he did not continue because a buyer came to visit the factory during the interview. Although he told me that he may able to participate in the evening of that day, I missed that opportunity due to an appointment with another participant. It was also stressful as I had to reschedule interviews as required by the context. Moreover, I was under time pressure to finish interviews with the potential participants within around 3 months.

While collecting data from Bangladesh, I observed that the majority of apparel suppliers did not have a formal CSR manager or sustainability manager. Instead, the general manager or human resources, administration and compliance managers were basically in charge of CSR and sustainability-related activities for their supply chains. In small and medium suppliers, business owners were responsible for managing sustainability issues of their companies. I was confused for a while about the designation issue of the sample participants since I proposed to collect data from CSR or sustainability managers in my confirmation report. Although I continued my data

collection process with a sense of participants' duties regarding CSR and sustainability, I also informed my supervisors about this issue.

The final challenge of my research concerns the management of data and analysis for my empirical chapters. While professional transcribers helped me with the transcribing of the majority of interviews in Bengali [native language], I was responsible for translating a total of 61 Bengali interview transcripts into English. The reason for translation was to apply the NVivo programming software for facilitating coding and analysis. However, I realised it was time-consuming after completing some of them. Then, I discussed it with my main supervisor who suggested I start analysis based on what I had [Bengali transcripts]. I gathered a huge amount of textual data from both primary and various secondary sources. At the preliminary stage of my data analysis, I was also struggling with how to deal with this massive amount of textual data that emerged from multiple tiers of apparel suppliers and multiple stakeholders. However, I found thematic analysis offered me the flexibility to analyse detailed textual data and develop themes by using a step-by-step framework.

What I learned and experienced from my research was that the curve of my doctoral research journey was not linear: instead it was challenging with various ups and downs. I learnt how to handle unanticipated contextual challenges throughout the entire research process, starting from the research inquiry to data collecting and analysis for writing the empirical chapters. The research, along with in-depth knowledge of the emerging areas of sustainable supply management and multi-tier supply chains, assisted me to develop specific skills of self-sufficiency, flexibility, and persistence. These skills could apply to creating a network,

interviewing and data analysis in future research projects. Overall, my research journey was challenging but with a positive outcome and good learning experience.

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Appendix 1 – Semi-structured Interview Guide

Questions for Apparel Suppliers

Section 1: Participants' Demographics

- Could you please tell me your designation and role in your company?
- Could you please describe your previous work experience with sustainability practices?

Section 2: Sustainability Initiatives and Practices

- Does your company have a formal sustainability policy? If yes, what does sustainability mean to your company?
- Does your company have sustainability initiatives? If yes, what are these initiatives and practices? If not, why?

Section 3: Drivers, Logics and Outcomes for Integrating SSM Practices

- Why have these SSM initiatives been integrated into your company?
    - Have you been offered any kind of incentives from your stakeholders to implement SSM practices?
- What is your perception about the impact of these sustainability practices on the performance of your company? Could you please give me some examples?
- What are the enablers that help in the implementation of your SSM agenda?

Section 4: Barriers or Challenges to Implementing SSM Practices

- What are the barriers or challenges that your company faces in implementing SSM practices in your supply chains?

Section 5: Implementation Mechanisms, Institutional Pressures and Complexities

- How does a buyer select your company?
- How do your buyers monitor your company's SSM practices?
- Do you have suppliers or subcontractors (second-tier, third-tier and beyond)? If yes,

- How does your company select your suppliers?
- How would you engage with your suppliers?
- How does your company monitor sub-contractors' sustainability practices? What are the difficulties, if any, that you face in monitoring them?
- Do you feel a sense of accountability for your suppliers' SSM practices? Would you please explain?

- Who are your main stakeholders or institutional actors with regard to SSM implementation?

- Did you experience any pressure from your stakeholders to implement the current SSM practices in your company and your suppliers?

- Are there any regulatory pressures (for example, government regulations, buyer codes of conduct and industry association requirements) that your company tries to meet by implementing the current SSM practices?

- Does your company face any pressure from competitors in adopting SSM practices? If yes, do you think this pressure leads your company to follow the best SSM practices?

- Are you and your factory management aware of any kind of supplier development (for example, training, workshops and other technical knowledge-building support) or collaboration with stakeholders (NGOs) regarding SSM practices?

- Did you experience any resistance or difficulty from your buyers or other stakeholders (for example, media and trade union leaders) regarding the implementation of SSM practices after the 2013 Rana Plaza factory collapse? If yes, how did you deal with it?

Sample Questions for Multiple Stakeholders

Questions for Buyers and Industry Associations

- Could you please tell me your designation and role in your organisation?
- Could you please describe your previous work experience with sustainability practices?
- Does your organisation have a formal sustainability policy? If yes, what does sustainability mean to your company?
- Does your organisation have sustainability initiatives? If yes, what are these initiatives and practices? If not, why?
- Why have these SSM initiatives been integrated into your company?
- How does your organisation select your suppliers or member suppliers?
- Do you have your own codes of conduct (CoC) or use third-party standards e.g. ISO, SA, WRAP for selecting suppliers?
- How would you engage with your suppliers or member suppliers?
- How does your organisation monitor direct and indirect suppliers' SSM practices? How frequently do you monitor them?
- What are the difficulties/barriers, if any, that you face in monitoring them?
- How does your organisation respond in situations where any member does not meet or exceed expectations concerning the standard SSM practices?
- Do you feel a sense of accountability for your suppliers' SSM practices? Would you please explain?
- Does your organisation exert any influence or pressure over your suppliers to ensure SSM implementation? Would you please explain?

- Are you aware about of any kind of supplier development (for example, training, workshops and other technical knowledge-building support) or collaboration with stakeholders (NGOs) regarding suppliers' SSM practices?
- Did you experience any resistance or difficulty from your stakeholders (media, NGOs, donor agencies and governments) regarding the implementation of SSM practices after the 2013 Rana Plaza factory collapse? If yes, how did you deal with it?
- What do you think might help apparel suppliers to implement SSM practices?

Questions for Trade Unions

- Could you please tell me your designation and role in your current organisation and previous work experience?
- What are the key activities of your organisation in relation to the apparel sector?
- How do your union members contribute to the development of the apparel sector?
- How do your union members participate in the factory's management to address general workers' issues and demands in the apparel sector (working conditions, health and safety and minimum wages)?
- How do your union members create pressure on their firms (suppliers) to ensure workers' demands are met? Would you please explain (protests and strikes)?
- Have you experienced any resistance/disputes against apparel suppliers or industry associations regarding the improvement of working and labour conditions? If yes, how did you deal with it?
- How effective are the codes of conduct and laws, if any, guiding the operations of the apparel suppliers?
- Do the buyers monitor these codes of conduct? Does the government monitor these laws?

- Did you experience any support from apparel suppliers or other stakeholders (government, donor agencies and media) regarding the improvement of sustainability practices after the 2013 Rana Plaza factory collapse? Would you please explain?
- Are you aware of any kind of workers' development initiatives (health and safety training, workshops and other technical knowledge-building support) at the factory level or outside the factory?
- What do you think might help apparel suppliers to better address factory workers' issues and implement sustainability practices?

Questions for Government Inspectors and Third-party Auditors

- Could you please tell me your designation and role in your current organisation and previous work experience?
- What are the key areas of your organisation that contribute to the improvement of SSM implementation in the apparel sector?
- Can you please describe the audit or assessment process?
- Do you follow a supplier rating system? If yes, would you please explain?
- How does your organisation inspect direct and indirect suppliers' SSM practices? How frequently you inspect these suppliers?
- What are the difficulties/barriers, if any, that you face in monitoring them?
- How does your organisation respond in situations where any member does not meet (is non-compliant) or exceed expectations concerning the standard SSM practices?
- Does your organisation exert any influence or pressure on suppliers to ensure SSM implementation? Would you please explain?
- Did you experience any resistance or difficulty from apparel suppliers and other stakeholders (industry associations) regarding the implementation of SSM practices after the 2013 Rana Plaza factory collapse? If yes, how did you deal with it?

- Did you experience any support from apparel suppliers or other stakeholders (development agencies and supranational organisations) regarding the improvement of sustainability practices after the 2013 Rana Plaza factory collapse? Would you please explain?
- How has the implementation of sustainability practices changed since the 2013 Rana Plaza disaster? Please share your own experience.
- Are you aware about of any kind of sustainability development initiatives (training, workshops and other technical knowledge-building support) at the factory level or outside the factory?
- What do you think might help apparel suppliers to better address and implement SSM practices?

Questions for NGOs and Development Agencies

- Could you please tell me your designation and role in your current organisation and previous work experience?
- What are the main activities of your organisation?
- What are the key activities of your organisation in relation to the sustainability implementation of the apparel sector?
- Are you aware of any kind of sustainability development initiatives (training, workshops and other technical knowledge-building support) at the factory level or outside the factory? Would you please explain?
- Does your organisation exert any influence or pressure on suppliers or other stakeholders to ensure SSM implementation? Would you please explain?
- Did you experience any resistance or difficulty from suppliers and other stakeholders (industry associations, government and buyers) regarding the implementation of SSM practices after the 2013 Rana Plaza factory collapse? If yes, how did you deal with it?

- Did you experience any support from apparel suppliers or other stakeholders (media, government, trade associations and buyers) regarding the improvement of sustainability practices after the 2013 Rana Plaza factory collapse? Would you please explain?
- How has the implementation of sustainability practices changed since the 2013 Rana Plaza disaster? Please share your own experience.
- What do you think might help apparel suppliers to better address and implement SSM practices?

Questions for Local Media

- Could you please tell me your designation and role in your current organisation and previous work experience?
- What are the key activities of media in relation to the apparel sector?
- How do you report the news regarding the activities/incidents of the apparel sector?
- How does the reported news influence the public perception about the SSM implementation in the apparel sector? Would you please explain?
- Does your organisation exert any influence or pressure on suppliers or other stakeholders to ensure SSM implementation? Would you please explain?
- Did you experience any resistance or difficulty from suppliers and other stakeholders (industry associations, government and buyers) while reporting the 2013 Rana Plaza factory incident? If yes, how did you deal with it?
- Did you experience any support from apparel suppliers or other stakeholders (NGOs) regarding the improvement of sustainability practices after the 2013 Rana Plaza factory collapse? Would you please explain?
- How has the implementation of sustainability practices changed since the 2013 Rana Plaza disaster? Please share your own experience.
- What do you think might help apparel suppliers to better address and implement SSM practices?

Appendix 2 – Ethics Approval Letter

MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA
UNIVERSITY OF NEW ZEALAND

Date: 03 February 2017

Dear Shobod Nath

Re: Ethics Notification - **4000017186 - Embedding sustainability into global supply chains: Evidence from Bangladeshi Apparel Suppliers**

Thank you for your notification which you have assessed as Low Risk.

Your project has been recorded in our system which is reported in the Annual Report of the Massey University Human Ethics Committee.

The low risk notification for this project is valid for a maximum of three years.

If situations subsequently occur which cause you to reconsider your ethical analysis, please contact a Research Ethics Administrator.

Please note that travel undertaken by students must be approved by the supervisor and the relevant Pro Vice-Chancellor and be in accordance with the Policy and Procedures for Course-Related Student Travel Overseas. In addition, the supervisor must advise the University's Insurance Officer.

A reminder to include the following statement on all public documents:
"This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named in this document are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you want to raise with someone other than the researcher(s), please contact Dr Brian Finch, Director - Ethics, telephone 06 3569099 ext 86015, email humanethics@massey.ac.nz. "

Please note, if a sponsoring organisation, funding authority or a journal in which you wish to publish requires evidence of committee approval (with an approval number), you will have to complete the application form again, answering "yes" to the publication question to provide more information for one of the University's Human Ethics Committees. You should also note that such an approval can only be provided prior to the commencement of the research.

Yours sincerely

Research Ethics Office, Research and Enterprise
Massey University, Private Bag 11 222, Palmerston North, 4442, New Zealand **T** 06 350 5573; 06 350 5575 **F** 06 355 7973
E humanethics@massey.ac.nz **W** http://humanethics.massey.ac.nz

Human Ethics Low Risk notification

Dr Brian Finch
Chair. Human Ethics Chairs' Committee and Director (Research Ethics)

Research Ethics Office, Research and Enterprise
Massey University, Private Bag 11 222, Palmerston North, 4442, New Zealand **T** 06 350 5573; 06 350 5575 **F** 06 355 7973
E humanethics@massey.ac.nz **W** http://humanethics.massey.ac.nz

Appendix 3 – Information Sheet

Embedding Sustainability into Global Supply Chains: Evidence from Bangladeshi Apparel Suppliers

INFORMATION SHEET

I would like to invite you to participate in this study which examines why and how Bangladeshi multi-tier apparel suppliers embed sustainability practices into global supply chains. I would like to interview you and explore your views on the implementation of sustainability practices among suppliers like your company. Each interview will last around 45–60 minutes and with your consent will be audio-recorded. I will ensure the confidentiality of all information shared. Please be assured that your participation is completely voluntary and all information will be used for this research only.

Findings from this study will be reported in a PhD thesis. Following the submission of the doctoral thesis, it is possible that aspects of the emergent data will be published in refereed journals, and also presented at conferences. Pseudonyms of all participants, departments, and the institution will be used to safeguard the privacy of the participants.

Your rights

You are under no obligation to accept this invitation. If you decide to participate, you have the right to:

- stop the interview at any time
- ask for the sound recorder to be turned off at any time
- refuse to answer any particular questions
- be given access to a summary of the project findings
- access the full report findings when completed

Contact Details

Thank you for taking time to consider this invitation. If you have any questions about the project, please do not hesitate to contact us.

Researcher
Shobod Deba Nath
School of Management, Albany
Massey Business School
Massey University, New Zealand
M: [redacted] (New Zealand)
M: [redacted] (Bangladesh)
E-mail: S.Nath@massey.ac.nz

Supervisor
Associate Professor Gabriel Eweje
School of Management, Albany
Massey Business School
Massey University, New Zealand
T: +64 9 414 0800 ext. 43388
E-mail: G.Eweje@massey.ac.nz

Committee Approval Statement: The project has been evaluated by peer review and judged to be low risk. If you have any concerns about the conduct of this research that you wish to raise with someone other than researcher(s), please contact Dr Brian Finch, Director (Research Ethics), email: humanethics@massey.ac.nz .

Appendix 4 – Invitation Letter

Dear ……

My name is Shobod Deba Nath, a PhD researcher at the School of Management, Massey University, New Zealand. I would like to invite you to participate in my research "Embedding sustainability into global supply chains: Evidence from Bangladeshi Apparel Suppliers".

The purpose of the research is to examine why and how Bangladeshi multi-tier apparel suppliers implement sustainable supply management practices in global supply chains. The collected information from these interviews will be audio-recorded for academic purposes only with absolute confidentiality. Any possible identifiers of any person or organisation will be removed.

Therefore, I would like to talk you about your understanding and experience regarding sustainability practices of your organisation, in particular supply chain management issues, and ask for your opinions and thoughts. I would be grateful to be given such an opportunity. Would you please give me some time on [day and date], 2017 at 10 am or I will arrange a time at your convenience. Please find details about my research from the attached documents: Information Sheet and Consent Form.

I look forward to your positive feedback.

Kind regards

Shobod Deba Nath

PhD researcher
School of Management, Albany
Massey Business School
Massey University, New Zealand
M: [redacted] (New Zealand)
M: [redacted] (Bangladesh)
E-mail: S.Nath@massey.ac.nz

Appendix 5 – Consent Form

MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA
UNIVERSITY OF NEW ZEALAND

MASSEY BUSINESS SCHOOL

Embedding Sustainability into Global Supply Chains: Evidence from Bangladeshi Apparel Suppliers

PARTICIPANT CONSENT FORM - INDIVIDUAL

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree/do not agree to the interview being sound recorded.

I wish/do not wish to have my recordings returned to me.

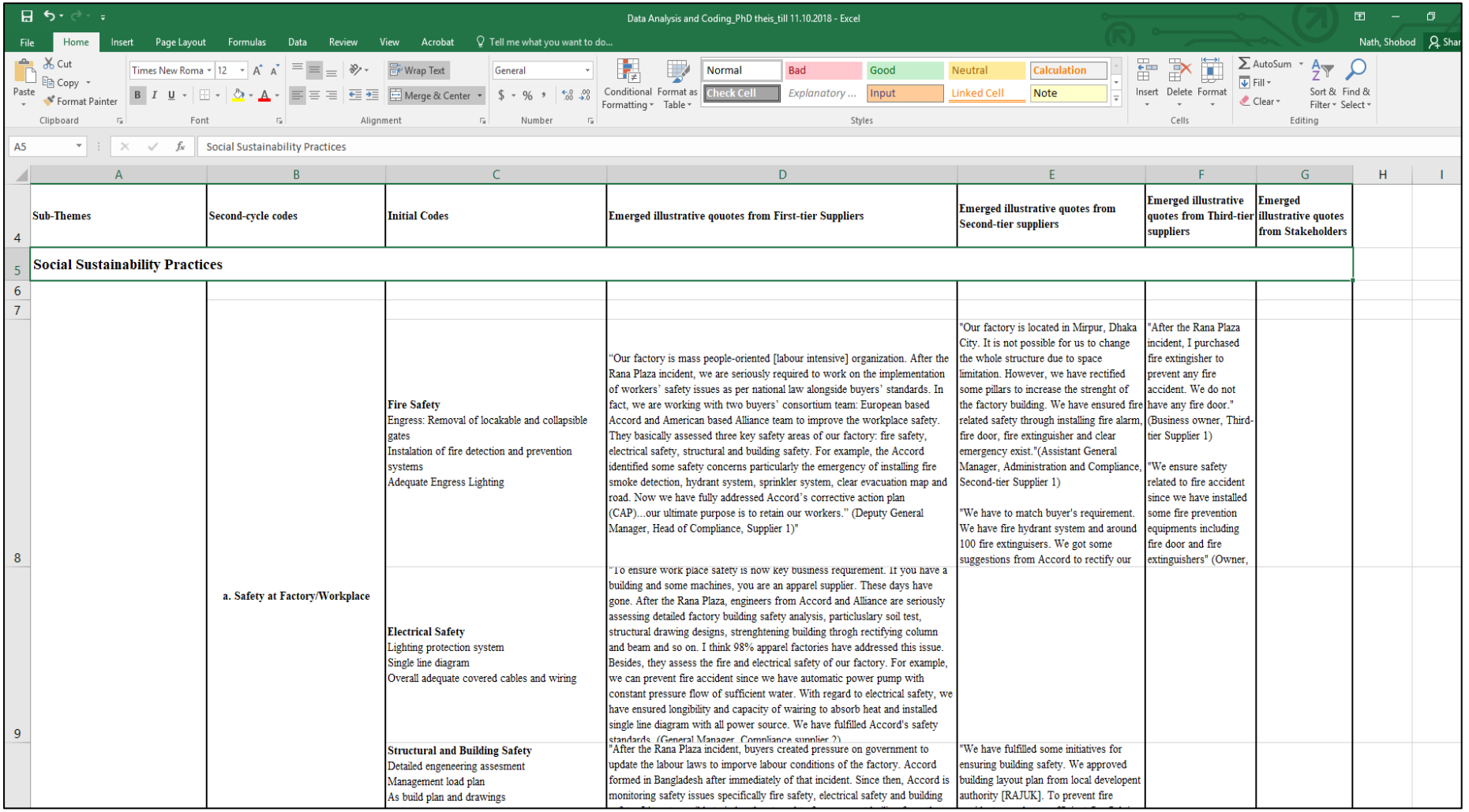
I wish/do not wish to have data placed in an official archive.

I agree to participate in this study under the conditions set out in the Information Sheet.

Signature: ..... **Date:** .....

Full Name - printed .....

Appendix 6 – Sample Screenshots of Data Analysis and Coding Process



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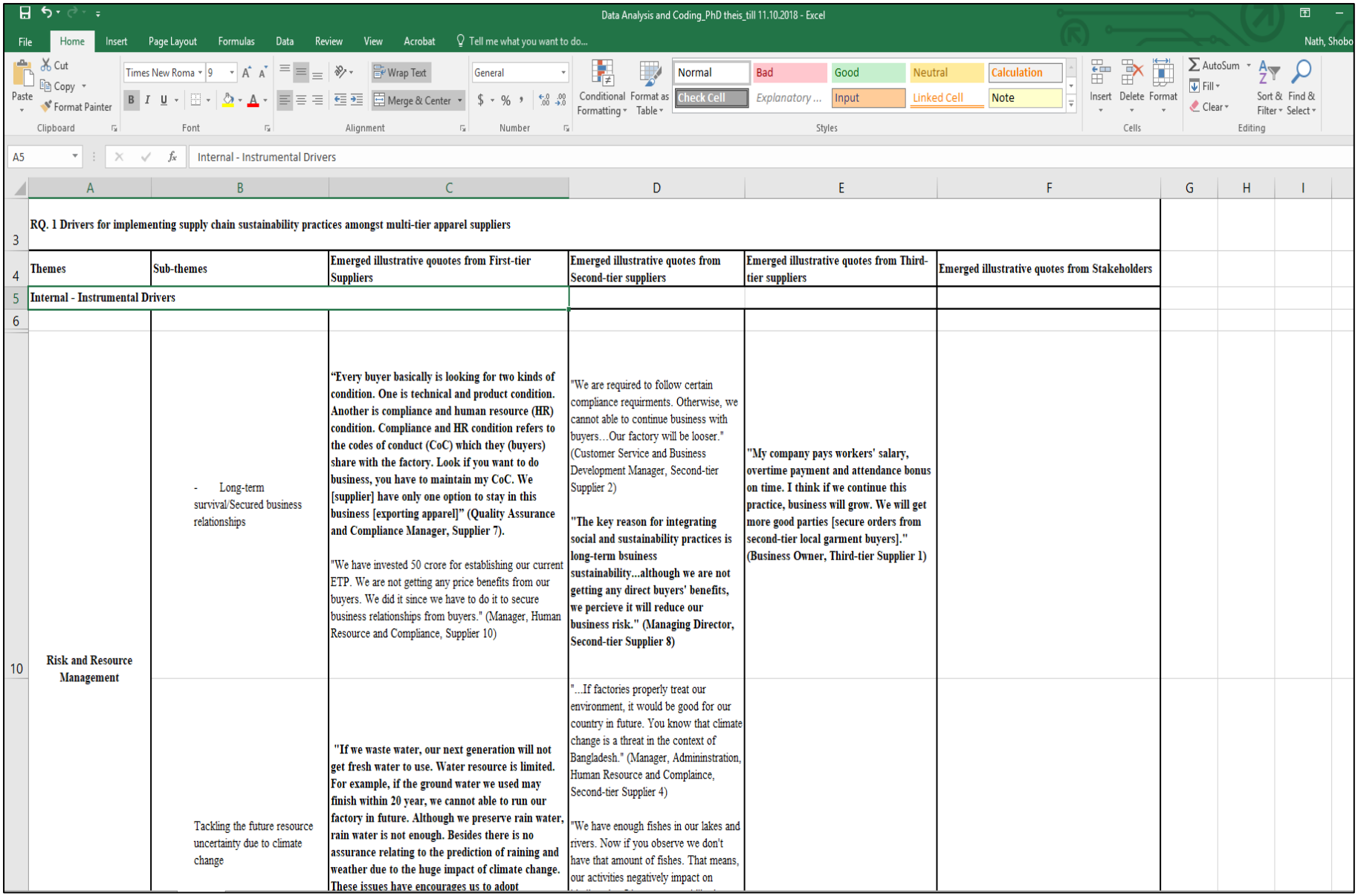
	Sub-Themes	Second-cycle codes	Initial Codes	Emerged illustrative qouotes from First-tier Suppliers	Emerged illustrative quotes from Second-tier suppliers	Emerged illustrative quotes from Third-tier suppliers	Emerged illustrative quotes from Stakeholders
5	**Social Sustainability Practices**						
8		a. Safety at Factory/Workplace	**Fire Safety** Engress: Removal of locakable and collapsible gates Instalation of fire detection and prevention systems Adequate Engress Lighting	"Our factory is mass people-oriented [labour intensive] organization. After the Rana Plaza incident, we are seriously required to work on the implementation of workers' safety issues as per national law alongside buyers' standards. In fact, we are working with two buyers' consortium team: European based Accord and American based Alliance team to improve the workplace safety. They basically assessed three key safety areas of our factory: fire safety, electrical safety, structural and building safety. For example, the Accord identified some safety concerns particularly the emergency of installing fire smoke detection, hydrant system, sprinkler system, clear evacuation map and road. Now we have fully addressed Accord's corrective action plan (CAP)...our ultimate purpose is to retain our workers." (Deputy General Manager, Head of Compliance, Supplier 1)"	"Our factory is located in Mirpur, Dhaka City. It is not possible for us to change the whole structure due to space limitation. However, we have rectified some pillars to increase the strenght of the factory building. We have ensured fire related safety through installing fire alarm, fire door, fire extinguisher and clear emergency exist."(Assistant General Manager, Administration and Compliance, Second-tier Supplier 1) "We have to match buyer's requirement. We have fire hydrant system and around 100 fire extinguisers. We got some suggestions from Accord to rectify our	"After the Rana Plaza incident, I purchased fire extingisher to prevent any fire accident. We do not have any fire door." (Business owner, Third-tier Supplier 1) "We ensure safety related to fire accident since we have installed some fire prevention equipments including fire door and fire extinguishers" (Owner,	
9			**Electrical Safety** Lighting protection system Single line diagram Overall adequate covered cables and wiring	"To ensure work place safety is now key business requirement. If you have a building and some machines, you are an apparel supplier. These days have gone. After the Rana Plaza, engineers from Accord and Alliance are seriously assessing detailed factory building safety analysis, particluslary soil test, structural drawing designs, strenghtening building throgh rectifying column and beam and so on. I think 98% apparel factories have addressed this issue. Besides, they assess the fire and electrical safety of our factory. For example, we can prevent fire accident since we have automatic power pump with constant pressure flow of sufficient water. With regard to electrical safety, we have ensured longibility and capacity of wairing to absorb heat and installed single line diagram with all power source. We have fulfilled Accord's safety standards. (General Manager, Compliance supplier 2)			
			Structural and Building Safety Detailed engeneering assesment Management load plan As build plan and drawings	"After the Rana Plaza incident, buyers created pressure on government to update the labour laws to imporve labour conditions of the factory. Accord formed in Bangladesh after immediately of that incident. Since then, Accord is monitoring safety issues specifically fire safety, electrical safety and building	"We have fulfilled some initiatives for ensuring building safety. We approved building layout plan from local developent authority [RAJUK]. To prevent fire		



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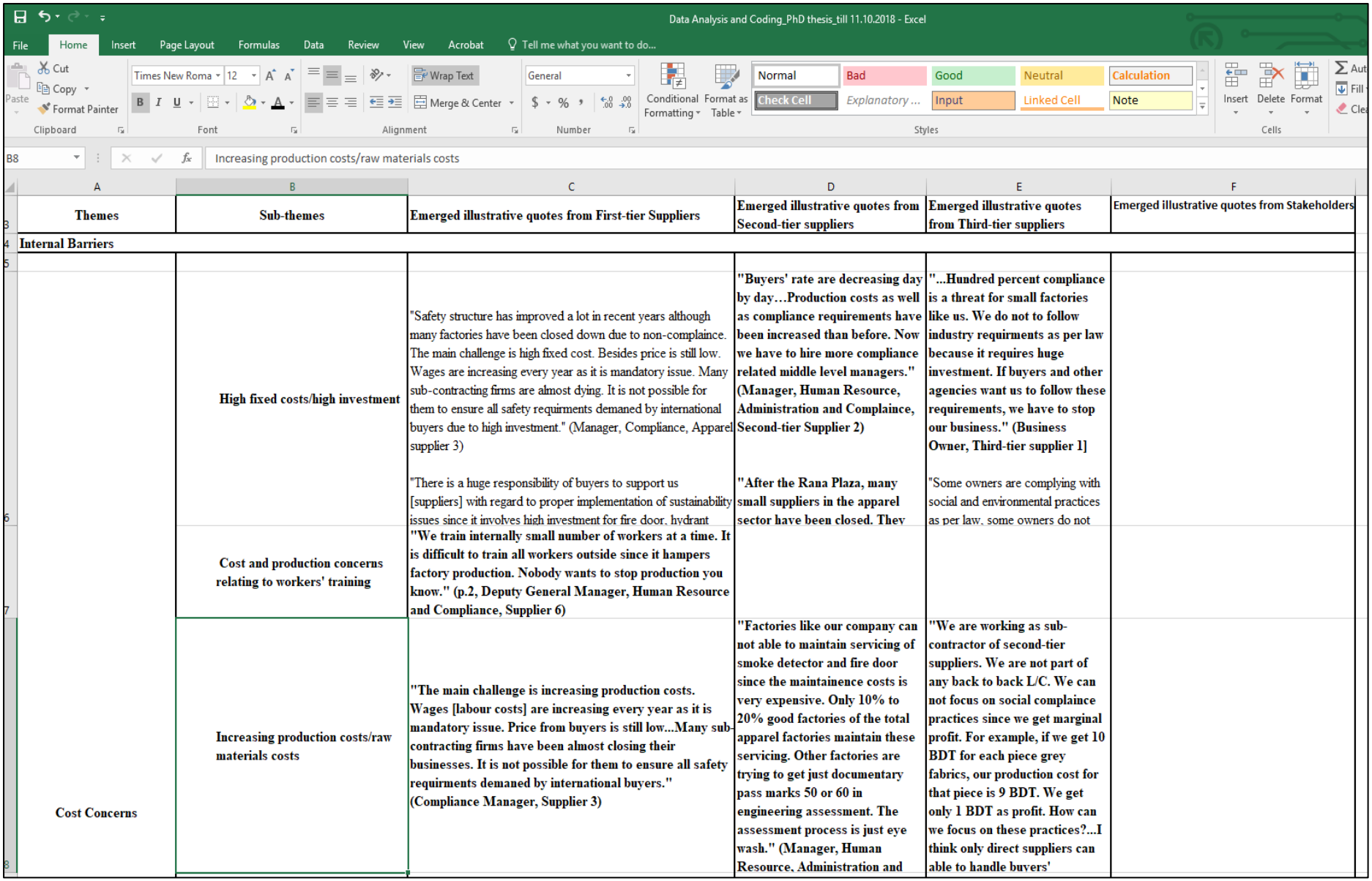
A5 | Internal - Instrumental Drivers

	A	B	C	D	E	F	G	H	I
3	**RQ. 1 Drivers for implementing supply chain sustainability practices amongst multi-tier apparel suppliers**								
4	**Themes**	**Sub-themes**	**Emerged illustrative qouotes from First-tier Suppliers**	**Emerged illustrative quotes from Second-tier suppliers**	**Emerged illustrative quotes from Third-tier suppliers**	**Emerged illustrative quotes from Stakeholders**			
5	**Internal - Instrumental Drivers**								
6									
10	**Risk and Resource Management**	- Long-term survival/Secured business relationships	**"Every buyer basically is looking for two kinds of condition. One is technical and product condition. Another is compliance and human resource (HR) condition. Compliance and HR condition refers to the codes of conduct (CoC) which they (buyers) share with the factory. Look if you want to do business, you have to maintain my CoC. We [supplier] have only one option to stay in this business [exporting apparel]" (Quality Assurance and Compliance Manager, Supplier 7).** "We have invested 50 crore for establishing our current ETP. We are not getting any price benefits from our buyers. We did it since we have to do it to secure business relationships from buyers." (Manager, Human Resource and Compliance, Supplier 10)	"We are required to follow certain compliance requirments. Otherwise, we cannot able to continue business with buyers…Our factory will be looser." (Customer Service and Business Development Manager, Second-tier Supplier 2) **"The key reason for integrating social and sustainability practices is long-term bsuiness sustainability...although we are not getting any direct buyers' benefits, we percieve it will reduce our business risk." (Managing Director, Second-tier Supplier 8)**	**"My company pays workers' salary, overtime payment and attendance bonus on time. I think if we continue this practice, business will grow. We will get more good parties [secure orders from second-tier local garment buyers]." (Business Owner, Third-tier Supplier 1)**				
		Tackling the future resource uncertainty due to climate change	**"If we waste water, our next generation will not get fresh water to use. Water resource is limited. For example, if the ground water we used may finish within 20 year, we cannot able to run our factory in future. Although we preserve rain water, rain water is not enough. Besides there is no assurance relating to the prediction of raining and weather due to the huge impact of climate change. These issues have encourages us to adopt**	"...If factories properly treat our environment, it would be good for our country in future. You know that climate change is a threat in the context of Bangladesh." (Manager, Admininstration, Human Resource and Complaince, Second-tier Supplier 4) "We have enough fishes in our lakes and rivers. Now if you observe we don't have that amount of fishes. That means, our activities negatively impact on					



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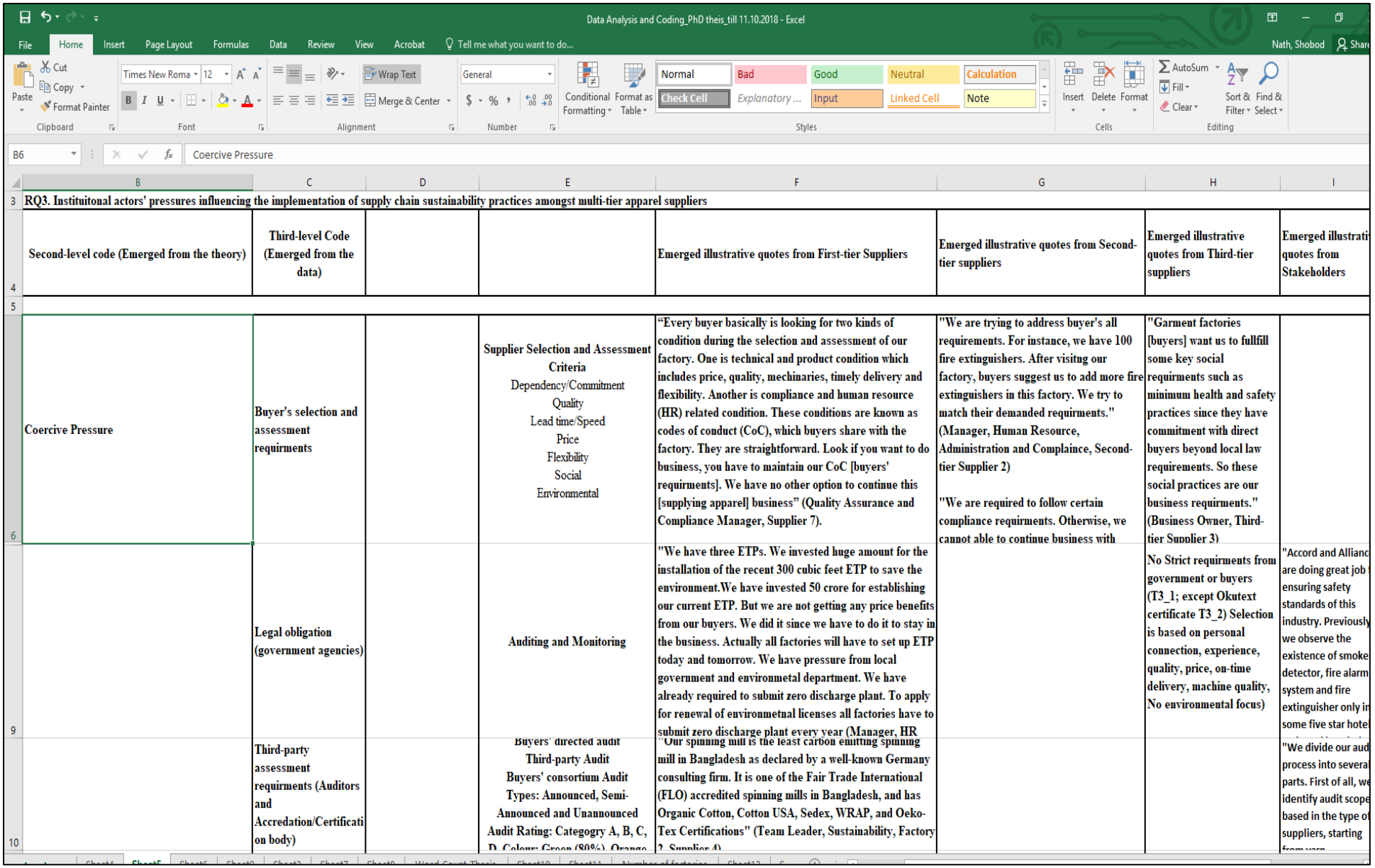
B8 Increasing production costs/raw materials costs

	A	B	C	D	E	F
3	**Themes**	**Sub-themes**	**Emerged illustrative quotes from First-tier Suppliers**	**Emerged illustrative quotes from Second-tier suppliers**	**Emerged illustrative quotes from Third-tier suppliers**	**Emerged illustrative quotes from Stakeholders**
4	**Internal Barriers**					
5						
6		**High fixed costs/high investment**	"Safety structure has improved a lot in recent years although many factories have been closed down due to non-complaince. The main challenge is high fixed cost. Besides price is still low. Wages are increasing every year as it is mandatory issue. Many sub-contracting firms are almost dying. It is not possible for them to ensure all safety requirments demaned by international buyers due to high investment." (Manager, Compliance, Apparel supplier 3) "There is a huge responsibility of buyers to support us [suppliers] with regard to proper implementation of sustainability issues since it involves high investment for fire door, hydrant	**"Buyers' rate are decreasing day by day…Production costs as well as compliance requirements have been increased than before. Now we have to hire more compliance related middle level managers." (Manager, Human Resource, Administration and Complaince, Second-tier Supplier 2)** **"After the Rana Plaza, many small suppliers in the apparel sector have been closed. They**	**"...Hundred percent compliance is a threat for small factories like us. We do not to follow industry requirments as per law because it requires huge investment. If buyers and other agencies want us to follow these requirements, we have to stop our business." (Business Owner, Third-tier supplier 1]** "Some owners are complying with social and environmental practices as per law, some owners do not	
7		**Cost and production concerns relating to workers' training**	**"We train internally small number of workers at a time. It is difficult to train all workers outside since it hampers factory production. Nobody wants to stop production you know." (p.2, Deputy General Manager, Human Resource and Compliance, Supplier 6)**			
8	**Cost Concerns**	**Increasing production costs/raw materials costs**	**"The main challenge is increasing production costs. Wages [labour costs] are increasing every year as it is mandatory issue. Price from buyers is still low...Many sub-contracting firms have been almost closing their businesses. It is not possible for them to ensure all safety requirments demaned by international buyers." (Compliance Manager, Supplier 3)**	**"Factories like our company can not able to maintain servicing of smoke detector and fire door since the maintainence costs is very expensive. Only 10% to 20% good factories of the total apparel factories maintain these servicing. Other factories are trying to get just documentary pass marks 50 or 60 in engineering assessment. The assessment process is just eye wash." (Manager, Human Resource, Administration and**	**"We are working as sub-contractor of second-tier suppliers. We are not part of any back to back L/C. We can not focus on social complaince practices since we get marginal profit. For example, if we get 10 BDT for each piece grey fabrics, our production cost for that piece is 9 BDT. We get only 1 BDT as profit. How can we focus on these practices?...I think only direct suppliers can able to handle buvers'**	



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B6: Coercive Pressure

	B	C	D	E	F	G	H	I
3	**RQ3. Instituitonal actors' pressures influencing the implementation of supply chain sustainability practices amongst multi-tier apparel suppliers**							
4	**Second-level code (Emerged from the theory)**	**Third-level Code (Emerged from the data)**			**Emerged illustrative quotes from First-tier Suppliers**	**Emerged illustrative quotes from Second-tier suppliers**	**Emerged illustrative quotes from Third-tier suppliers**	**Emerged illustrati quotes from Stakeholders**
5								
6	**Coercive Pressure**	**Buyer's selection and assessment requirments**		**Supplier Selection and Assessment Criteria** Dependency/Commitment Quality Lead time/Speed Price Flexibility Social Environmental	**"Every buyer basically is looking for two kinds of condition during the selection and assessment of our factory. One is technical and product condition which includes price, quality, mechinaries, timely delivery and flexibility. Another is compliance and human resource (HR) related condition. These conditions are known as codes of conduct (CoC), which buyers share with the factory. They are straightforward. Look if you want to do business, you have to maintain our CoC [buyers' requirments]. We have no other option to continue this [supplying apparel] business" (Quality Assurance and Compliance Manager, Supplier 7).**	**"We are trying to address buyer's all requirements. For instance, we have 100 fire extinguishers. After visitng our factory, buyers suggest us to add more fire extinguishers in this factory. We try to match their demanded requirments." (Manager, Human Resource, Administration and Complaince, Second-tier Supplier 2)** **"We are required to follow certain compliance requirments. Otherwise, we cannot able to continue business with**	**"Garment factories [buyers] want us to fullfill some key social requirments such as minimum health and safety practices since they have commitment with direct buyers beyond local law requirements. So these social practices are our business requirments." (Business Owner, Third-tier Supplier 3)**	
9		**Legal obligation (government agencies)**		**Auditing and Monitoring**	**"We have three ETPs. We invested huge amount for the installation of the recent 300 cubic feet ETP to save the environment.We have invested 50 crore for establishing our current ETP. But we are not getting any price benefits from our buyers. We did it since we have to do it to stay in the business. Actually all factories will have to set up ETP today and tomorrow. We have pressure from local government and environmetal department. We have already required to submit zero discharge plant. To apply for renewal of environmetnal licenses all factories have to submit zero discharge plant every year (Manager, HR**		**No Strict requirments from government or buyers (T3_1; except Okutext certificate T3_2) Selection is based on personal connection, experience, quality, price, on-time delivery, machine quality, No environmental focus)**	**"Accord and Allianc are doing great job ensuring safety standards of this industry. Previously we observe the existence of smoke detector, fire alarm system and fire extinguisher only in some five star hote**
10		**Third-party assessment requirments (Auditors and Accredation/Certificati on body)**		**Buyers' directed audit Third-party Audit Buyers' consortium Audit Types: Announced, Semi-Announced and Unannounced Audit Rating: Categogry A, B, C, D, Colour: Green (80%), Orange**	**"Our spinning mill is the least carbon emitting spinning mill in Bangladesh as declared by a well-known Germany consulting firm. It is one of the Fair Trade International (FLO) accredited spinning mills in Bangladesh, and has Organic Cotton, Cotton USA, Sedex, WRAP, and Oeko-Tex Certifications" (Team Leader, Sustainability, Factory 2, Supplier 4)**			**"We divide our aud process into several parts. First of all, we identify audit scope based in the type of suppliers, starting**