BENCHMARKING SOCIAL UPGRADING AND DECENT WORK
INDICATORS IN A SOUTH AFRICAN SUSTAINABLE COTTON TEXTILE
AND APPAREL SUPPLY CHAIN

by

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A thesis submitted to the Faculty of the University of Delaware in partial
fulfillment of the requirements for the degree of Master of Science in Fashion and
Apparel Studies

Spring 2014

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ACKNOWLEDGMENTS

I would like to thank first and foremost my advisor Dr. Marsha A. Dickson, who I am honored to have been able to work with and learn from. Without her guidance, wisdom, and support, none of this would have been possible. I am particularly grateful for Dr. Huantian Cao for his support during data collection and expert advise during the writing of this thesis, and for Dr. Daniel Kinderman for his enthusiastic insight and encouragement, which motivated me to broaden my perspective on this topic. I wish to acknowledge Dr. Molly Eckman, whose optimistic outlook and wisdom has been a source of inspiration for me. My grateful thanks are also extended to Heinrich Schultz, the power behind the cluster initiative in South Africa, whose judgment and determination will forever serve as a source of motivation for me. In addition, a deep thank you to all those that helped to facilitate the field research within South Africa, including but not limited to Heinrich Schultz, Gloria Goncalves, Hein Schroder, and Nicky van Hille. To the past researchers in this field, I am indebted to you all for your shared knowledge. Last but not least, I would like to thank my parents and brothers for their unconditional support and love.

This thesis was part of a larger project, “Managing Global Supply Chains for Human Security and Sustainability”, that led to two masters’ theses. This research was supported by grants to Dr. Marsha A. Dickson from the University of Delaware’s Institute for Global Studies and Center for Area Studies.
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This research assessed current work conditions relating to social upgrading and decent work indicators in a pilot cotton textile and apparel supply chain in South Africa. There is currently a new cluster development initiative being implemented within South Africa to sustainably develop the cotton and apparel industry, therefore an opportunity was created to benchmark current working conditions for the future determination of social upgrading and decent work. A case study consisting of desktop research and field research including interviews with a total of ten managers, eight workers, and two extension officers, and collection of archival documentation was conducted. Research was conducted throughout the entire supply chain including farms, gins, a spinning mill, a textile mill, and a garment manufacturer. An instrument was created through the compilation of past research on social upgrading and decent work micro/firm indicators and was supplemented with current contextual issues within South Africa, financial indicators, and factors relating to the resource based perspective theory of competitive advantage. Qualitative data were analyzed through the constant comparison method using a deductive coding guide focused on 11 categories of decent work; inductive analysis identified additional themes. This research revealed that there are strong labor laws in place, social security is provided to workers, and worker rights are protected at all nodes of the supply chain although these were not apparent for seasonal workers at smallholder farms. In additional systemic issues, such as discrimination, were more commonly found at the bottom
of the supply chain, while financial challenges were present throughout the entire supply chain. This research on the entire supply chain showed the need to focus efforts on the bottom of the supply chain, where the majority of challenges were found and where traditional top down efforts to improve working conditions often fail to reach. This study also allowed for a holistic perspective of social upgrading and decent work to be created and for potential challenges to be highlighted, which will allow for the cluster to develop interventions to become a socially sustainable supply chain.
Chapter 1
INTRODUCTION

Due to globalization, apparel supply chains now are spread across the world requiring inputs from many countries to produce a single garment. Because of the vast amount of tiers, or nodes, in apparel supply chains, brands are unable to determine where their raw materials come from and also what the working conditions are like beyond the first tier of garment assembly (Hurley, 2005). One reason supply chains have spread across the world is because buyers in developed nations are constantly seeking out the lowest price for production (Gereffi & Frederick, 2010).

The current structure of the apparel industry is a buyer driven supply chain in which the lead firms make most of the decisions (Gereffi & Frederick, 2010). In some cases the governance of working conditions in apparel supply chains is carried out privately through top down strategies of multinational corporations (MNCS) by establishing codes of conduct and monitoring (Barrientos, Mayer, Pickles, & Posthuma, 2011b). However, these strategies often fail to reach the bottom of the supply chain and can create a large governance gap at beginning nodes of supply chains if there is not sufficient oversight from local governments. Governance gaps at the bottom nodes of the supply chain mixed with the pressure to drive prices down in a buyer driven supply chain, can lead to inadequate working conditions and lack of employment opportunities.

In buyer driven supply chains, lead firms in developed nations take the majority of the value created while suppliers at the lower end of the supply chain
compete for business. Suppliers can either improve quality and productivity to become competitive or lower their prices to compete on price (Milberg & Winkler, 2010). Lead apparel firms rarely provide suppliers with either financial support for investments or a sense of security through long-term contracts, therefore suppliers often do not invest in working conditions improvements and production process upgrades. Instead, many suppliers lower their prices to attract lead firms, which ultimately hurts the workers by undermining working conditions and stifling wages (Plank, Rossi, & Staritz, 2012). The International Labour Organization (ILO) promotes the concept that all workers deserve decent work. Decent work is adequate employment that offers the ability to escape poverty. Working conditions and a lack of employment opportunities can have a negative impact on worker’s well being. Also, suppressed wages and a lack of employment opportunities do not allow workers the ability to provide for their families and live a dignified life, which everyone should be entailed to (ILO, 2008b).

New innovations in sustainable supply chain development are starting to be implemented in the apparel industry to provide decent work and to spur sustainable economic development. A sustainable supply chain is defined as “one that performs well on both traditional measures of profit and loss as well as on an expanded conceptualization of performance that includes social and natural dimensions” (Pagell & Wu, 2009, p. 38). Progressive companies have begun to adjust their sourcing strategies to rely on sustainable supply chains (Pagell, Wu, & Wasserman, 2010). Sustainable supply chain development has the ability to assist in economic growth for the firms involved as well as provide decent work for those workers involved throughout the entire supply chain.
The idea of economic improvement and social improvement can be defined as economic and social upgrading. Economic upgrading is when a firm, industry, nation, or in this case supply chain, upgrades its processes to increase value added and therefore increase the revenue stream. Upgrading can take place within entire sectors, supply chains, or firms depending on the circumstance. Social upgrading involves improvements in wages, working conditions, economic rights, gender equality, and economic security for workers (Milberg & Winkler, 2010). Social upgrading occurs when workers are included in the upgrading process and is also synonymous to decent work (Goto, 2011). Sustainable supply chains are a viable mode of economic upgrading as they can increase value added throughout the supply chain (Sathe & Crooke, 2010). Economic upgrading can lead to social upgrading, however social upgrading is not always guaranteed to come with economic upgrading (Barrientos, Gereffi, & Rossi, 2011a). Due to the many factors that influence social upgrading, different rates of upgrading can occur throughout a supply chain (Hedberg, 2013). Yet there is a gap in research that addresses the factors that impact social upgrading and decent work throughout an entire apparel supply chain. Therefore the indicators of social upgrading and decent work, and measurements of progress against them, should be a focus of sustainable supply chain development to ensure that social upgrading will accompany economic upgrading throughout the supply chain.

The ability for a firm to economically upgrade is dependent on its ability to be competitive. The resource based perspective (RBP) theory states that a firm’s competitiveness is determined by the capabilities and resources it possesses (Branco & Rodrigues, 2006). There are tangible capabilities and resources such as capital and assets, and intangible capabilities and resources such as employee skill level, loyalty of
employees, geographic location, and company reputation. The intangible capabilities and resources of a firm can be developed through investments in worker development. The RBP theory supports the idea that social upgrading can be conducive to competitiveness and thus economic upgrading. However, it also states that a firm’s tangible resources must be sufficient to invest in intangible resources (Branco & Rodrigues, 2006). This means that there must be enough capital and financial backing to invest in worker development programs. This also supports the notion that economic upgrading must take place either before or in tandem with social upgrading, but social upgrading can also promote competitiveness and foster additional development. There has been recent progress when it comes to developing the capabilities and resources of suppliers in apparel supply chains to foster economic upgrading and social upgrading.

A supply chain engineering company, OrganiMark, is working to empower farmers in agriculture supply chains with a bottom up private governance structure rather than the prominent top down governance structure found in many apparel supply chains. The private governance structure they intend to provide includes: the promotion of organic agriculture, skill development and training, implementation of traceability strategies from the farm forward, and connecting organic producers to various markets. Bottom up private governance structures such as this, work to support the bottom of the supply chain by transferring some of the value added into the suppliers at the beginning of the supply chain. As a result, power is distributed more evenly between players in a supply chain. The hope is that when more of the power and value added is transferred to the farmers, the agriculture supply chains will become more supplier driven rather than buyer driven. While OrganiMark was
originally created to help smallholder organic farmers become competitive, they recently collaborated with other stakeholders in the South African apparel industry, such as the South African government and Cotton SA (a non-profit that represents the South African cotton industry), to help develop the Southern African Sustainable Cotton Textile and Apparel Cluster, which is focused on developing a sustainable supply chain for cotton within South Africa. This cluster will promote sustainable economic development with business and industry initiatives and government initiatives. This cluster has the potential to improve the lives of the workers within the supply chain by providing decent work. Assisting the creation of decent work can allow workers to permanently escape poverty and help to improve the competitiveness of an industry through increased worker productivity (Geren, 2010).

OrganiMark, along with the Southern African Sustainable Cotton Textile and Apparel Cluster, has recently developed a pilot sustainable supply chain within South Africa. The entire supply chain from cotton agriculture to retail exists within the country. The cluster’s efforts to bring economic growth have the potential to bring about social upgrading and therefore decent work for the employees involved throughout the entire supply chain. Social upgrading can improve people’s lives due to increases in workplace aspects such as wages, working conditions, and union rights (Goto, 2011).

In the beginning phase of the pilot supply chain, it is valuable to measure the current situation for workers with criteria that can be used to later determine whether social upgrading and decent work within each node has been achieved. Researchers have proposed certain criteria and indicators to measure and determine the extent of social upgrading and decent work. Many of the proposed indicators that past research
and theoretical papers have suggested are common throughout all publications. These include indicators such as wages, working conditions, health and safety, gender issues, and union rights including freedom of association (Anker, Chernyshev, Egger, Mehran, & Ritter, 2003; Barrientos, et al., 2011b; Milberg & Winkler, 2010). While many of the indicators and criteria suggested are similar, there are variations and different areas of focus. For example, some research stresses union rights (Goto, 2011), while others focus on the conditions at work (Barrientos, Gereffi, & Rossi, 2010). A study looking at different Asian garment producing countries determined that it is important to incorporate a worker point of view when addressing decent work conditions (Goto, 2011). No prior research has been conducted to simultaneously determine which decent work and social upgrading criteria are appropriate to benchmark working conditions at the firm level for each node of an apparel supply chain.

Sustainable supply chains have the potential to provide decent work and social upgrading to workers throughout the supply chain through economic development. However, the lack of uniform measuring tools for decent work and social upgrading throughout entire supply chains at the firm level represents a gap in current research. The creation of the Southern African Sustainable Cotton Textile and Apparel Cluster’s pilot supply chain creates the perfect opportunity to set benchmarks for the current condition of workers for future determination of social upgrading as the cluster’s goals are pursued. Measuring the current situation is also helpful for informing the interventions that could be carried out by the cluster as intentional efforts to support social upgrading for workers.
Purpose of the Study

The purpose of this study was to understand the current situation of workers employed throughout a pilot sustainable supply chain created by the Southern African Sustainable Cotton Textile and Apparel Cluster, using indicators of social upgrading and decent work. The specific objectives were as follows:

1. Identify potential contextual challenges for achieving social upgrading and decent work in the pilot supply chain.

2. Develop an instrument that can be used to measure working conditions in each node of the supply chain and track progress towards social upgrading and decent work; creation of this instrument incorporates worker perspective.

3. Establish profiles of current working conditions for each supply chain node, thus creating a benchmark for future determination of social upgrading.

4. Operationalize what a sustainable supply chain is from a social perspective for the Southern African Sustainable Cotton Textile and Apparel Cluster.

Operational Definitions

Social upgrading- In regard to this thesis social upgrading refers to the improvements in workers’ lives in the broad aspects such as: wages, working conditions, economic rights, gender equality, economic security, and others (Milberg & Winkler, 2010). This upgrading is rooted in decent work, in which a decent job can help provide for a decent life. In this study social upgrading is a sought after outcome of economic upgrading.

Sustainability- For the purpose of this thesis, sustainability is defined as the promotion of the triple bottom line: profit, people, planet. In order to be truly sustainable, a company needs to benefit each of the three aspects. Without a healthy
and strong workforce a business cannot run efficiently, just as without natural resources a company is likely to fail due to lack of inputs. This study will focus on the social aspect of sustainability and proposes that in order for a supply chain to be sustainable, the workers within it must benefit from decent work.

Sustainable supply chain- For the purpose of this thesis a sustainable supply chain is “one that performs well on both traditional measures of profit and loss as well as on an expanded conceptualization of performance that includes social and natural dimensions” (Pagell & Wu, 2009, p. 38). While this provides a concept, there is not a measurable definition of what a sustainable supply chain is in social terms. Therefore, one objective of this study is to operationalize a sustainable supply chain in terms of social aspects within the pilot supply chain being studied.

Assumptions and Limitations

An assumption of this study was that the measurements of social upgrading, that were designed to be used at a macro level, would be able to be adapted for use at the micro, worker level.

One major limitation of this study is that criteria measured for social upgrading and decent work for workers took place in only one pilot supply chain located in South Africa. Presumably, the suppliers chosen for the supply chain were better than others in terms of their readiness to address and improve upon issues relating to environment and social sustainability. Issues relating to working conditions and human rights change as the geographic location changes and there are many issues that can impact human rights and working conditions. Therefore, this study will only be fully relevant to the supply chain in South Africa and the work that is being done with the Southern
African Sustainable Cotton Textile and Apparel Cluster, and may not even accurately represent the situation of those companies who might later join the cluster.
Chapter 2

LITERATURE REVIEW

A brief overview of apparel supply chains sets a framework for a discussion of decent work, economic upgrading, social upgrading, and governance mechanisms initiated to improve working conditions. Subsequently, an in-depth analysis of past research of these topics is presented. Next, the theory of resourced based perspective is introduced. Finally, the sustainable supply chain development strategy being developed within South Africa is outlined.

Apparel Supply Chains and their Governance

The apparel industry is a buyer driven supply chain. This means that the major apparel brands, lead firms, have the majority of the power and influence, and are the decision makers throughout the entire supply chain (Gereffi & Frederick, 2010). There are two ways that suppliers from lesser-developed nations (LDCs) can become competitive in the buyer driven apparel industry: either take the ‘high road’ or the ‘low road’ (Milberg & Winkler, 2010). While the high road focuses on increasing productivity, the low road focuses on lowering costs, which ultimately means less money for wages and less money to support decent working conditions. Suppliers in LDCs often lower costs, including wages and working conditions, to attract buyers from the developed world (Plank, et al., 2012). This has been supported by a sourcing strategy referred to as a purchasing portfolio, which has been favored by lead firms in the apparel industry. The purchasing portfolio strategy is based on minimizing
sourcing costs any way possible. It supports the idea that switching manufacturers on a case-by-case basis to get the best deal is the most efficient way to run a business and is based on an assumption that there is no need for long-term relationships (Kraljic, 1983). The purchasing portfolio sourcing strategy paired with buyer driven supply chains have led to a race to the bottom mentality and created an industry that values cheap production. The availability of cheap apparel goods makes it harder for suppliers that do not take the low road to compete unless they supply a niche market or have value added, high road strategies (Rossi, 2013). Due to the emphasis on cheap production, traditional apparel supply chains do not tend to foster decent work.

**Decent Work**

Decent work is defined by the ILO as employment that is:

- Productive and delivers a fair income; provides security in the workplace and social protection for workers and their families; offers prospects for personal development and encourages social integration;
- gives people the freedom to express their concerns, to organize and to participate in decisions that affect their lives; and guarantees equal opportunities and equal treatment for all (ILO, 2008b, p vi).

In order to address and promote working conditions across the world, the ILO created the Decent Work Agenda. The Decent Work Agenda has four different pillars that when improved in tandem can create positive change. These pillars are creating jobs, protecting worker rights, and promoting both social protection and social dialogue (ILO, 2008b). While the Decent Work Agenda was created with the focus of development of decent work at a national level, the concept of decent work can be applied at the sector and firm level as well.

A decent work deficit is created when there are inadequate employment opportunities (ILO, 2001). This can lead to the viscous circle where people are stuck
in poverty and are not able to pull themselves out. Also, when workers are not properly paid, they cannot afford required health care or proper food, therefore they do not preform at their optimal levels. However, when workers are provided decent work they have the ability to live happy and fulfilled lives (ILO, 2008b).

Not only is decent work necessary for people in order to live a dignified life, it is also necessary in order to have sustained economic growth because it allows workers and industries the ability to become productive and more competitive (ILO, 2008b). Empirical research looking at two comparable factories showed that the facility that promoted decent work, quality working conditions, and fair wages had higher productivity than the facility that did not promote decent work (Locke & Romis, 2010). Decent work is a necessity because all humans deserve the opportunity to live a dignified life, but also to ensure that there can be sustained economic growth. Decent work can be strengthened through the process of economic and social upgrading.

**Economic Upgrading**

Economic upgrading is when a firm, supply chain, or industry adds value to the products that they produce or increases productivity (Milberg & Winkler, 2010). Economic upgrading can be the result of innovative strategies, technology upgrades, improved efficiencies and productivity, and value added activities among many others. There are four recognized types of economic upgrading; these are improving the process of production (process upgrading), increasing the value of product (product upgrading), increasing firm functions available (functional upgrading), and increasing the technology in the production chain (chain upgrading) (Barrientos, *et al.*, 2011a).
The cluster will stimulate economic development through skill development and training, adding value to products by promoting sustainable principles and providing transparency for buyers, increasing capacity of production across the supply chain, promoting investments in technology, and pooling national resources for greater use (Schultz, 2013). These are all aspects which Porter (1990) claims will make a nation more competitive. Through the creation of this cluster, there should be economic development in the South African cotton and apparel industry in the next few years. However, Milberg and Winkler (2010) analyzed the connection between economic upgrading and social upgrading and concluded that although some theories have proposed a definite link between economic upgrading and social upgrading, social upgrading is not guaranteed to be a result of economic upgrading.

Social Upgrading

Social upgrading is the improvement of livelihoods through employment and societal aspects such as: “wages, working conditions, economic rights, gender equality, and economic security” (Milberg & Winkler, 2010, p.1). Social upgrading is also synonymous with decent work. In fact, past research has defined social upgrading as the “promotion of the four dimensions of ‘Decent Work’” (Goto, 2011, p. 945). In this research, social upgrading will be referred to as the process taken to receive decent work. There have been a variety of governance strategies, both public and private, that have been developed to spur economic and social upgrading and to promote decent work.
Governance Strategies

The ILO has proposed some solutions to addressing a decent work deficit such as enacting a public investment policy at the national level through their Employment-Intensive Investment Programme (ILO, 2004). This is just one example of a proposed solution to decent work deficits that takes the form of public governance from states. Other solutions by way of public governance may include national laws and governmental regulation (Barrientos, et al., 2011b). While public governance can improve decent work deficits, “there are significant limits to the models that have developed to date” (Barrientos, et al., 2011b, p 313).

After poor working conditions, an example of a decent work deficit, in apparel supply chains were exposed in the 1990s, MNCS began to implement private governance initiatives. Some lead companies made an effort to take responsibility for the working conditions within their supply chains through the implementation of codes of conduct and also monitoring and auditing programs. These programs rarely reach beyond the first tier of the supply chain and generally have shown little results (Locke, Qin, & Brause, 2007). This leaves the bottom of the supply chain (i.e., cotton farmers through textile production) unaffected by the private governance of brands (Hurley, 2005).

Locke (2013) proposed that there should be collaboration between private and public governance to effectively promote working conditions. The sustainable supply chain development strategy being implemented by the cluster incorporates both public and private governance to promote sustainable development that could positively impact workers.
Past Research on Economic Upgrading, Social Upgrading, and Decent Work

Assessing the impact of economic upgrading on social upgrading and decent work is common in both conceptual papers (Barrientos, et al., 2011a; Milberg & Winkler, 2010) and empirical research (Goto, 2011; Hedberg, 2013; Rossi, 2013). To better understand what social upgrading and decent work constitutes, past research proposing indicators of social upgrading and decent work will be discussed. Next, past conceptual research on economic upgrading, social upgrading, and decent work will be examined, followed by empirical research regarding the same topics.

Indicators of Social Upgrading and Decent Work

Past research has proposed drivers of social upgrading (Barrientos, et al., 2011b), measures for social upgrading (Milberg & Winkler, 2010), and decent work indices and measures (Anker, et al., 2003; Bonnet, Figueiredo, & Standing, 2003; Ghai, 2003; ILO, 2008a). Some of the drivers of social upgrading are the quantity of jobs in relation to gender, ability for women to balance productive and reproductive work, wages, job security, quality of jobs, and benefits offered (Barrientos, et al., 2011b). Similarly, Milberg and Winkler (2010) describe social upgrading as improvements in the areas of wages, working conditions, economic rights, gender equality, and economic security.

The indicators of social upgrading have also been separated into two categories. The first category is measurable aspects, which consists of wages, wellbeing, and employment security. The second category, enabling rights, consists of freedom of association and collective bargaining rights (Plank, et al., 2012; Rossi, 2013).
The ILO (2008) categorized various measurable decent work indicators into 11 types, which include the following: employment opportunities, wage and productive work, working time, combining work family and personal life, work that should be abolished, work security, equal opportunity and treatment, safe work, social security, social dialogue, and lastly the economic and social context of employment. These are the same 11 categories in which Anker, et al., (2003) divided decent work indicators. Ghai (2003) categorized decent work indicators based on the ILO’s four pillars of decent work, which include employment, social security, basic rights, and social dialogue.

Past research also further categorized the criteria for social upgrading (Milberg & Winkler, 2010) and decent work (Bonnet, et al., 2003) depending on what context was being measured and included the macro/nation, meso/sector, or micro/firm. This is an important aspect especially when focusing on the micro/firm-level, as some indicators for social upgrading will not be observable at this micro/firm-level such as a nation’s unemployment rate. This study focuses on social upgrading at the micro/firm-level.

Past Conceptual Research

In theory, social upgrading is a function of employment and pay, tying social upgrading to wage determination (Milberg & Winkler, 2010). Two major theories outline wage determination, neoclassical and institutionalist theory. The neoclassical theory claims that wages are determined by technology, so when there is economic upgrading and technological improvements wages will increase. Institutionalist theory claims that wages are determined by the broader context including bargaining power of the workers (Milberg & Winkler, 2010).
Theoretical papers have suggested that union rights can be a determining factor for social upgrading and thus decent work (Barrientos, et al., 2011b). In fact, some researchers define social upgrading as the improvement of union rights because this allows for improvement in working conditions (Barrientos, et al., 2011b; Plank, et al. 2012). Union rights, including freedom of association and right to collectively bargain, allow for workers to speak up and demand the wages and working conditions that they deserve. Generally, when workers are regularly employed and have union rights, they have a greater opportunity to achieve social upgrading when economic upgrading occurs in the firm (Plank, et al., 2012). Union rights can provide workers an opportunity to improve certain measurable standards such as, wages and hours of work (Plank, et al., 2012). This is due to the fact that those measurable standards are often included in collective bargaining agreements, an outcome of successful unionization and collective bargaining. The presence of unions is generally dependent upon the nation in which the workers live, therefore it is also necessary to address the important of the context in which social upgrading and decent work is being evaluated.

An exploratory paper suggests that there are factors in the broader context that can have an impact on social upgrading. Local organizations and governments can provide social dialogue and social protection, two of the four pillars that lead to decent work (Warnecke & de Ruyter, 2012). Governments can support social upgrading by regulating local labor laws, providing labor inspectors, and providing social security for workers. Also trade unions can help the social dialogue by giving workers voice and helping resolve issues (Warneck & de Ruyter, 2012). In addition to these contextual aspects, Goto (2011) proposed that worker profiles, including skill level
and discrimination imbedded in local culture, could impact the ability for workers to socially upgrade.

**Past Empirical Research**

Conventionally it was believed that economic upgrading would automatically bring social upgrading and thus decent work. However, it turns out that social upgrading in theory is quite different than social upgrading in practice (Plank, *et al.*, 2012).

Each different type of economic upgrading can bring different opportunities and difficulties for social upgrading. Rossi (2013) conducted research at first tier apparel factories in Morocco to assess the economic and social upgrading that had taken place. This empirical research looked at process, product, and functional upgrading and found that each different type brought different outcomes for the workers. Process upgrading improved aspects of working conditions such as working hours for workers, while product upgrading allowed for workers to build their skills and knowledge (Rossi, 2013).

Functional upgrading proved both beneficial to social upgrading and harmful, causing social downgrading, because the pressures that lead firms had driven downward throughout the supply chain required the need for a flexible workforce. Manufacturers created a flexible workforce by employing regular employees, those that benefited from social upgrading, and an irregular or temporary workforce, those that did not benefit from social upgrading and were the victims of downgrading (Barrientos, *et al.*, 2011b; Rossi, 2013). Irregular workers were hired on a temporary bases and were not given any benefits. This research showed that regular workers benefited from written contracts, higher wages, and steadier hours while irregular
workers were hurt. Also, regular workers expressed improved relationships with managers and increased respect which could have a positive impact when it comes to enabling rights and the degree to which they participate in decision making within the factory (Rossi, 2013). Thus, the discrepancies between regular and irregular, or permanent and temporary, worker need to be taken into account when evaluating social upgrading or decent work.

The unequal upgrading for regular and irregular workers is supported by other empirical research that focused on decent work in first tier garment exporters based in Asian countries. The study showed that pressure to lower prices from lead firms had a negative effect on workers even when there was economic development present (Goto, 2011). This means that top-down pressure from lead firms can take away the probability that economic development would create social upgrading for workers. Goto (2011) explains “social upgrading lags behind economic upgrading as suppliers must prioritise cost reductions if they are to attract international buyers” (p. 955).

Empirical research that compared garment factories in both Morocco and Romania confirmed conceptual beliefs that the context which firms are located in can impact social upgrading. This research found that Romania’s socialist nature resulted in higher levels of labor regulation, inspectors, and supported unions. This resulted in higher union acceptance, better health and safety standards, and formal employment contracts. In comparison, there was little state governance in Morocco. Instead, the governance was through industry codes, referred to as the Fibre Citoyeene. The private governance improved the monitoring of labor standards and also increased the awareness of the importance of compliance (Plank, et al, 2012). The context and
different governance structures in these two countries impacted working conditions in different ways.

In addition, research conducted by Pipkin (2011) looked at social upgrading within first tier suppliers in the apparel export industries of Guatemala and Colombia. This also showed that the context in which the manufacturing facility was located contributed to the extent of social upgrading. A few of the contextual aspects that impacted social upgrading were trade relations with the United States (both countries’ most important export market), the importance of the industry to the nation, and international experience of business leaders (Pipkin, 2011). When the government fostered the development of the apparel industry through an export-oriented model, there was more growth and foreign investment. Also, it was common for Guatemalan managers to work or study abroad in the United States, whereas it was not in Colombia where they tended to stay in-country. International experiences of the Guatemalan managers allowed them to be more in sync with international labor standards and knowledgeable on different business strategies (Pipkin, 2011). These two aspects increased the competitiveness of the industry and promoted economic development.

All the research that I have found which looks at the social upgrading and decent work within apparel supply chains takes place at the first tier. The first tier in apparel supply chains consists of the garment assembly facilities. While one study was at the farm level (Hedberg, 2013), it was in the produce industry and did not look at any other nodes. It is necessary to take into account the entire supply chain and the workers that are involved at each node. It is also important to set the foundation for a longitudinal study because there has not been any research that has compared the state
of social upgrading and decent work before and after a development initiative to determine its success. This is especially important with new strategies aimed at sustainable development in apparel supply chains.

From this overview of prior research it is also apparent that there is adequate research, studies, and scholarly papers that offer indicators that can be used to evaluate social upgrading and decent work. While past research has led to a variety of criteria for measuring social upgrading and decent work, it is beneficial to have a single instrument that outlines those aspects that lead to social upgrading and decent work at the firm level. One objective of this study was to cross reference past research and create an instrument that can be used to measure the necessary criteria to evaluate social upgrading and decent work.

This research is focused on measuring social upgrading and decent work throughout an entire apparel supply chain. There have been various unsuccessful attempts to promote and regulate working conditions in apparel supply chains, however the recent pursuit of a sustainable supply chain development strategy warrants a closer look. In order to determine if this development strategy is a viable method for promoting decent work, a baseline must first be created. This research creates a reference point for future research by developing an instrument and collecting data related to decent work and social upgrading at a micro/firm level. As a result what a sustainable supply chain should be in terms of social aspects for workers can be envisioned and intervention strategies to achieve this can be proposed.

**Theoretical Framework**

Although social upgrading is not guaranteed to accompany economic upgrading, economic upgrading is a prerequisite for social upgrading and thus decent
work (Milberg & Winkler, 2010). Improving labor standards without the necessary economic support can undermine the competitive advantage of that firm or industry (Mosley & Uno, 2007). In relation to this study, there must be economic development in the South African cotton and apparel supply chain in order for the workers to benefit from social upgrading and achieve decent work. Economic upgrading indicates greater competitiveness in producing a certain item.

**Resource Based Perspective**

The resource based perspective (RBP) theory of firm competitiveness is founded on the notion that a firm’s performance is based on the resources and capabilities that it controls/embodies. A firm’s resources can be intangible or tangible. Intangible resources are exclusive to each firm and are difficult for competitors to replicate. Some intangible resources are: firm reputation, employee knowledge and skills, and also employee commitment and loyalty. Tangible resources include financial assets and physical property (Branco & Rodrigues, 2006). Both types of resources are necessary for success, however because intangible resources are harder to replicate and are unique to companies they are considered more important when focusing on developing a sustainable competitive advantage within a firm.

Intangible resources require tangible resources in order to be implemented effectively (Branco & Rodrigues, 2006). Although intangible capabilities like skills, knowledge and loyalty to a firm are very important, investments into these capabilities are not possible if the financial backing, tangible resources, are not present. Therefore this theory supports the concept that economic upgrading, which will bring sufficient tangible financial resources, must be present in order for companies to invest in intangible capabilities, training and better working conditions.
Branco and Rodrigues (2006) propose that a company can create a sustainable competitive advantage by, “effectively controlling and manipulating their resources and capabilities that are valuable, rare, cannot be perfectly imitated, and for which no perfect substitute is available” (p. 112). One way they suggest to do this is to invest in socially responsible (SR) business strategies that develop internal intangible resources and capabilities (Branco & Rodrigues, 2006). By investing in resources and capabilities such as training, skill development, and HR management policies, a company can increase productivity and quality of production, thus creating a competitive advantage. By investing in employee wages and flexible working hours, employee motivation and commitment could improve, creating a harder working, loyal and more experienced staff that then improves competitiveness of the company (Branco & Rodrigues, 2006).

The concept of investing in skills and capabilities of firms is further supported by Rossi (2013) who stated, “economic upgrading was identified as the path to pursue a high road of development built on skills and added value, in contrast to that built on exploiting developing countries’ comparative advantage on cheap labor costs” (p. 223). Therefore, the improvement of skills and capabilities within firms is a suggested way to bring economic development.

Competitiveness is a prerequisite for the South African cotton and apparel industry in order to upgrade and develop economically. The Southern African Sustainable Cotton Textile and Apparel Cluster plans to initiate interventions aimed at increasing the competitiveness of the cotton textile and apparel industry within the country. Their interventions include training, assisting in the development of small and medium sized businesses, supporting farmers progress to become more sustainable
and profitable, introducing new technology, assessing feasibility of new value added processes, developing business technology platforms that improve business operations, and pooling resources between members to increase abilities. All of these aspects will foster the improvement of the internal resources and capabilities within firms.

The RBP theory states that investing in internal capabilities and resources that directly impact workers will create a sustainable competitive advantage (Branco & Rodrigues, 2006). Not only will this improve the prospect of economic development, but it also reinforces aspects which past research has proposed as drivers of social upgrading. Although the internal capabilities have the opportunity to support further development of firms, there must be sufficient tangible resources in the beginning to invest in those intangibles. The new supply chain development strategy in South Africa is focused on developing both intangible and tangible capabilities and resources; therefore improvements in social upgrading and economic upgrading should take place in the future.

**Context for this Research**

The supply chain engineering company OrganiMark has helped to create the Southern African Sustainable Cotton Textile and Apparel Cluster. Within the cluster there are representatives from the South African government, retailers, manufacturers, suppliers, service providers, and unions. The cluster’s main focus is promoting economic development in the cotton textile and apparel industry and “creating the capacity of its members to participate in this niche market [sustainable textiles and apparel]” (Schultz, 2013, p. 6). The cluster provides a combination of both public and private governance structures, which will fully integrate the entire supply chain from
cotton agriculture to retail. The private governance will include sustainable cotton initiatives and integrated supply chain programs, such as business platforms to ensure transparency and the facilitation of collaboration among the industry. Public governance will be in the form of governmental programs that focus on fostering industry growth. Locke (2013) claims that the combination and collaboration of public and private governance systems is the ideal way to promote labor standards. In addition to this governance structure, the cluster will also encourage suppliers to take the high road through sustainable cotton, textile, and apparel production to increase the value added to the goods produced.

The cluster will focus on assisting in the development and advancement of all nodes of the supply chain including farms, cotton gins, spinning and textile mills, and garment manufacturers through various interventions. Some of those interventions involve increasing training, fostering small business development, introducing new technology, pooling resources together to increase capacity, developing a system to offer fully traceable goods, fostering collaboration between members, and supporting the adoption of sustainable principles (Schultz, 2013). The outcome of these interventions are hoped to include increased sales, jobs created, companies and people trained, and increased cotton production (Schultz, 2013). The strategy that the cluster is implementing supports the resource based perspective (RBP) in that it is investing in capabilities and resources to improve the competitiveness of the firms involved. While the main goal is for economic development there is high prospects for social upgrading and improvements in decent work.

There is a gap in research that analyzes how sustainable supply chain development strategies, such as those being undertaken by the Southern African
Sustainable Cotton Textile and Apparel Cluster, impact social upgrading and decent work across time. There also has not been any research that measured working conditions throughout an entire supply chain against social upgrading and decent work criteria at the firm level. This research offers a prime opportunity to collect data that can provide a benchmark for the future determination of social upgrading and decent work.
Chapter 3

METHODS

The purpose of this research was to create a benchmark of current working conditions for workers in a pilot sustainable supply chain recently initiated in South Africa by the Southern African Sustainable Cotton Textile and Apparel Cluster to highlight potential problem areas and in order for future determination of social upgrading. The research approach was a case study. A case study is defined as, “an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident” (Yin, 2009, p. 18). Data were collected through both desktop research and field research primarily consisting of interviews and supplemented with archival data.

This case study sought to highlight aspects of working conditions that reflect social upgrading and decent work. This will provide information for the future creation of interventions and strategies to address potential shortcomings. It is believed that social upgrading will lead to decent work, which is the actualization of a job that allows workers to escape poverty and provide a decent life for their families.

Desktop Research

Desktop research was conducted to inform the development of this instrument to be used in interviews and provide a broader context to the case study. Desktop data were used to identify known risks and shortcomings of decent work and working
conditions in South Africa. Reports from organizations such as Human Rights Watch, the International Labour Organization, and the United States State Department were used. These reports were chosen because they represented the most prominent human and labor rights publications available. Themes in worker rights violations within the cotton and other agriculture supply chains were highlighted. Trade data and trade regulation were also reviewed since improved export performance is one goal of the pilot supply chain. Because theory suggests that higher exports will lead to economic development, it is necessary to incorporate the current trade situation into the broader context of the supply chain (Milberg & Winkler, 2013).

Desktop research was also used to capture the common ideals and perspectives from civil society such as union members from a few of the largest unions in South Africa, including the Southern African Confederation of Agriculture Unions (SACAU), Southern African Clothing and Textile Workers’ Union (SACTWU), and Congress of South African Trade Unions (COSATU). Perspectives from the South African Department of Labour and labor rights activists from South Africa were assessed through published reports. In addition, data and opinions on a new government initiative, the Preferential Procurement Policy Framework Act (PPPFA) were collected. Ideally, interviews would have been conducted with these stakeholders, however due to limited time, funds, and scope of this study, desktop research was used to construct a societal and contextual view of the supply chain. In addition, desktop research prior to interviews was conducted to determine macro data such as average earning per employment position (a criteria suggested by Anker, et al., 2003). In total the desktop research created an overview of some of the major
contextual challenges that will need to be measured and potentially addressed when promoting social upgrading and decent work in South Africa.

**Field Research**

Field research was conducted within various locations in South Africa along the supply chain. The main source of data collection was through interviews, however archival research was also conducted to supplement interviews. In order to conduct field research, an instrument needed to be developed to direct data collection.

**Instrument Development and Procedures**

In order to create the interview schedule I compiled past research that discussed social upgrading and decent work indicators and also contextual issues that were found during desktop research into a table that was organized based on the 11 main categories of decent work outlined by the ILO (2008a) (see Appendix A for social upgrading and decent work indicators). Various sets of proposed social upgrading and decent work indicators were combined in order to create a list of indicators that allowed for the levels of social upgrading and decent work for workers to be benchmarked at the micro-level across all nodes of the apparel production supply chain, from farm to garment assembly. Heavily drawn upon was research regarding the measurement of decent work from the ILO (2008a). Measurements proposed by the ILO (2008a) for decent work consist of various indicators that fall within 11 categories including: employment opportunities, wage and productive work, working time, combining work family and personal life, work that should be abolished, work security, equal opportunity and treatment, safe work, social security, social dialogue and worker representation, and lastly the economic and social context. Indicators
within the ILO’s tool that apply to firm-level analysis were adopted, such as hourly pay, percentage of women workers, and rate of unionization. Indicators from the 11 categories were supplemented with others proposed by Milberg and Winkler (2010) and Barrientos, et al. (2011b). Some of the indicators included for discussion in the interviews were ratio of permanent to temporary workers, employee contracts, women’s ability to balance reproductive and productive work, working hours, and unpaid family labor.

In addition to the past decent work and social upgrading research, the instrument took into account those major issues found during desktop research that are currently in South Africa pertaining to decent work and social upgrading. Topics related to the inequality of men and women, discrimination of immigrants, lack of rural education, poor safety standards on farms, poor labor standards at apparel manufacturers, and low rates of unionization at farms were aligned with the 11 categories of indicators to ensure that questions would be asked that directly address the main contextual issues. For example, the instrument asked for information about the percentage of women in the workplace in all positions including management due to the prevalence of gender inequality in South Africa.

Considerations based upon the resource based perspective (RBP) theory were taken into account to determine aspects that relate to capability and resource development. For example, because the RBP theory puts an emphasis on the importance of internal investment, questions for managers relating to training and skill development were developed. Costs of implementing these strategies, their future plans and opinions regarding sustainability, and also details about the company’s
competitive strategies were also addressed in the instrument (see Appendix B for additional indicators).

Open-ended questions providing both quantitative and qualitative data were used. Separate interview schedules were created for managers and workers. Questions for managers sought to collect data on topics related to decent work and social upgrading indicators as well as topics related to managerial values and internal investment relating to RBP such as hiring practices, proportion of temporary workers, investments in training and skill development, social security expenditures, and safety practices. One goal of this study was to understand worker perspectives, therefore open-ended questions allowed the interviewees to give their opinion and point of view on the importance of the various dimensions of decent work. Questions for workers were designed to investigate topics such as wages, discrimination, the balance of work and family life, fair treatment, decent hours of work, and job security. Open-ended questions allowed workers to provide their outlook on issues related to livelihood and working conditions. Open-ended questions were used for both worker and manager interview schedules to reveal issues that were not previously addressed and to allow the participants to add their knowledge and understanding to these topics (see Appendices C and D for interview schedules).

Important aspects of the instruments developed were that they provide quantitative data that can be used for comparison in the future. In order to obtain answers that directly related to the predetermined social upgrading and decent work indicators, some questions focused on obtaining quantitative data on wages, number of injuries on site, rate of unionization, and other topics. Littrell and Dickson's (2010) work was referenced for examples of close-ended quantitative questions that produce
ratings. Littrell and Dickson (2010) successfully used a Likert-type scale to measure happiness on a scale of 1-5 by using pictures of sad and happy faces to represent different levels of happiness. After hearing the different levels of happiness the workers chose which choice fit them best in regards to different aspects of work and life.

The interview schedule created was semi-structured, or what Yin (2009) refers to as a focused interview, using predetermined close-ended questions and open-ended questions that could lead to the discussion of new topics (Ryan, Coughlan, & Cronin, 2009). It was important to ask the same set of predetermined questions to ensure validity. The order of questions followed that suggested by Ryan, et al., (2009); demographic questions were first, then factual questions that focused on general noninvasive aspects, followed by the potentially sensitive questions at the end that related to treatment, equality, discrimination, and job satisfaction. Probes were created in order to anticipate which questions may need further description and to ensure that the interviewee’s answer would address certain topics of importance. These proactive probes, created before the interview, were supplemented with spontaneous, reactive, and emergent probes that emerged on the spot depending on interviewee response and were used in a more conversational method as suggested by Willis (2005). Willis (2005) also recommended that questions be worded in simple language that is easy to understand, so questions were created using noncomplex language.

Setting and Participants

The setting for this case study consisted of various locations across South Africa. Interviews were conducted with both workers and managers from firms at each node of the cotton supply chain including farms, gin, spinning facility, textile mill, and
garment manufacturer. Due to the fact that this research focused on one pilot sustainable supply chain for a South African retailer, there was a limited number of firms involved and they were not randomly selected from the industry.

The organization OrganiMark, a leader within the Southern African Sustainable Cotton Textile and Apparel Cluster, identified the firms where interviews were conducted. The size of the firms ranged from smallholder farms to larger commercial enterprises. Research was conducted during a two-week period from January 20 to January 31, 2014. Two days were spent in the first region where interviews were conducted at a gin, a smallholder farm, and a commercial farm. In the second region, interviews were conducted at a smallholder farm and gin in one day. One day was spent with the retailer in a third area. Interviews were also conducted at a textile mill and spinning facility in the same region. Lastly, interviews were conducted with a garment manufacturing facility in a fourth region.

The initial plan had been to conduct interviews at two facilities per node, however due to time constraints of the research team, the hosting organization, and firms within the supply chain, only one firm per node was interviewed (except for the smallholder farm and gin level). It had also been proposed that I would have access to two managers per node and six workers per node that I would select to interview, with a total of eight managers and 24 workers. However, in total there were 10 managers, eight workers, and two extension officers interviewed. At the smallholder farms the owners of the farms were categorized as managers, even though they do work in the fields. One smallholder farmer and farmworker representative was interviewed and counted as one worker because he provided a worker perspective. The distribution of interviews conducted at each node is outlined in Table 3.1.
Table 3.1

*Number of managers and workers interviewed per supply chain node*

<table>
<thead>
<tr>
<th>Supply Chain Node</th>
<th>Managers</th>
<th>Extension officers</th>
<th>Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smallholder Farm</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Commercial Farm</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Gin</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Spinning Mill</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Textile Mill</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Garment Manufacturer</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>2</td>
<td>8</td>
</tr>
</tbody>
</table>

The small number of workers interviewed was due to many factors. At the farms and gins the majority of workers are employed during the harvest season. Because field research was conducted just after planting season most of the employees were not present. Instead an interview was conducted with a farmer representative. There was an extension officer present both when interviews were conducted with smallholder farmers and with the farm representative. Extension officers are employed by the South African Department of Agriculture and provide resources and training for smallholder farmers. At the spinning mill I was able to interview three different workers that the manager had chosen. The workers ranged in positions within the factory, years worked there, and age. At the textile mill, due to time constraints of the business there was limited time available for us to speak with both managers and workers, so only two workers were briefly talked to. The two workers were chosen by the manager due to the different positions that they had in the workplace and with the union. At the garment manufacturer, only two workers were available for interviewing due to the fact that it interrupted workflow to take them off the production line. The
factory manager chose which two workers could be pulled from the factory floor to ensure that production would not be disrupted.

Procedures

I used a modified consent form, which was read to each interviewee before tape recorders were turned on. The modified consent form described the research and also informed the interviewee that participating was unpaid, confidential, voluntary, that there was no potential to be harmed, and asked permission to use a tape recorder. The consent form was ‘modified’ because I did not have interviewees sign the form. I did not think that interviewees with limited education or formal background would be comfortable signing a document that they may not be able to read. Instead, after reading the modified consent form, I received a verbal consent that the interviewees understood and were willing to participate in this study. Tape recordings were made during all interviews. This ensured complete accuracy of recorded data. Hand written notes were taken to supplement the verbal dialogue that took place. No translators were needed throughout the interviews, as English is predominantly spoken as a second language.

Tape recordings were transcribed after the interviews were conducted. The transcribed interviews were entered into the qualitative data software program, NVivo. In some cases archival data was collected through separate documents that were given to me regarding company and worker information during the interviews. These documents were also entered into NVivo.

Quantitative data from interviews and archival documentation consisting of collective bargaining agreements and company documents were organized into an Excel document. Data was categorized to reflect the instrument created for the
interviews. This allowed similar data for each category to be compared across the supply chain.

Data Analysis

A coding guide providing a “descriptive framework” (Yin, 2009, p.131) was created to deductively analyze the qualitative data. The coding guide included different topics and areas of interest related to the major topics being studied (see Appendix E for the coding guide and descriptive framework). The coding guide included the separation of the five nodes of the supply chain: cotton farming, ginning, spinning, textile production, and the manufacturing of the goods. The supply chain nodes were separated because it is important to understand the differences in decent work and social upgrading for workers at various positions across the supply chain. The coding guide also separated the data from workers and managers. Content topics were also included in the coding guide; these related to the 11 areas of interest pertaining to decent work and social upgrading and additional topics relating to RBP theory.

Qualitative data were coded using the constant comparative method of coding described by Glaser and Strauss (1967). The constant comparative method is a tactic used when coding data that requires the researcher to continually compare the coded areas of data to each other to ensure that all data sets are in fact related and belong in a certain category or group. One benefit of this method is that it allows for previously unknown themes to appear (Yin, 2009).

After qualitative data were deductively coded using the coding guide and the constant comparative method, themes not addressed previously began to emerge. I used an inductive process of pattern matching as described by Yin (2009) to analyze
the data further. Patterns were looked for between: workers within the same node and also workers throughout the supply chain, and also managers within the same node and also throughout the supply chain. This analysis allowed additional themes to be identified and coded within the data.

After the qualitative data were analyzed and coded, I used an explanatory analysis technique as suggested by Yin (2009). This allowed me to connect the data with a proposed explanation about why it is the way it is. With this some potential drivers and suppressors of social upgrading and decent work were highlighted and relate to the themes identified inductively.

Initially quantitative data were planned to be analyzed separately, however due to the limited time allotted for interviews and the small sample size of workers limited quantitative data was collected. Some quantitative aspects such as the exact number of safety incidents or the exact number of women in management positions were not obtained. Due to the small amount of quantitative data, it did not allow statistical analysis. Quantitative data were organized with regards to the categories of the descriptive framework created for coding.

**Ethical Considerations**

All ethical considerations were taken into account when conducting this study. This study did not harm or violate participants in any way. This study followed Institutional Review Board (IRB) standards. Before conducting interviews all interview schedules and intention of research were approved by the IRB, and received exempt status due to its noninvasive nature (see Appendices F and G for modified consent narratives, Appendix H for protocol, and Appendix I for IRB approval form).
Chapter 4

RESULTS

Desktop Research: Current South African Context

In order to better understand the current context of the supply chain in South Africa, desktop research was conducted prior to instrument development and field research. Current issues relating to decent work were sought out in documents and publications from various international and South African sources.

This section discusses a number of issues currently present within South Africa that relate to the 11 key categories of decent work presented by the ILO (2008a). In addition, other contextual topics impacting decent work and social upgrading were found and are discussed here including the following: separation and differences of cultures, current legislation pertaining to labor rights, and the role that Bargaining Councils play in the country. In addition, current trade data showing the competitiveness of the cotton, textile, and apparel industry and the enactment of a new government initiative aimed at economic development for the industry are discussed to provide a broader economic context of the garment supply chain.

Decent Work

While employment opportunities are limited in South Africa, women and young adults are especially at risk. In 2013 South Africa had a total nationwide unemployment rate of 24.7% and an unemployment rate of 69.3% for citizens between the ages of 15-34 (South African Department of Labour, 2014). Women in South
Africa tend to have higher unemployment rates than men and women make up only 41% of the workforce (Congress of South African Trade Unions (COSATU), 2013). Also, women are not as prominent in decision-making positions or directors of companies. The major trade union, COSATU (2013), reported that only 14.7% of women are in decision-making positions, while only 7.1% of directors of companies are women. This shows that there is notable inequality when it comes to women in the workplace.

In regards to adequate earnings and productive work, a prominent issue was identified within the agriculture sector and with clothing manufacturers. While there is not a national minimum wage set in South Africa, there are minimum wages for farmworkers set by the Sectoral Determination of the Department of Labour. While the minimum wage for farmworkers in South Africa is already one of the lowest national minimum wages with earnings at R1,375 per month, Human Rights Watch (HRW) (2011) found that the women farmworkers they interviewed earned on average less than this at R1,192 per month.1 Also, migrant labor is common for agriculture work where discrimination and suppressed working conditions have been reported (US State Department, 2012).

It was reported in 2011 that numerous clothing manufacturers in Newcastle, KwaZulu-Natal continually failed to pay legally prescribed wages for that sector (Gina, 2011). On April 12, 2013 the “2012/2013 Clothing Industry Bargaining Council Wage Agreement” was extended to apply to all companies, including those that are not a member of the Bargaining Council (Kriel, 2013b). This made the wage

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1 The currency exchange rate on April, 24 2014 for $1 US dollar was the equivalent to R10.63 South African Rand
agreement legally binding for all clothing manufacturers in South Africa, whereas before it was only applicable for signatory companies represented by the Bargaining Councils (Kriel, 2013b). The ruling was after a few foreign owned clothing manufacturers won a temporary case in March 2013 declaring that could pay employees wages below those set by the Clothing Industry Bargaining Council (Kriel, 2013b). In May of 2013 10,000 members of SACTWU held a strike to demand that companies in KwaZulu-Natal pay workers the legally prescribed minimum wage (Kriel, 2013a).

The main issues related to decent working time were found to be located at smallholder farms. There were reports of misdocumentation of hours worked and failure to pay overtime to the workers (US State Department, 2012). When assessing ability to combine work, family, and personal life it is important to remember that in South Africa there is a large number of households that are single-parent with only a woman running the household. The empowerment of the woman is the empowerment of the household, however the suppression of the woman can have negative impacts on the household they support. Human Rights and Business (2006) deemed this to be a moderate risk and issue within South African workplaces because the discrimination against women could result in negative impacts on the family unit. At the farm level, many migrant workers live on the farms where they may be under strict and unfair rules that disallow family visits. In addition to this, violations against maternity leave were found at agriculture farms (HRW, 2011).

The main issue pertaining to work that should be abolished is the issue of migrant labor being subject to forced labor at farms. At the farm level child labor laws are rarely enforced, however the rest of the formal sector does have adequate child
labor law and inspectors (US State Department, 2012). Thus, when interviewing workers and managers at farmers it was important to determine if workers are migrants, what rights they are provided, and also how they were hired. It is common knowledge that labor brokerage often leads to forced labor, as migrants are put into jobs that they are paid lower than promised and without knowledge, ability to speak the language, papers to leave, and possibly in debt to the brokers that got them the jobs (Verite, 2010).

Stability and security of work is a main component regarding decent work. Migrant workers are common in agriculture industries due to the increased amount of labor needed for the busy harvest season. These migrant and temporary farm workers may not have equal status or rights given to them as compared with permanent workers (HRW, 2011). The South African Department of Labour (2014) stated that the rise of casual labor is one of the main challenges when it comes to improving labor conditions within the country. There has been an increase in the frequency that employees are hired on a temporary or part-time basis, also 6% of total employment consists of atypical, temporary or contracted, work (South African Department of Labour, 2014).

Migrant workers on farms are also a concern when it comes to equal opportunity and treatment in employment. There have been many cases of xenophobic violence where migrants are the subjects of brutality (COSATU, 2013). This xenophobia could lead to poor treatment in the workplace for migrants. Before apartheid ended the South African government categorized citizens based on four different ethnicities: Black, Coloured, Indian/Asian, and White. Although law does not segregate these groups anymore, the differences and separation can still be seen.
Besides migrants, other vulnerable groups within South Africa include women, Blacks, Coloureds, indigenous groups, those infected with HIV/AIDS, and homosexuals (Human Rights & Business, 2006). Other organizations have included young workers in this group, because the unemployment rate is much higher for young workers (COSATU, 2013). It is important to understand if there is any discrimination of these vulnerable groups at the workplaces. Under the South African law all workers, even legal refugees and migrants, are protected under the same labor laws, therefore they should be treated so. Because illegal immigrants are not protected under South African labor law, they are even more vulnerable to poor working conditions and treatment. In 2011, poor working conditions and violations of labor rights were found at 12 clothing manufacturers in the South African town of Newcastle in KwaZulu-Natal. During an inspection by the Department of Labour, almost 50 illegal immigrants were found in unhygienic, unsafe working conditions and being housed in inhuman quarters (Gina, 2011). The report published by SACTWU stated that, “The employment of undocumented foreign workers is usually only done to evade labour and human rights as such workers are vulnerable and have no or very little recourse to the law” (Gina, 2011, n.p.).

Under South African law all workers, including legal migrants, are to be provided a set amount of days for sick leave and benefits. A report by Human Rights Watch (2011) found that one-third of farmworkers did not receive sick leave, even if they provided doctors notes for their employers. If they were ill they had to pay for their own treatment and lose out on the days wages. If there are not free clinics in the area, a visit to the doctor could cost the same as a farm worker’s weekly wage (HRW, 2011). Also, various clothing manufacturers in Newcastle, KwaZulu-Natal failed to
make the necessary contributions to the Unemployment Insurance Fund (UIF), which all employers are required to pay into for each employee (Gina, 2011). Failure to disclose the actual number of employees can result in employees being unable to obtain unemployment pay if they lose their job. The government is responsible and provides pensions to those 60 years old and above (Social Security Administration, 2013).

Farms are again the major area of concern when it comes to safe work environments. Commercial farms tend to abide by the Occupational Health and Safety (OHS) standards set by the South African government, while some smallholder farms are continually found to be lacking in OHS standards (Business Rights & Business, 2006; US State Department, 2012). Sexual harassment has been found to be present on farms (Rural Education, Awareness & Community Health, 2006) as well as domestic violence towards women on farms especially if they are secluded and separated from family groups (HRW, 2011). Additional areas that need to be attended to include pesticide exposure, the use of personal protective equipment (PPE), sanitation and availability of drinking water, toilets and hand washing facilities, and the rate of injuries (Fair Labor Association, 2011).

When looking at social dialogue, workers’ and employers’ representation issues were found at the farm level where many workers may not be covered by a union due to the difficulty of organization (COSATU, 2013). There were a total of 99 strike reports in country, mainly in the mining, agriculture, and transportation sectors (South African Department of Labour, 2014). There was a violent strike at a vineyard in 2012 in the Western Cape that ended with two fatalities (US State Department, 2012). Regardless of that incidence, unions are able to freely organize and in the year
of 2011-2012 there were no reported violations of collective bargaining agreements (US State Department, 2012). There are different associations and organizations of farmers within South Africa, for instance the African Farmers’ Association of South Africa (AFASA), which facilitates skill building and collaboration through study groups and regional farmer associations (AFASA, 2011).

Lastly in regards to the economic and social context for decent work the main issues within South Africa are related to immigration, education, discrimination against women, and the presence of communicable diseases. South Africa has the most asylum application in the world with 220,000 asylum seekers in 2011, mainly from Bangladesh, the Democratic Republic of Congo, Ethiopia, Somalia and Zimbabwe (The United Nation Refugee Agency (UNHCR), 2013). In addition, 63,000 refugees were registered in 2011. It was estimated that there would be 565,520 refugees and asylum seekers in South Africa at the end of 2013 (UNHCR, 2013). This high number of migrants face xenophobia in both violence towards them and in receiving documentation. The inability to receive documentation means that these workers may not be able to receive social service benefits such as health care (UNHCR, 2013).

There is a lack of access to education in rural areas (Human Rights & Business, 2006). It was reported that young girls in South Africa face discrimination and sexual violence both at school and in their communities. This treatment creates a male dominant society where the women may grow up to succumb to or fear men (Bhana, 2012). This culture could be translated into the workplace where women are discriminated against or not provided equal opportunity. The high presence of
communicable diseases such as HIV/AIDS and tuberculosis pose potential issues as it could impact the health of workers or be a cause for discrimination (COSATU, 2013).

Other Contextual Issues

According to the 2011 South African census, there were 51.8 million people living in the country. Historically within South Africa, people have been categorized within four ethnic groups: “Black” (for people of African descent), “Coloured” (mixed-race descent), “Indian” (or “Asian” for descendants of immigrants from India and Southeast Asia), and “White” (European descent)” (Valchev, Vijver, Nel, Rothman, Meiring, 2013, p. 1079). The South African population is distributed as follows: 79.8% are Black, 8.9% are Coloured, 2.6% are Indian/Asian, and 8.7% are White (Statistics South Africa, 2013). Due to the rocky and oppressive past of South Africa, there is a constant struggle between outsiders, migrants, versus insiders, South Africans, regardless of ethnicity. This discrimination has lead to an increase in the discrimination against immigrants from other African nations and has become more visible since the end of apartheid (Matsinhe, 2011).

There are over 20 languages spoken by Black Africans and two languages originating from the White community (Serfontein & Toit, 2010). There are many differences in the cultures and value systems within the cultures; Black Africans tend to be collectivist in nature, Whites are individualistic, and Coloureds fall somewhere in-between (Valchev, et al., 2013). The majority of the population of South Africa is Black, and there are more than 10 indigenous tribes within the country. While 50 years ago the majority of the Black population lived in rural areas, there has been a recent move to urban areas and now around half the Black population lives in urban areas (Serfontein & Toit, 2010).
Within South Africa Black and Coloured populations tend to have lower education levels and higher unemployment rates. In 2011 the average percentage of the Black population that had achieved the equivalent of a high school diploma or higher was 35.2%, for Coloured it was 32.6%, for Indian/Asians it was 61.6%, and for Whites it was 76% (Statistics South Africa, 2011a). In addition to the wide difference in employment of men and women noted earlier, there is also difference between the different ethnicities. In 2011 the unemployment rate for Blacks was 35.6%, for Coloureds 22.3%, for Indian/Asian 11.7% and for Whites 5.9% (Statistics South Africa, 2011a). This research took place in three different provinces within South Africa. Two provinces’ majority population is Black, while the majority of third province’s population is Coloured (Statistics South Africa, 2011b).

As for the legislation and law that surrounds this supply chain, South Africa has many laws in place. South Africa has a Bill of Rights, which contains labor rights pertaining to all South Africans. This Bill of Rights includes freedom of association, labor relations, right to fair labor practices, union rights, right to strike, and right to collective bargaining (ILO, 2011). South Africa has ratified all 8 ILO Conventions that the ILO regards as fundamental, core labor standards covering the topics of association, child labor, forced labor, and discrimination (ILO, 2013).

After apartheid ended in 1994 the Labour Relations Act was enacted in 1995, which promoted freedom of association and collective bargaining rights. There are an additional seven laws that have been put in place to ensure a safe and productive workforce including the Basic Conditions of Employment Act, 75 of 1997, Occupational Health and Safety Act, 85 of 1993, and the Compensation for
The Labour Relations Act of 1995 assisted in the formation of a strongly unionized apparel and textile industry. The Southern African Clothing and Textile Workers Union (SACTWU) is the main union for the apparel production industry and has around 100,000 members which equates to an 85% union density rate for the apparel production industry (SACTWU, 2013). There are different bargaining councils that represent the different sectors within the industry. The Bargaining Councils are in charge of creating collective agreements and ensuring that they are enforced. They are also in charge of “collecting and managing funds for pension, provident, medical aid, sick pay, holiday, unemployment and also training programs” (Labour Relations Act, 1995). The National Bargaining Council for the Clothing Manufacturing Industry is in charge of creating the annual collective agreements for the garment manufacturing industry. These agreements dictate wages, annual bonuses, method of payment, deductions, time records, piece rate, work hours, rest intervals, meals, night shifts, overtime, holidays, short time, tea and drinks, closed shop policies, annual leave and public holidays, terminations, record cards and contracts, seating accommodation, expenses of the council and regional chamber, maternity and paternity benefits, doctor and clinic visits, and finally retrenchment benefits (National Bargaining Council for the Clothing Manufacturing Industry, 2013). The National Textile Bargaining Council has seven sub-sectors including the woven and cotton sub-sectors which textile and spinning mills fall under (National Textile Bargaining Council, 2013). The collective agreements created by these councils cover similar topics that the council for clothing manufacturing does.
Farm workers in South Africa are covered under the Sectoral Determination 13, which sets certain standards for farm work. This act sets requirements for a minimum wage, how payment occurs, pay slips, fines and deductions, contracts, hours of work, overtime, night work, breaks, annual and sick leave, maternity and family leave, child and forced labor, termination, and temporary work (South African Department of Labour, 2013).

Because all workers (including legal migrants and seasonal) in South Africa are entitled to globally recognized labor rights, there should not be frequent violations when it comes to the set labor standards. When workers have enabling rights they have a greater ability to stand up for themselves and benefit from labor laws in place. While the labor laws ensure proper working conditions, there is also one major aspect that can impact the availability and quality of jobs, the economic component.

In 2012 South Africa imported R15,208 million worth of apparel and textiles and by August 2013 they had already imported R18,785 million worth (The South African Revenue Service (SARS), 2013). Only R3,611 million worth of apparel and textiles were exported in 2012 and R4,378 million worth by August 2013 (SARS, 2013). While exports have increased over the past year, South Africa had the largest trade deficit to date at R19.05 billion in August 2013 (SARS, 2013). South Africa imports the majority of its apparel and textile products because similar products are offered at lower prices from countries such as China. While the industry is not competitive, shown by the trade deficit of apparel and textile imports, there is support for the industry that could potentially help the industry regain a competitive advantage.
The South African government has recently made progress to strengthen the cotton, textile and apparel industries within the country. In 2011, the government enacted the Preferential Procurement Policy Framework Act (PPPFA). This policy requires that all apparel and textile goods purchased by the government must be produced 100% locally. This act will spur the economic development of the cotton, textile and apparel industries within South Africa by providing an increase in demand for local production for cotton farming, spinning production, textile production, and garment manufacturing (Department of Trade and Industry, 2011). Table 4.1 summarizes the key issues of decent work and other topics found in desktop research.

Table 4.1

*South African contextual issues and factors impacting decent work and social upgrading*

<table>
<thead>
<tr>
<th>Category</th>
<th>Node</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment opportunities</td>
<td>Overall</td>
<td>Women have higher rates of unemployment, more men than women in management positions</td>
</tr>
<tr>
<td>Adequate earnings and productive work</td>
<td>Farm</td>
<td>Cases of women paid less than men at farms</td>
</tr>
<tr>
<td></td>
<td>Farm</td>
<td>Cases of wages below minimum wage</td>
</tr>
<tr>
<td>Decent working time</td>
<td>Clothing Manufacturer</td>
<td>Cases of workers paid below minimum wage</td>
</tr>
<tr>
<td></td>
<td>Farm</td>
<td>Reports of overtime not paid to farm workers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Misdocumentation of hours</td>
</tr>
<tr>
<td></td>
<td>Farm</td>
<td>Issues for women living on the farms</td>
</tr>
<tr>
<td>Combining work, family, and personal life</td>
<td>Farm</td>
<td>Cases of forced labor of migrants at farms</td>
</tr>
<tr>
<td>Work that should be abolished</td>
<td>Farm</td>
<td></td>
</tr>
<tr>
<td>Stability and security of work</td>
<td>Farm</td>
<td>Seasonal work</td>
</tr>
</tbody>
</table>
Table 4.1 Continued

<table>
<thead>
<tr>
<th>Category</th>
<th>Node</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal opportunity and treatment in employment</td>
<td>Farm</td>
<td>Cases of migrants being discriminated against at the farm level</td>
</tr>
<tr>
<td></td>
<td>Clothing Manufacturer</td>
<td>Illegal immigrants found in poor and inhuman work conditions</td>
</tr>
<tr>
<td>Safe work environment</td>
<td>Farm</td>
<td>Xenophobia of migrants</td>
</tr>
<tr>
<td>Economic and social context for decent work</td>
<td>Overall</td>
<td>Safety at farms</td>
</tr>
<tr>
<td></td>
<td>Overall</td>
<td>Highest amount of asylum seekers in the world, large amounts of refugees. They face discrimination and difficulty in receiving documentation to receive social service benefits</td>
</tr>
<tr>
<td></td>
<td>Overall</td>
<td>Lack of education in rural areas</td>
</tr>
<tr>
<td></td>
<td>Overall</td>
<td>Culture that discriminates against women</td>
</tr>
<tr>
<td></td>
<td>Overall</td>
<td>Discrimination of those with communicable diseases</td>
</tr>
<tr>
<td>Legislation</td>
<td></td>
<td>Ratified all 8 ILO fundamental conventions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bill of Rights</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Labour Relations Act of 1995</td>
</tr>
<tr>
<td>Collective Bargaining Councils</td>
<td>Spinning, textile, garment manufacturing</td>
<td>Prominence and power of Bargaining Councils</td>
</tr>
</tbody>
</table>

**Field Research**

The results from field research are discussed in two sections. The first focuses on work at farms and gins. The second focuses on work at spinning, textile, and garment manufacturing facilities. In South Africa the farms and gins have close relations and in some cases they are owned by the farmers; they shared similar characteristics regarding decent work. The spinning, textile, and garment manufacturing facilities also have similar characteristics when it comes to aspects of decent work. Initially, the research planned to create a profile of each node of the supply chain, however insufficient data were collected. While this could be a setback,
many similarities were found within the two node groups and describing findings based on the two groups is adequate for the study. The primary source of data was interviews; however some archival data were also collected to supplement the interviews. It will be noted if data came from archival documentation, if not it can be assumed that the data came from interviews.

Smallholder Farmers, Commercial Farm, and Ginning Facilities

Interviews were conducted in two different regions. In the first region one gin manager, one commercial farmer, two smallholder farmers, and one extension officer were interviewed. The extension officers are employed by the government and help with training and facilitate communication between the farmers and the larger industry. This region was home to the larger gin that was farmer owned. The manager of the gin was an educated White man, the commercial farmer was a White man, and the two smallholder farmers came from Black underprivileged communities. One of the smallholder farmers was experienced in cotton farming and worked to train others in the community, including the second smallholder farmer interviewed. An extension officer was present during the interviews with the smallholder farmers.

In the second region one gin manager, one farmer representative, and one extension officer were interviewed. This area was home to a smaller gin that was recently bought and renovated in part by the government and in part by the farmers. It is currently owned by the government but ownership will soon be transferred to the farmers. The gin manager was from the local Black community and involved in an agriculture union. The farmer representative interviewed was also from the local Black community. The extension officer was also present.
At the time of the interviews it was not harvest and ginning season, therefore workers were not available to be interviewed. This is a limit to the study because it does not include the perspective of the workers at these supply chain nodes.

**Decent Work and Social Upgrading Conditions**

The first topic to be discussed is a theme found through inductive analysis because it sets the stage for the prospects of cotton farming specifically. Then themes found through deductive analysis of the farms and gins data that relate to the decent work and social upgrading indicators will be discussed.

**Context for Growing Cotton: Risk and Opportunity**

There are specific risks and opportunities for cotton farmers within South Africa. Many areas in South Africa are ideal for growing cotton because it is drought resistant so it does better than most crops in the region. In one region, the soil is rich in nutrients so the cotton farmers do not need to use fertilizer. Also, cotton is a good rotation crop and can improve the yields of other plants when used in such a way. In addition to cotton, the farmers visited grow corn, wheat, tobacco, sweet potatoes, or various other vegetables. There are many farmers in the areas visited that come from families of cotton farmers. This means that farming skills and traditions are passed on through the generations.

Even though there is great opportunity to grow cotton because of its success in the region, there are also some risks involved. A cotton farm’s yield is mainly dependent on the season’s rain. If there is too much rain or too little, the harvest will be negatively impacted. While cotton is an ideal crop for dryland, land without irrigation, farmers reported changing rain and weather patterns. Unpredictable rainfall
can be harmful for cotton crops on dryland because if the amount of rain is less than necessary amount, there is no opportunity to supplement it with irrigation. One of the smallholder farmers interviewed had lost money in 2011 because of the drought. Another weather related risk is hail; it can take out an entire crop in a matter of minutes. Also, the price of cotton depends on international prices, which is heavily dependent upon China’s production. In the past ten years the price of cotton has gone from below $1/lb to over $2/lb.

The farmers are dependent on the gins. When the small gin previously went out of business a few years ago, the farmer representative claimed that many farmers quit growing cotton because it was too expensive to transport cotton and pay others to do the ginning. While this could be a constraint, the gin manager stated how the gins being farmer owned provide an opportunity for farmers to add value to their crops.

Economic and Social Context for Decent Work and Social Dialogue, Worker’s and Employers Representation

The economic and social contextual indicators for decent work that were discussed in the interviews are the presence or absence of labor inspectors and education levels of the population. In addition to this, worker representation and ability to organize play a large role in the achievement of decent work and has the ability to impact the rest of the decent work and social upgrading indicators.

While labor inspectors could visit unannounced at anytime, smallholder farmers believed they had not been inspected because they were too spread out geographically. The commercial farmer and the both managers of the gins claimed they had reoccurring visits from labor inspectors. No minimum level of education was stated as a prerequisite for hiring workers for harvest or for the unskilled labor (non-
managerial) at the gins. Only 50% of the workforce at the larger gin was reported to be literate, while all workers at the small gin were reported to have received matrics, equivalent to a high school diploma. The smallholder farmers interviewed stated that their children did attend school, however it is not known if all smallholder farmers are located near schools to send their children to.

The prevalence of communicable diseases can have a negative impact on workers, however the degree that is impacted workers was not revealed. The manager of the larger gin did mention that some workers do have HIV/AIDS but many try to hide it so the amount of workers with the disease is unknown.

All workers, including legal migrant workers, by law have the right to freedom of association and to collectively bargain. One area, according to the farmer representative, has around 23-28 farmer associations. These are organizations made up of smallholder farmers in certain areas who collaborate to share knowledge and information and try to find solutions to problems. While they are not unions, these associations have allowed the smallholder farmers to organize and have representation to share concerns, solve problems, gain knowledge, and collaborate to form a stronger voice. Each organization has a chairman, and there is a chairman of all the chairmen; this was the farmer representative interviewed. The chairmen work with extension officers to help get them in touch with the individual farmers if needed.

The manager of the larger gin stated that the union was “chased away”, but that the thing unions care about most are wage increases and bonuses, so he will always pay a minimum wage. The smaller gin was only open for a trial run, not officially so there is no union. The commercial farm has around 10% of employees in a union. He believes that “some don’t like to be in the union. It usually depends on the farm
manager and how they are treating the workers and the relationships that they have with the workers. Some will feel insecure and they will go to the unions.” The manager of the smaller gin said that managers have good relationships with workers and that they can come to them with any problems. It was not asked if there were other forms of dialogue or a grievance mechanism at the commercial farm and the larger gin.

Employment Opportunities, and Stability and Security of Work

The employment opportunities and the stability and security of work that farms and gins are able to provide indicate the quantity of the decent work opportunities available. Table 4.2 outlines the number of workers hired and the duration of seasonal employment for the farms and gins.

Table 4.2

Number of workers and length of work at farms and gins

<table>
<thead>
<tr>
<th></th>
<th>Farms</th>
<th>Gins</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Smallholder1</td>
<td>Smallholder2</td>
</tr>
<tr>
<td>Number of workers</td>
<td>30</td>
<td>90</td>
</tr>
<tr>
<td>Work season</td>
<td>2 months</td>
<td>3 months</td>
</tr>
<tr>
<td>Number of workers</td>
<td>Family</td>
<td>Family</td>
</tr>
</tbody>
</table>
In both areas visited, interviewees spoke of the possibility of job creation through cotton farming. Cotton is a cash crop, which means that farmers can sell their crop for money rather than farming for subsistence. However, the number of farmers within South Africa has sharply decreased since the 1990s. In one region, the farmer representative claimed that the number of cotton farmers dropped from 2,700 to 900. The extension officer and the farmer representative in this area are currently trying to promote the planting of cotton because they think it will allow people in the community to gain an income. While one of the extension officers said that women do not choose to work on farms, one of the two smallholder farmers interviewed was a woman and the smallholder farmer that tutored others was currently tutoring two women and two men.

The smallholder farmers that were interviewed explained that the farmers themselves and their families do the majority of work. Their children help on the farms on Saturdays because they attend school during the week. During harvest season smallholder farmers generally hire people outside the family from local communities. The smallholder farms visited were harvested by means of handpicking, which requires more labor than machine harvesting.

Despite the reported reliance on family members, it was also said that one and one-half people are typically needed for every hectare during the cotton harvest season. Additionally the smallholder farmers interviewed hired more. One of the smallholder farmers had 12 hectares of cotton and hired 30 women for two months, which equates to two and a half workers per hectare. The other smallholder farmer had 52 hectares of cotton and hired 90 women for three months, which equates to a little
over one and one half workers per hectare. Harvesting can take between two to three months depending on the amount of hectares.

The commercial farmer interviewed was involved with many other agriculture crops in addition to cotton. He has 200 hectares of cotton total. While it is not common for commercial farmers to harvest their cotton by means of handpicking, according to the commercial farmer interviewed, he had 40 hectares handpicked for the sole purpose of creating employment for the local community. On his cotton farm he usually has 40-50 seasonal workers, however he had over 100 workers last year because he used handpicking for a portion of his crop. Across all his farms (tobacco, vegetables, and citrus), he has around 1,000 seasonal employees and 20-30 permanent employees. Men, women, locals and migrants are hired; 50% of workers are migrant and 50% are women. The permanent employees tend to have worked for him for a long time. The diversity of crops planted by the commercial farmer plants means that there is something being harvested at all times of the year, which allows him to employ seasonal workers from farm to farm providing constant work. However, even if workers are constantly employed from farm to farm, they remain on seasonal work contracts.

All hired workers at the smallholder farms are seasonal, and the majority of workers at the commercial farm are seasonal. In addition to this because the gin processes cotton after harvest, the majority of workers at the gins are seasonal as well. The time the gin is open depends on how large the cotton harvest was.

The smaller gin had just reopened the year interviews took place and had run a trial process for three months last season. For the three months the gin was running it hired 52 employees; 29% of the workers hired were women. Only locals and no
migrants were hired. Next year if the harvest is larger, as expected, there will need to be more than 52 employees hired.

The large gin runs for six months a year. It employs 55 seasonal workers and 17 permanent workers. The majority of the laborer jobs are given to men. Women, 10% of the workers last season, work generally in administration positions and as cleaners. Migrants are also hired at this location; 40% of employees were migrants last season. Because the jobs at the gin are unskilled work, the first capable people that show up are the ones given the jobs with no preference given to whether they are migrants or education level. The gin manager asks applicants if they can complete a list of tasks; if they say yes and agree they are hired. The manager estimated that 60% of the same temporary workers return every year. Although the larger gin has the capability to process more cotton than the smaller gin, more of its processes are automated, therefore it requires fewer employees. All workers are given a contract and the requirements for termination are stated within the contract.

It did not appear that labor brokers were used during the hiring process at any of the facilities visited. The smallholder farmers interviewed hire local women from their community. It is unknown how the commercial farmer hires all workers, however he did mention hiring workers that come to his farm seeking jobs and also hiring workers that other smallholder farmers employ. The smaller gin also hired people from their local community. The larger gin hired workers that came to the gin to apply.

Adequate Earnings and Productive Work and Working Time

Adequate earnings and productive work relates to the quality of the jobs available and working time evaluates the decency of working time for those employed.
Table 4.3 outlines the wages and work hours for workers at the farms visited, and Table 4.4 outlines the wages and work hours for the workers at the gins.

Table 4.3

<table>
<thead>
<tr>
<th>Decent work indicator</th>
<th>Smallholder farmers</th>
<th>Commercial farmer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages paid</td>
<td>R1/1kg</td>
<td>R2/1kg</td>
</tr>
<tr>
<td>Daily wage</td>
<td>R40-R140/day(^a)</td>
<td>R80-R280/day(^a)</td>
</tr>
<tr>
<td>Work time</td>
<td>7:30-4:30, 5-7 day/wk(^b)</td>
<td>6am-4pm, 5 day/wk but depends on how much the workers want to work(^b)</td>
</tr>
<tr>
<td>Wages paid</td>
<td>n/a</td>
<td>Minimum wage about R110/day unskilled</td>
</tr>
<tr>
<td>Work time</td>
<td>n/a</td>
<td>6am-4pm 5 days/wk</td>
</tr>
</tbody>
</table>

\(^a\) Based on the commercial farmer’s estimate that a harvester can pick between 40kg-140kg a day.

\(^b\) Varies based on weather, workers choose how much they want to pick. At one smallholder farm workers can pick on Sundays if they want extra money. At commercial farm some workers will only pick for a few hours a day.

Table 4.4

<table>
<thead>
<tr>
<th>Decent work indicator</th>
<th>Small gin</th>
<th>Large gin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages paid</td>
<td>Claimed minimum wage</td>
<td>R1,700/month unskilled(^a)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R4,000/month drivers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R5,000/month supervisors</td>
</tr>
<tr>
<td>Work time</td>
<td>9hrs/day 5 days/wk</td>
<td>9-12hrs/day 5 days/wk(^a)</td>
</tr>
<tr>
<td>Overtime</td>
<td>Time and a half paid if they have to work Saturday</td>
<td>Time and a half for hours over 45 hrs/wk(^b)</td>
</tr>
</tbody>
</table>

\(^a\) Usually over 45hrs/wk

\(^b\) As determined by law
Workers hired to handpick cotton are paid by the amount of cotton that they pick. The smallholder farmers paid workers R1 per kilogram of cotton picked. The commercial farmer paid handpickers a higher wage at R2 per kilogram. There is a wide range that workers usually pick in a day, it can vary from around 40 kilograms to 140 kilograms. This means that a day’s wage can vary from R40 to R140 a day at a smallholder farm or R80 to R280 a day at commercial farms. Unskilled permanent workers at the commercial farm are paid around R110 a day.

As for the smallholder farmers themselves, they earn around R1,000 annually per hectare in one region. This, one farmer stated was, “Just enough to make a living.” In the other area visited, the smallholder farmers on average make around R4,000 annually per hectare. This difference in profit is due to the input costs, which will be discussed in more detail in the subsequent section detailing the financial aspects of the farms and gins.

Smallholder farmers stated that they generally harvest from around 7am to 4pm Monday through Friday (with one farmer working Saturday), however the time and days worked can change due to many factors. The weather can make a difference in the times that the cotton can be harvested. If the cotton is still wet from dew in the morning, they must wait to pick until after it dries, pushing back the hours workers are in the field or decreasing the time worked. Also, the smallholder farmers commented that handpicking is done at will, which can increase or decrease time worked tremendously. Because the smallholder farmers pay handpickers per kilogram rather than an hourly or daily wage, they stated that workers take breaks when they want, the workers can choose the amount of time worked, and the worker can work as fast or slow that they want. One smallholder farmer stated that although he does not work
Sundays, he allows workers to pick cotton on Sundays if they want to earn more money. Due to the casual work structure of handpicking cotton, hours and days worked by workers are unregulated.

Permanent workers at the commercial farm work from 6am to 4pm, five days a week. Workers that handpick cotton generally work on the same time frame, however the commercial farmer explained that, “for some they are happy to work less and will work only till 10am but they got what they needed.”

The manager of the larger gin said employees are paid minimum wage and he stated this is around R1,700 a month for unskilled work, around R4,000 a month for drivers, and around R5,000 a month for supervisors. The manager of the smaller gin stated that they pay employees the minimum wage, however he did not state what that wage is. Overtime, which is time and a half, is paid for hours over 45 a week as stipulated by the law at both locations. Workers at the larger gin work five days a week, nine to 12 hours a day. There is a day shift and a night shift. Workers at that location generally work over 45 hours a week, and are paid overtime. Workers at the smaller gin work nine hours a day five days a week and overtime is paid if they have to work Saturdays.

At the commercial farm, the owner stated that he tells his workers what must get done and allows them to manage themselves. He believes that this motivates them to work harder as they have the responsibility to manage the completion of tasks. He also tries to reward good workers by promoting them to supervisors when there is the opportunity. Besides this, there was no mention as to how workers are motivated or trained to become more productive. This may be due to the relatively low skill level required for the majority of the positions offered at the farms and gins.
Equal Opportunity and Treatment in Employment

Decent work entails that all people have an equal opportunity for employment. Therefore, firms and farms need to offer all qualified individuals equal opportunities and treatment regardless of gender, ethnicity, or other factor. There is a strong preference to only hire local people rather than migrants at the smallholder farms and at the smaller gin visited. At the small gin only locals were hired; no migrants were hired and there appeared to be resistance to doing so. The reason is unknown but the preference for local over migrant workers seemed to be a desire to provide work for and support their communities. When a smallholder farmer spoke about hiring workers for the harvest, the extension officer added that this “creates job opportunities for the locals.”

The commercial farmer hires migrants (50% migrant workforce) and stated his empathy for their desperation driving them to leave their home countries in search of work. He also stated there is a difference in work ethic because migrants have traveled far for work; they are starving so willing to work hard. He also stated that he finds migrants more educated so he is able to put them in higher skilled positions such as drivers. The larger gin hires migrant workers (40% migrant workforce) if they have legal documentation and stated that he does not discriminate when it comes to hiring migrants or locals.

Law requires that wages cannot be different for men and women that do the same work; there was no evidence of this occurring. At the larger gin, the women employed (10% of the workforce) work in administration positions and as cleaners. I was unable to obtain information about why women are not hired for the majority of the positions at the gin. Last season the smaller gin hired 29% women. About 50% of the commercial farmer’s employees are women. He stated that women perform all job
positions. However he claimed that women prefer some jobs more than others, such as women do not like to drive the tractors and would rather do cultivation. All workers hired for harvesting at the smallholder farms visited were women.

The commercial farmer gives his workers trust and responsibility to get tasks done themselves, rather than micromanaging each worker. He believes this builds a positive relationship with his employees. The manager also stated that he has a good relationship with his workers because he treats all races the same, focuses on the work they do, and truly cares for them.

Safe Work Environment and Social Security

One determining factor of decent work is if it is stable and provides a sense of security for workers. Related to this are the physical safety aspects of employment and also the social security and benefits provided by the employer. Safety at smallholder farms did not seem to be an issue; no injuries were reported. Smallholder farmers, extension officers, and the farmer representative all claimed that they and their workers wear personal protective equipment (PPE). Although PPE is provided, its use is not regulated. Farmers have been trained by extension officers and by Cotton SA on what to wear and when and were also trained how to properly use chemicals. There was a serious accident on a tractor at the commercial farm and a worker lost his leg. The worker was smoking marijuana and not supposed to be on the tractor when it happened. The commercial farmer pays the government for workers’ compensation. The government paid for the treatment and disability of the worker injured. Besides that serious accident, the farm owner stated that the number of accidents is very low. At the larger gin supervisors receive safety training from Cotton SA. The gin owner stated that a very serious accident was reported, but did not go into details on the
incident. The smaller gin has not had any injuries but had only been running for three months for a test run last season. The gin plans to have a consultant conduct safety trainings next year when it is fully up and running.

Smallholder farmers do not pay for sick leave for workers they hire during harvest. It is the responsibility of the worker to cope with any illness incurred during harvest season. Both gins and the commercial farm follow labor law when it comes to sick leave. Labor law states that all farmworkers should receive one sick day for every 26 days worked (South African Department of Labour, 2013). The manager of the larger gin stated his responsibility to take care of his workers, bring them to the hospital, pay for the visit, and the importance of “acting human.” He understands the high prevalence of HIV/AIDS and when workers are willing to come out and tell him they need help, he will help them get to the clinics. Both gins reported that they pay government levies as stipulated by labor law. These levies include unemployment, pensions, and worker compensation. They deduct a certain percent from paychecks and pay an amount themselves as stipulated by the Department of Labour.

Combining Work Family and Personal Life and Work That Should be Abolished

Decent work allows people to have a job that does not negatively interfere with their ability to have a family and social life, therefore it is important to look at how employment interacts with workers social lives. Also decent work excludes the possibility of child and forced labor.

Because most of the hired help at smallholder farms are local women, their families are close and they do not have to travel far distances. The farmers interviewed plant bt cotton, which decreases the time spent in the field doing tasks such as weeding and killing harmful insects. The advances in cotton with bt cotton has also
improved the ability for women to take care of the household. One of the smallholder farmers stated, “Women are in charge of taking care at home. Cooking, bringing everything required at home and in the field as well. Now with the bt they have more time to other work at home and to look after other food crops.” The status of maternity leave is not known at the smallholder farms visited, however one smallholder farmer herself was around five months pregnant.

At smallholder farms, it is common for children 13 and older to help their families with their cotton farms. The extension officer clarified that children alone are not hired; the only children that are on the farms are the children of those who own the farm. Also, it was emphasized that children only help on Saturdays because they have school during the week.

The commercial farmer employs many migrants from Zimbabwe. In describing the family separation of migrants, he commented that migrants generally stay the entire year and go home once or twice a year to visit their parents and family. Sometimes their families join when the workers come to South Africa. It is common for the smaller children to join, but school-aged children tend to stay in Zimbabwe with other family members to attend school.

Resource Based Perspective and Financials

Aspects relating to the resource based perspective (RBP) and the financials of the gins and farms are important to assess in order to better understand the level and future possibility of economic upgrading and competitiveness. Increasing financial standing and competitiveness indicate a possibility to bring social upgrading and thus decent work.
Resource Based Perspective

Cotton SA works to provide training to smallholder farmers throughout South Africa. This is funded by government, generally takes place at local colleges within the farming communities, and is free for participants. The four modules that Cotton SA generally teaches are: financial planning, land preparation, integrated pest management programs, and cotton quality. This training adds to the skill base and capabilities of farmers in the area.

RBP also suggests it is important to look at the practices taking place in firm and at the farms that assist in the development of firm or farm resources and capabilities. The owner of the commercial farm said he believes that having high standards in the workplace and taking advantage of technology allows him to be successful. One aspects of RBP theory is the resources that are available. The commercial farmer has made investments in resources in the form of technology, which has ultimately made his yields higher for his crops. For example, he now uses satellite imaging to find sections of the crop that have harmful bug infestations or that are malnourished and to also precisely plant rows of crops to plant the maximum amount possible. Besides the training and skill development of the actual farmers, there was no mention as to training or skill development for the low skilled workers hired at any of the farms or gins.

The manager of the larger gin spoke of his highly skilled permanent staff that has been in the industry for a long time. These are the skilled employees in upper level positions. The staff of the gin is focused on assisting farmers to help them increase cotton quality and yields. The substantial knowledge and skill level of the gin’s staff directly benefits farmers and ultimately leads to more competitive farmers because they have skilled professionals that are able to assist them. The manager of the gin
understands that expanding the cotton industry is a way to create more jobs through smallholder farmers. He believes that unemployment can be cut by 30% in two years by increasing the production of cotton. The resources are currently available to expand the cotton industry and there is the opportunity to create jobs.

One gin manager explained that in the surrounding area of the gin, there is ample land that can be used for agriculture including planting cotton. There are farmers and industry professionals that are highly skilled and a system in place to provide others training. The smaller gin is focused on promoting the farming of cotton through skill development, training, and commodity financing. By providing capabilities and resources to farmers, they will not only be able to plant more cotton and increase farmer profits, but the manager is also hopeful that more cotton produced in the area will require that the gin run for five months instead of two months which will allow him to hire workers for a longer period of time. The larger gin sells about half the cotton to local spinners and half is sold to merchants and then exported. Globalization allowed cheaper cotton to be imported in country by local spinners, this decreased demand of South African cotton. However, the commercial farmer said that the demand for local cotton is coming back because it is more convenient for the local spinners. In addition, the new government procurement policy will increase demand for South African cotton.

Another issue brought up at farms and gins was the uncertainty of the skills that the oncoming generation possesses specifically related to farming. There is concern that the farmers are getting older and the younger generation is not filling the shoes of the old. Managers spoke of having to train younger people as some of the most experienced and knowledgeable people are nearing retirement age.
Financials: Capacity, Investment, Value Added, and Productivity

The profitability of farming will ultimately dictate the income provided to farmers and workers. When it comes to the smallholder farmers, the largest issue related to finance is the pre-planting investment needed (R2,500 to R4,000 depending on the region). All smallholder farmers interviewed stated that they cannot borrow money from banks. They cannot borrow money from banks because they do not have land deeds to their land, which is related to the fact that the land is tribal and they do not own the land they plant on. The manager of the larger gin commented that in the past there was a system in place that provided farmers financing for upfront costs, which would then be deducted from their profit when cotton was sold. However, there were various fees that farmers often did not fully understand and if farmers were not able to achieve a sufficient harvest they would incur debt that often accumulated across many seasons. All farmers and gin managers commented on the need for a new commodity financing system to pay for the inputs of farming (i.e., seed, fertilizer, herbicide/pesticide, land preparation if needed) before the planting season, but also ensure farmers do not incur continuous debt. The manager of the larger gin believed now that the gins are “co-op gins” (i.e., farmer owned), a new financing system with fair principles could be established. This will also encourage more farmers to plant cotton.

The price of cotton is very volatile so it is risky for farmers to invest a large amount of money into planting a crop that could potentially lose them money if growing conditions are not optimal that season. Fertilizer, seed, chemical, and diesel are all going up in price. Also at the time of the interviews the South African Rand had depreciated in value, making it worth less in relation to other currencies. This made imports (all seed, herbicide/pesticide, and diesel) more expensive.
In one region, it costs R3,000 per hectare to plant cotton if you have a tractor for the seed, fertilizer, and pesticide. If farmers do not have a tractor it costs them R4,000/hectare to pay for inputs plus rent a tractor for land preparation and seed planting. The extension officer commented that “If you have your own implements [tractor] then you can make a profit, but if you don’t have your own implements it can be harder to make a profit.” In one region where it is dryland farming, it costs around R2,500 per hectare to grow cotton. It is less expensive in this area because they do not use tractors for land preparation, seed planting, or have to use fertilizer because of the nutrient rich soil. The farmer representative stated that the average size of the smallholder cotton farm in the area is three hectares. Although the average yield is 1,500 kilograms per hectare, depending on weather and rain it can vary from 750 kilograms per hectare to 2,000 kilograms per hectare. Farmers in one area will profit an additional 20-25% by ginning cotton locally at the gin that is reopening, instead of paying higher fees elsewhere and high costs to transport it long distances. Table 4.5 outlines the financial indicators for the farms visited.
Table 4.5

*Financial requirements of farms*

<table>
<thead>
<tr>
<th></th>
<th>Commercial farmer</th>
<th>First region</th>
<th>Second region</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size in hectares</strong></td>
<td>200</td>
<td>12; 20</td>
<td>On average 3</td>
</tr>
<tr>
<td><strong>Cost of seed from</strong></td>
<td>R1,000/hectare</td>
<td>R1,000/hectare</td>
<td>R1,000/hectare</td>
</tr>
<tr>
<td>Monsanto</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Input cost w/out</strong></td>
<td>R4,000</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>tractor per hectare</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Input cost w/tractor</strong></td>
<td>R3,000</td>
<td>R2,500</td>
<td></td>
</tr>
<tr>
<td><strong>Yield of seed cotton</strong></td>
<td>4,600kg/hectare</td>
<td>800-1000kg/hectare</td>
<td>1,500kg/hectare</td>
</tr>
</tbody>
</table>

The two gins visited are not set up to make a profit, rather their purpose is to add value for the farmers. The manager of the small gin stated, “according to our [business] plan the farmers will get most of the profit, but a certain percentage will be reserved for unforeseen expenses for the gin.” The manager of the larger gin commented that the gin runs on a small profit of around 2%, which is saved for investments and to get funding from banks if needed. The larger gin pays the farmer for half of the cotton at the time of purchase so that the farmers can pay their workers right away. The gin does not receive payment until a week after the cotton is sold to the cotton merchant. This is because it takes on average one week for the cotton merchant to receive a grade certification to verify the quality of the cotton. Three years ago the average price paid for seed (unprocessed) cotton was R8.10 per kilogram in 2013 it was R6.85 per kilogram.

The smaller gin hopes to have 8,000 tons ginned in year two and 15,000 in year three, if the farmers grow this much. At the time of the interview, the larger gin
was running at 50% capacity. On average the gin processes 15-18 million kilograms of seed cotton in 100 days (May-November). By having maintenance and engineers on staff at all times to repair on the spot, productivity increased 68-82% at the larger gin. To increase the value created, the larger gin is also looking to turn cottonseed extract into bio-paraffin to sell. Table 4.6 outlines the financial requirements for the gins visited.

Table 4.6

Financial requirements of gins

<table>
<thead>
<tr>
<th>Financial Indicators</th>
<th>Largegin</th>
<th>Smallgin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>14 bales of lint/hour</td>
<td>1.5-2 bales of lint/hour</td>
</tr>
<tr>
<td>Production</td>
<td>15-18 million kg (15,000 tons) of seed cotton</td>
<td>8,000 tons in year 2 (2014); 15,000 in year 3 (2015)</td>
</tr>
<tr>
<td>Maximum</td>
<td>30 million kg (30,000 tons) of seed cotton</td>
<td>15,000 tons of seed cotton</td>
</tr>
</tbody>
</table>

The group of farmers that own the larger gin also started additional companies in conjunction. This allowed them to decrease the input costs of cotton production, which ultimately makes them more profitable. Also, when farmers collaborate together through the gin they have better buying power to get cheaper prices on inputs. When speaking of the benefits that the cluster will bring to the gins and farmers, the manager of the larger gin said:

The cluster will create an integrated value chain approach that will allow the gin to give the farmer a guaranteed minimum price for the cotton and create stability for the farmer. How can you expect a farmer to wait for the price? If you go to buy a t-shirt and the retailer tells you
they will tell you the price in three days time, no one would do that! We need to give the farmer an indication of price so he can make his calculations and decide if it will be worth his time to plant cotton. Also, it’s going to be a fixed price not a fluctuating price.

One important member of the supply chain that was not interviewed was the cotton merchant. The managers of the gins stated that they sell their cotton to international cotton merchants. The commercial farmer stated that the cotton merchant that buys cotton from the gin he is a member of, sells half to local spinners and exports half. When discussing this the commercial farmer stated, “the gin owner wants to prevent that [selling to cotton merchants]. The gin owner wants to sell locally and cut out the merchant.” This would add more value to the gins and farms by allowing the gins to collect the value gained from selling and distributing cotton rather than the merchant.

**Themes Revealed Through Inductive Analysis**

Besides those decent work and social upgrading indicators that this research identified through deductive analysis other themes were found through inductive analysis that could potentially impact decent work and social upgrading. Those themes were the degree of industry support, the political climate, impacts of the community and culture, extended services provided to workers, and the support for the community.

**Industry Support**

Support for the industry could have an impact on the future success of the farms and gins. Besides the support that the farms and the gins will receive through the Southern African Sustainable Cotton Textile and Apparel Cluster, there were other
mentions of industry support. Throughout interviews the theme of assistance to this industry, mainly from the government, was mentioned as a factor that make farms and gins more competitive and successful. Extension officers, who are funded by the government, provide assistance to farmers. One extension officer usually works with 20 to 25 smallholder farmers. They will deliver inputs, herbicides and seed, to smallholder farmers in the area that may not have access to transportation. This promotes cotton farming, and also makes the job of the smallholder farmer easier. Cotton SA plays a large role in providing free training to smallholder farmers, which is also funded by the government. The last course enrolled 27 farmers. Occasionally the government gives out grants up to R1,000 to help pay for costs associated with planting cotton. The woman smallholder farmer has received three of these grants to help pay for seed and other inputs.

Another example of the support this industry is getting is the buyout of the smaller gin by the government. After the gin closed there were negative impacts throughout the community. Many smallholder farmers stopped planting cotton because without the local gin they could not produce at a competitive price. The government invested money to reopen the gin, and the government currently owns it but ownership will be transferred to the farmers after it is up and running successfully.

Political Climate and Politics

Throughout interviews the topic of the current political climate impacting business was reoccurring. The political climate impacts the implementation of laws and initiatives and was described as being inconsistent at times by some of those interviewed. It was reported that there is a government preference to support businesses and business owners/managers with ties to the government. If managers or
owners give any trouble to the local politicians, the government will be more likely to regulate the business more strictly. In the past the government has supported smallholder farmers by providing fertilizer and seed. However, in the past they have also promised to provide smallholder farmers seed and did not follow through. This caused the farmers to wait for the promised seed for too long and ultimately miss out on the opportunity to plant anything.

Community and Culture Impacts

Throughout interviews it became evident that the local culture plays a large role in the way that business is conducted. Local tribes own the majority of land in those regions where there is cotton farming. The farmers generally refer to it as community land. The government does not have control over the land; the Chief of the local tribe does. Because of this, farmers do not own the land they farm on and do not have land deeds. Without a land deed farmers cannot get financing from banks because they do not have collateral. Some areas require a royalty to be paid to the Chief on the profits made. This community land is usually passed on through families; if it is not passed on to children the Chief will find other uses for it.

Extended Services Provided

At the farm and gin nodes, the only mention of services provided for workers was in the form of living facilities. The living facilities that farm owners and gin managers provide to both seasonal and permanent workers have the potential to improve their lives by providing them with safe and sanitary living conditions. The commercial farmer provides housing for seasonal workers, however he is not happy with it. The reason why he does not like it was not stated however, I believe the reason
is similar to the opinion of the manager of the larger gin. The larger gin does not have housing for seasonal workers because it is too much responsibility and many people tend to move in such as wives and children. This gets out of hand and requires the manager to “police it”. The manager said he is not sure where exactly they find to live.

Community Support

Another theme that appeared within both gins and all farmers interviewed was the support of the community, and the benefits everyone received from being part of a close-knit and supportive community. There is a great amount of support for the smallholder farmers, which came from the communities. One of the smallholder farmers interviewed acts as a tutor and teaches others in the community how to grow cotton. He was initially mentored by the gin in his region and by Cotton SA. This smallholder farmer commented that commercial farmers, people from the gin, and members of Cotton SA are always willing to answer questions and lend support to the smallholder farmers in the area. The commercial farmer is very passionate about his country and creating more jobs. He stated that, “My vision is, it’s for the South Africa, for every man and woman to have work. And cotton gives the opportunity.” He also continually provided support and resources to the smallholder farmers in this area. For example, he would lend his tractor to smallholder farmers and provide advice.

Additionally, the smallholder farmer in that area commented on how the same commercial farmer had provided support for the community, when he said:

Last year also, during harvest season he [commercial farmer] asked if after my cotton was harvested if we could bring the pickers to harvest at his area. He did this to give them job opportunities. I drove them to his farm for six weeks. His truck was paid, and those people were paid. We
are building a family here, we don’t charge each other for diesel when we help each other.

While discussing this, the extension officer added that, “Its good for people, they get paid and work a longer season. We help each other in South Africa.”

In one region there is a strong network of smallholder farmers organized through farmer associations. Within these farmer associations, information and education is shared within this close-knit region of farmers as well as being used as a means for social dialogue and representation. This is similar to the study groups that are in the other region. The study groups are different from farmer associations and are only focused on developing knowledge and skills. These groups were created to get farmers and experts together to learn from each other and ask questions. The extension officers in both areas play a big role in connecting the smallholder farmers to the gin and the larger industry. They are personally involved with the farmers year-round so they understand what is going on at the farms and they are there to help the farmers become more successful.

**Spinning Mill, Textile Mill, Garment Manufacturer**

Interviews were conducted at industrial nodes including one spinning facility and one textile mill in one region, and at one garment manufacturer in a different region. At the spinning mill, interviews were conducted with two managers and three workers chosen by the factory manager. Both managers were White males and the workers were Black females. At the textile mill interviews were conducted with one manager and two workers chosen by him based on availability as a walk-through of the factory was conducted. The manager was a White male and the two workers were Black, one male and one female. At the garment manufacturer, interviews were conducted with one manager, a White female, and two workers, both Coloured.
women, who were chosen by the factory manager based on availability. The majority of the data collected were through interviews, however there were data collected through archival documentation. It will be noted if data came from archival documentation, otherwise it can be assumed that the data came from interviews.

**Decent Work and Social Upgrading Conditions**

This section is structured the same way as the previous summary of the farms and gins. Those themes revealed through deductive analysis of decent work and social upgrading indicators will first be discussed. Next, is an assessment of those aspects relating to RBP theory and financials. Finally, the themes revealed through inductive analysis are analyzed. Unlike the farm and gin nodes, there is not a discussion of risk and opportunity for the industrial nodes. The risks that are associated with the industrial nodes do not have as large of an impact as those at the farms and gins. Those risks that were present will be discussed in the financial section.

**Economic and Social Context for Decent Work and Social Dialogue, Workers’ and Employers’ Representation**

The economic and social context of the businesses has major impacts on their ability to effectively operate. Also, the degree of social dialogue has the ability to impact all other aspects of decent work. Economic and social context as well as the current situation related to social dialogue sets a foundation for the rest of the topics related to decent work.

The history of the South African apparel and textile industry can be complex, however the manager of the spinning mill explained it well when he said:

The reality is that the clothing guys hate the textile guys. The clothing guys think everything should be imported duty free. In the textile
industry, we see it very differently. This used to be a chain, we had South African ginners and spinners, we’d weave it and make garments, and South Africa was a happy little country. As soon as we globalized, what happened is we the textile guys we went out and started buying our raw materials from wherever we could get it cheapest. We screwed with the poly manufacturers, with the spinners, with the cotton ginners, because we could buy those materials cheaper somewhere else. Everyone down the line lost their jobs. Now there is really nothing sustainable because there are hardly no spinners. What is left of the textile and apparel industry is very little.

One issue mentioned by all managers relating to the economic and social context is the deteriorating quality of public education. Even though the majority of all employees at each facility had received matrics, the equivalent of a high school diploma, education levels were still very low. A belief held by all managers is that the current education system in place throughout the country is inefficient and not educating the population. The manager of the garment manufacturing facility reported that although most workers had matrics, the average level for reading, writing, and numeracy of workers was equivalent to a fourth grade level in the United States.

Archival documentation at the spinning mill showed that 21% of employees have post matric education (beyond high school level), 39% have a matric (high school equivalent), 33% completed grade eight or nine, and 7% have no education to grade seven. Those with no to little education are the older generation, 40 years old and above. The textile mill mainly hires those with a matric, however if someone with potential does not have a matric they will hire them and “train the guy up to that level.” The garment manufacturer also tends to hire those with a matric, but will also hire people if they do not have a matric and offer them educational classes to obtain it.
The main reason for the differences in education levels among ethnic groups is because under apartheid many people, mainly Blacks and Coloureds, were denied equal social and economic rights. The recent end to apartheid in South Africa brought many abrupt changes within the country. The manager of the spinning mill commented on how the recent changes and also the diverse population interact within the country:

A lot of the people who were promised housing and jobs are rural people who have never had a good educational upbringing. They haven’t had the same opportunities [rights] and now to promise them those opportunities. The locals have grown up in the township, went to a township school, and have never been to a big city or had to work a job for most of their life. They haven’t yet seen a bigger picture. They haven’t been exposed to the same basic education we’ve had. To compound things we have many different dialects and the communication isn’t that great either. I think that is one of the challenges we face as a country.

Another aspect of economic and social context that can impact decent work and social upgrading is the frequency of labor inspections. The manager at the textile mill stated that a monitor from the labor department will come to the facility if there is an injury at the workplace, but besides that keeps good records so there is no need for them to come. They are audited by a company they supply for and were audited in order to receive the ISO 14000 certification. Factories can obtain ISO 14000 certification when they meet and prove high environmental management standards. The manager at the garment manufacturer stated that they are 100% compliant so the labor department has no need to send inspectors. One of the roles that the Bargaining Councils play in South Africa is to address any issues with working conditions, therefore they take over this role of inspecting and monitoring working conditions.
The unions are very strong in South African manufacturing sectors. The garment manufacturer had a 100% unionization rate. There is a 98% unionization rate at the spinning facility. At the textile facility, 100% of weekly paid workers, those lower skilled workers not on salary or in management positions, are in a union. There were shop stewards at each location that are responsible for making sure that any worker issues are taken care of. Monthly meetings are held at the spinning facility with shop stewards to ensure all grievances are heard. There were no strikes reported in the last few years at any facilities. All three facilities were covered by collective bargaining agreements which regulate aspects of the jobs such as: wages, working time, overtime, methods of payment, maternity leave, sick leave, annual bonuses and benefits. While workers can benefit from a very strong union, some are worried that the unions are too strong and demand wages and benefits that are too high. The manager of the textile mill explained:

In South Africa, our Labor Relations Act, based upon Germany’s model, was very good for a first world nation. The problem in South Africa is we had a wage disparity with people that had no rights, then suddenly they were given a whole bunch of rights. It may have overwhelmed the people. We have a problem with attitude and aptitude. We have an exceptionally militant union. We have high attitude but low aptitude.

In addition to the union, there are also procedures in place to file grievances at each location. Each manager spoke of the efforts they make to promote communication and openness at each location. The garment manufacturer holds quarterly meetings with all staff and the manager walks the floors to give workers the opportunity to stop her to ask questions. The textile mill has weekly department meetings to discuss any issues. The manager believes that if the managers constantly address workers about any issues, there is no possibility for people to get angry or for
issues to get out of hand. The manager said that two grievances were filed in the past year. Both were instances of one worker being upset at another worker and they were resolved after managers sat the workers down to discuss the issue.

During the interview with the worker at the textile mill, the manager was present and he asked the worker how he was doing at his job. The worker replied, “No you are doing a good job! Since you are promoted we are very happy. There are some things that we are not happy about but he [the manager] is doing it.” When it comes to the monthly meetings with the union, the manager believes in complete visibility and lets the union organizers be a part of the budget and labor decision-making. This is shown when he stated:

The thing is we are doing to work with the union is I meet with the trade union once a month, I tell them everything, I show them the business plan for the year and open the books to them. I show them the cost of labor and where the business is standing. I tell them they can make the choice to either entrench a couple of guys or we pay everyone less. I put them in control to make those labor decisions.

Employment Opportunities and Stability and Security of Work

The number of jobs available and the stability of those jobs are indicators for social upgrading and decent work. The amount of jobs a company can provide helps to boost decent work in the community. The garment manufacturer employs 1,500 people, 107 of those are managers and supervisors, and 80% are women. The garment manufacturing facility is currently being expanded, which will triple the amount of factory workers they will be able to employ by 2024. Archival documentation at the spinning mill showed that it employs 289 people, 12 of those are management level, 39 are junior managers or supervisors, and 54% are women. At the time of the interview, the spinning mill was not running at full capacity. However, the number of
workers employed would not change if full capacity is reached due to the limited space of the facility. Archival documentation at the textile mill showed that the facility employs 240 workers, 24 of those are management level, and 60% are women. If business expands and a third shift is added, more workers will need to be hired. The majority of workers at the garment manufacturer were Coloured while the majority of workers at the textile and spinning mill were Black. There were no migrants employed at any of the facilities.

It was common for there to be workers that had been employed for 20 years or longer at each facility, information revealed by both workers interviewed and statements made by managers. One worker that was already employed at the spinning mill for 20 years expressed her desire to stay with the company until she was 60 and receive pension. There was a monthly turnover rate close to 0% at the garment manufacturer. Archival documentation showed that there is an annual 7.5% turnover rate at the spinning mill and annual 8.5% turnover rate at the textile mill in 2013. All workers were given contracts at each facility. Labor brokers were not used at any of the facilities and workers are hired through an application process at the facility.

Recently wages have been increasing at a faster rate than productivity, which the manager of the textile mill said resulted in the retrenchment of workers. They decreased the number of worker employed from 530 in 2009 to 250 in 2013. The manager expressed that:

The problem with that [wage increases] is there are more guys earning 15% [wage] increases than the executives gaining 3%. So the inflation of labor expense has gone up. Which is fine, but the problem isn’t the cost of labor. The problem is the productivity in South Africa hasn’t changed... Today it takes three people to do the job two people did in the past and it’s costing four times more.
According to the manager, no one was fired when retrenchments had to take place, but instead workers voluntarily resigned; mostly early pensions were taken. Termination requirements are outlined in the collective bargaining agreements regulating each of the workplaces visited.

At the time of the interview, there was underemployment at the dye house of the textile mill. Workers were only able to work four days a week instead of five, the usual number of days per week worked at that facility. During an interview a worker commented that the manager is working hard to change that. He understood that it in order for the workers to be able to work five days a week business had to improve. Previously workers were only working three days a week, but the manager has worked to get it up to four days at the time of the interview. There was not any underemployment reported at the spinning or garment manufacturing facilities.

Adequate Earnings and Productive Work and Working Time

The amount that workers are paid, the ability to become a more productive worker, and the regularity of the hours that workers work are themes related to decent work. As stipulated by the collective bargaining agreements, wages are increased each year. This also includes the wages paid for learners and trainees, new hires that receive lower wages while being trained for a certain amount of time. Collective bargaining agreements dictate that wages are the same for men and women, differences in wages come in different job positions and years on the job. Pay slips are given at each facility and all workers asked about pay slips understood how wages are calculated. The textile mill pays above minimum wage, and the manager commented that they added a wage category voluntarily to be able to offer raises to employees that they feel do an exceptional job.
At the garment manufacturing facility, unskilled factory workers are paid R21.13 per hour, this was an 8% increase from the last year. Archival documentation showed that workers at the textile mill are paid from R24.43 to R29.91 per hour depending on the job, this was a 6.6% increase from the past year. Through archival documentation, it was shown that spinning mill paid workers R21.65 to R24.85 per hour depending on job, this was a 7% increase from the past year. Annual bonuses and long service awards are provided as stipulated by the collective bargaining agreements at each facility. The guidelines and amounts are displayed in Table 4.7.

Table 4.7

<table>
<thead>
<tr>
<th>Decent work indicator</th>
<th>Spinning</th>
<th>Textile</th>
<th>Garment Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wage</td>
<td>21.65-24.85R/hr</td>
<td>24.43-29.91R/hr</td>
<td>21.13R/hr</td>
</tr>
<tr>
<td>Increase from last year</td>
<td>7%</td>
<td>6.6%</td>
<td>8%</td>
</tr>
<tr>
<td>Days per week</td>
<td>4 days on/ 2 days off</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Hours per shift</td>
<td>12</td>
<td>9</td>
<td>8.5</td>
</tr>
<tr>
<td>Hours per week</td>
<td>48 or 56</td>
<td>45</td>
<td>42.5</td>
</tr>
<tr>
<td>Number of shifts at facility</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Those workers that were asked expenses commented that they were able to cover the majority of their living expenses with their current wages, but not everything. When asked if they earn enough to cover their expenses, one worker at the garment manufacturer stated that, “We have to because if you know that is your limit, you can’t go over it. So you have to work in between your budget.” However, it was
harder for some of the other workers. One worker that supported herself and her mother stated that she could not cover all her family’s expenses. Another worker at the spinning mill supported her mother and two children and stated, “You know wages is always less than your expenses. You try to cover some, not everything in one wages. But we are trying.”

Because the wages are determined by the collective bargaining agreement, it is difficult to offer incentives for those employees that become multi-skilled and increase efficiency. The bargaining agreements do not cap pay, however they require all people within the same position be paid the same amount. This requires managers to pay those lower skilled workers that are only able to perform one task the same as a worker that may be multi-skilled and able to perform many tasks. This is a problem that was brought up by all managers interviewed. One spinning manager described:

The opportunity to look at productivity related increases are limited because of the union’s stance that an injury to one is an injury to all. So if you get five Rand I should get five Rand. It does stifle the initiatives that we do have.

Workers at the garment manufacturer work five days a week for 42.5 hours a week. There is one day time shift. Overtime is not offered because when it was available before workers started to work slower in order to create the need for overtime at the facility. After expansion of the facility is complete, by 2024, the company hopes to go into a three shift system. At the textile mill, workers work five days a week for 45 hours a week. There are two shifts, however they would like to run seven days a week and add a third shift. There are three 12 hour shifts at the spinning facility. Workers work four days on and two days off then four night on and two days off. It works out so that workers always work overtime; either work 48 hours a week or 56 hours a week. When overtime is worked at the spinning mill and if it is worked
at the textile mill, time and half is paid as stipulated by the collective bargaining agreements.

One worker at the spinning mill stated that she felt that she was working too many hours per week. She was 29 years old and wished that she had time to go to school part time to get a better career, but she did not have the time while working full time. She also commented that working full time can be too physically demanding for the older employees at the facility. Another worker at the spinning mill commented that 12 hours shifts can be difficult and eight-hour shifts would be easier for the workers. The rest of the workers at the spinning mill and garment manufacturer questioned about their current work hours did not have any complaints.

Another important aspect to social upgrading and decent work is the ability for workers to gain new skills and become more productive. Employee training and skill development were mentioned as a focus at each of these companies. All employees received work related skill trainings but additional education opportunities were also provided. The garment manufacturer invests 10% of all sales into training and development. The spinning mill had a very in-depth training program, and even built a building on site specifically for training and education purposes. One specific highlight was that all management and workers in leadership positions were trained in soft skills to improve people skills and motivate those under them. The spinning mill also offered learnership programs free of cost to train and certify people in the community. Those people could then take their certification and find work outside the factory if there was not a job available at the facility. The manager of the spinning mill stated:

Training is very close to my heart for this organization over the next couple of years. It's fundamental. The more well equipped your
workforce is the easier it becomes for us to focus on the strategic things, rather than worry about the day-to-day things.

This strong focus on training was also shown at the textile mill. When the manager of the textile mill spoke of the training and learning opportunities they have set up on site he stated:

Probably 20% of our staff is learning about something. Something we’ve got that I am very proud about is that we have two hard drives with a library on it. It doesn’t matter what you want to learn, chemistry, microbiology, balance sheets, it’s on there.

Equal Opportunity and Treatment in Employment

Decent work should be an opportunity for everyone; therefore it is important for all people to have equal opportunity in employment. There also must be fair treatment of employees at the facilities. Each manager claimed that women and men have the same opportunities at each facility and that there is no difference in the wages they receive. Men and women tended to have the same jobs and work next to each other at these facilities. As stated in the previous section women made up the majority of the workforce at each facility.

The manager of the garment manufacturer was a female, and she stated that there was an effort to increase the amount of women that were managers and supervisors to match the amount of women workers. Archival documentation was shown that there were no women in the top and senior management at the spinning facility, but 23% of the junior managers or supervisors were women. Half of all workers in management positions at the textile mill are women, which was revealed through archival documentation. The manager of the textile mill commented that, “The sex and race doesn’t matter, the aptitude does.”
At the spinning mill archival documentation showed that top, senior, and mid-management consisted of the following: 34% White, 58% Asian/Indian, and 8% Black. At the junior management and supervisor level 44% were Black and 56% were Asian/Indian. At the textile mill archival documentation revealed that 33% were White, 17% were Asian/Indian, 8% were Coloured, and 42% were Black. The number of different races in management positions is not known for the garment manufacturing facility.

There were not any migrants employed at the facilities. The employment of Blacks had increased at the garment manufacturer (to 34%) because the manager commented that they are able to perform better at work because they do not face the same social issues as the Coloureds in the area.

Labor relations are highly regarded and were talked about by managers at all facilities. Managers appeared to respect workers and also efforts are made to improve the commitment and loyalty of workers. The manager at the spinning facility said, “One of the things... you want to improve employee participation. If you are involved and you have buy in then, we say get their hearts because you get their hands on top of it.”

There has been a large shift in the way that labor relations have been dealt with in the past decade at two of the factories visited. At the textile mill, the manager stated that:

We used to have a very poor relationship in the textile industry, it used to be very volatile and have a lot of strikes. We have no strikes. We have a good working relationship between management and the shop stewards.

The manager of the garment manufacturer took over eight years ago. Before she was there, “the culture was very male dominated and paternalistic, punitive.”
During that time the turnover rate was 49%, which is extremely high. There have been substantial improvements in the culture and treatment of workers in the past eight years since the manager has been in place.

Equality was emphasized at the garment manufacturing facility by treating the workers and managers the same. The manager commented on this when talking about changes in the factory:

There used to be a lot of division in the treatment for management and factory workers. They had separate toilets, separate canteens, managers were served tea by tea ladies and we had a separate year end function because we were very special and the workers were not treated special at all. Now we are all special. No one gets served tea, we all make our own tea. The factory workers actually get served tea. They’ve got decent canteens and management does not have a canteen. So either you go sit there or you sit in your office.

A worker at the spinning facility discussed respect and community when she recalled what her manager always says to the employees, “as we enter the gate we are one, we are family.” While some workers felt there was respect and fair treatment, this was not the entire case. One worker reported that she felt too much pressure from the managers. The pressure stemmed from the workers being pressured to work more efficiently because there was “too much work” that had to be done within the factory. However, the worker understood that the managers felt under pressure so they had to put pressure on them as well.

Safe Work Environment and Social Security

Decent work entails that workers are able to work safely at the places where they are employed. Another important aspect of decent work is that employment should provide workers social security in the form of benefits such as sick leave and a
pension. Managers at each of the three facilities stated, and workers confirmed, that protective clothing was provided for employees. Worker compensation was paid for those employees injured on the job, as stipulated in collective bargaining agreements. At the garment manufacturer, the manager stated that the most common injuries were needles in the fingers, however this would be from women removing the needle guards on their machines. Company documents were shown at the spinning facility that listed the number of injuries, this document showed that there was a steadily decline in the number of injuries in the past few years. The highest amounts of injuries reported in company documents at the textile mill were injuries to the hands or the back. The time lost due to injuries in 2013 was less than in 2012. The textile mill purposefully does not use sulfur-dyeing methods because the manager said it can be harmful to workers. There were on-site clinics at each facility. The spinning facility monitored ear, lungs, blood pressure and sugar levels of all employees. Blood tests are conducted at the textile mill to make sure that workers are not being exposed to chemicals.

Government inspectors will visit the textile mill to monitor the facility if a worker is injured. The manager of the garment manufacturer did mention that there are audits conducted to make sure that workers are wearing PPE and using their needle guards. Managers at all facilities confirmed that there is safety and fire training provided for all employees. The manager at the garment manufacturer commented that they also have volunteer fire safety marshals.

Sick leave and benefits are regulated by the collective bargaining agreements at each facility. Deductions from pay were taken for health care and provident funds (pension) and given to the Bargaining Council. The Bargaining Councils are
responsible for the health care fund and pensions. The Bargaining Council determines the amount of the deductions.

Combining Work Family and Personal Life and Work that Should be Abolished

Decent work allows workers to be able to have a fulfilling home life that is not negatively impacted by their jobs. Because many women work in these factories, the facilities need to provide women workers the ability to be mothers and raise children. Decent work also excludes the possibility of child and forced labor. Collective Bargaining agreements regulated maternity leave and these three facilities reported that they followed these regulations. No workers under the age of 18 were hired at the three facilities.

Most workers interviewed were all from surrounding communities so they were relatively close to their families. Even though they lived in the surrounding area, getting to and from work could be time consuming and costly. At the spinning mill one worker stated that she had to take two taxis every day to and from work, which cost her R28 everyday. Another worker at the same facility stated that after a 12 hour shift it took her an hour and a half to get home, so by the time she got home she was too tired to do anything. Although the worker lived in the surrounding community, she still had to travel a substantial distance and inefficient transport systems added to the time spent traveling. At the garment manufacturer the workers interviewed lived much closer and could either walk 30 minutes or take a taxi for R8 each way.

Managers understood the need to balance work and family life at the facilities visited. This is shown when the workers at the garment manufacturer expressed how understanding management is when it comes to workers having to take days off to tend to sick family members. Also, during an interview with a worker at the textile
mill, he told of a time when the managers let the workers off early the day before the holidays so that they had more time to travel and spend with their family.

One aspect of balancing work and raising a family is the ability for women to provide for their children to ensure they have a decent future. A worker at the spinning mill expressed how this job improved her family and personal life when she stated, “That job is doing a lot for me. I’m supporting my family and we are happy. I do everything I wish to do for myself. I’m not depending on other people, only on myself.” A second worker at the spinning mill has a similar comment when she said, “My life has changed a lot since I’ve came here. As I told you my parents have grown up, they are above 60. But I can look after them.” These workers were provided the opportunity to be beneficial family members because of their jobs.

Resource Based Perspective and Financials

The development of capabilities and resources can reveal strategies taken to increase the competitiveness of a company. Also, because social upgrading is dependent on economic upgrading the financials of the companies can show the possibility of social upgrading and decent work.

Resource Based Perspective

Developing worker capabilities is a fundamental strategy to sustain a competitive advantage in business. Quality is a strong focus at the garment manufacturer. The manager claims this is created and sustained through the skill level of workers at the factory. She commented that training and development of staff adds to this and ensures high levels of quality and consistency. Efforts to develop the capabilities of workers at the textile mill and spilling mill were also evident through
the training programs they had in place. The manager of the spinning mill also expressed concern for training workers and to be able to provide jobs for those in the community. The textile mill offers training and education on a variety of topics, and the manager stated, “The opportunity is there for anybody to learn anything and if we don’t have it I will get it. And if I don’t know it, give me 24 hours and I will learn it.” The manager of the textile mill reported that training has shown improvements in productivity, so they will continue to focus on training. He also stated that training gives workers a sense of pride. This is evidence of how capability development of workers can improve the success of the facility.

Throughout the interview the manager of the garment manufacturer expressed how she cares deeply for the women and has deep sympathy for the issues that they deal with on a day-to-day basis. This caring nature has led to the recent changes and the creation of many facilities that are offered to the women, which will be discussed in a following section pertaining to extended services. The services provided for workers make them more loyal and committed to the company, two intangible capabilities. These two aspects are shown by the near zero turnover rate and the satisfaction workers interviewed had with their jobs. When the workers were asked if they would change anything about their jobs, they both could not think of anything. It was also common at the textile mill and spinning facility for workers to be employed for over ten or even 20 years. Also, to boost company moral and build relationships all three facilities had end of the year functions that would promote the equality of workers and managers.

The need to pass on capabilities to younger generations was an issue brought up by every manager interviewed. Managers spoke of the common belief that the
younger generation does not want to work in manufacturing jobs. However, one manager commented that the necessity to have a job would override that issue. This same manager had older workers tell him that they experience the younger generation being unwilling to work hard on the factory floor. The manager of the textile mill brought up the issue that many middle class people are leaving South Africa to work elsewhere and that this is leaving a large lower class “stuck here.” This occurrence could mean that vital capabilities, knowledgeable citizens, and resources, income generated by these professionals, are leaving the country.

Financials: Capacity, Investment, Value Added, Productivity

Decent work depends on the availability of stable and competitive businesses. Economic upgrading must take place in order for businesses and the industry to become stable and competitive. Each of the three facilities commented on the increased demand that the Preferential Procurement Policy Framework Act (PPPFA) will bring to their businesses. The garment manufacture was in the middle of an expansion project that would triple the capacity of the facility by 2024. They currently produce eight million garments per year, which makes up 60% of all school clothing sold in South Africa. The biggest cost at this facility is raw material at 65%. The manufacturer has added value to their production by being fully integrated; it is not just a cut-make-trim (CMT) facility. By including other activities such as marketing products, sourcing their own material, packaging, and shipping the items, they are able to gain more value for their products. The efficiencies at this factory are higher than other manufacturing industries in this area because the manager believes that the workers work harder. The services provided to workers on site were in part set up by management to help to address the absenteeism issue, which hurts productivity. The
exact rate of absenteeism is unknown but the manager stated that it was high and has been increasing the past few years. However, productivity and efficiency rates have been improving in the past years at the facility.

At the textile mill, the largest cost to run the facility is raw materials at 60%, labor at 27%, and maintenance at 5%. The manager of the textile mill commented that the increase in training resulted in direct improvements in productivity of the workers and a decrease in the reject rate. To increase value added in products, the textile mill is looking at including organic cotton blends. The textile mill was not running at full capacity at the time of the interview. They had two shifts, but to become full capacity would like to work seven days a week and have three shifts.

At the time of the interview the spinning mill was producing an average of 800-850 tons of yarn per month, but would like to be producing 1,000 tons per month. Their biggest cost is labor and then energy costs at about R20million per year. When speaking about the capacity of the spinning mill, the manager described how production capacity depends on the success and strength of the industry. When addressing the issue of limited demand he stated:

Productivity can’t happen when your mill has got to stop and then start again. It’s a contradiction of terms. The prime objective of any initiative that wants to revitalize the industry is that it has to create the demand to get the industry working flat out. Then you can start thinking about how can we make this thing better or that thing better.

In order to increase business he stated that the company would benefit the most from local demand increase, rather than through export increases.

There has been a 25% increase in energy costs throughout the whole country consistently for a few years; each manager mentioned this as an issue. The spinning facility is involved with an external company that guarantees they can help the
business save 20% of energy usage. The textile mill also took steps to decrease energy usage such as changing lighting and engineering their coal fired oil burner to reduce energy use, which the manager believes will save R38,000 to R42,000 a month in energy costs. The manager of the garment manufacturer commented that they are concerned about energy use and costs, however they are still trying to figure out which strategy to take to decrease energy cost.

The volatility of cotton prices has created an uncertain environment for the spinning facility. Within a few months the price of cotton can go from under a dollar to over two dollars per pound. The manager of the spinning mill stated this as a one of the largest issues that his company faces. This facility is dependent on purchasing cotton on credit; they do not pay for the cotton they buy until 90 days after it is received. The only companies able to sell large amounts of cotton on this credit scheme are the large international cotton merchants. In addition to the volatile cotton prices, there has also been a decrease in local demand for textiles. The manager of the textile mill stated this was because imports became available for lower costs. The textile mill lost one million meters of business within two years a few years prior to the interview.

**Themes Revealed Through Inductive Analysis**

Inductive analysis revealed additional topics of interest pertaining to these three supply chain nodes as with the farm and gin nodes. The themes found were similar to those found at the gin and farm node and include the degree of industry support, the political climate, impacts of the community and culture, extended services provided to workers, and the support of the community.
Industry Support

The support, or lack thereof, that an industry receives from outside forces can support or suppress social upgrading and decent work. At the time of the research, there was evidence of strong support for the textile and apparel industry. Besides the development of the Southern African Sustainable Cotton Textile and Apparel Cluster, in part funded by the South African government, the government has a few other programs in place to spur economic growth.

The PPPFA stipulates all government clothes and textiles must be purchased locally and contain 100% local content. During the interview with the garment manufacturer manager, she expressed that this had allowed them to feel safe expanding operation to meet the new demand for local goods. The manager at the spinning mill claimed that this act will take the pressure off producing everything at a very low price and will relieve some stress. The manager of the textile mill expressed interest in increasing production to meet this new local demand.

The government also has the Production Incentives Scheme in place. It assists in the purchasing of new goods and more productive technology. The garment manufacturer took advantage of this incentives scheme, which helped pay the cost to replace older machines. The government also enacted a new policy in 2014 that provides factory audits to help detect problem areas and assist in the improvements to decrease environmental impacts of facilities. Another way that support has been given to the industry is in the bailout of the spinning mill by the government. In the past the mill faced financial troubles and was on the verge of closing, so the government stepped in and bought the mill so that it would not have to close. Learnerships and apprenticeships at the spinning mill are subsidized through the Sectoral Education and Training Authority (SETA).
Political Climate and Politics

The ability and success of the government to enforce the policies in place and to provide stable infrastructure has an impact on the success of the companies within the country. The sudden surge in energy costs was blamed on the failure of the government to address infrastructure development issues. Another issue brought up by one of the managers is that, many of the rules and regulations are not enforced when it comes to customs. The manager estimated that customs fails to collect R2.5 billion in duties each year because of companies falsely reporting the value of goods imported. Another issue he mentioned was the enforcement of the PPPFA. The manager stated that the implementation of policies created by the government is an issue. He went on to say that even though the PPPFA has been put in place, there are cases of this not being effectively implemented and textile goods being imported instead of being sourced locally.

Community and Culture Impact

The community in which these firms are situated and the cultures of the workers have a large impact on the way that business is conducted, the ability for workers to perform at an optimal level, and also the lives of the workers. In the Western Cape, where the garment manufacturer is located, there are high levels of gangs, violence, and substance abuse in the townships where the majority of workers live. The constant issues that the workers must deal with in their communities and home life take a toll on their ability to be productive and come to work every day. The manager stated that there are high levels of absenteeism due to these social issues. This is why the manager of the garment manufacturer decided to hire more Black
Africans, because she claimed that they do not have as many social issues in their communities.

The issue of absenteeism was also a problem mentioned by the manager of the spinning facility. The management team has tracked data to reveal that it is highest among young males. To this the manager commented that young women are more responsible. At this facility, workers interviewed expressed concern about the dangers and violence they have to deal with in their communities if they are out at nighttime. For this reason they are happy that the work hours are from 6am to 6pm so they can get home before it is too late.

The manager of the garment manufacturer stated that in the workers’ communities, it is common that women are used to being shouted at and experience violence at home. This treatment of women is one issue she had to address when she started working at the factory. She said:

The typical woman is used to a male shouting at her, swearing at her, and abusing her. To find that in the workplace isn’t strange for her. She doesn’t react to kindness, she reacts to shouting and screaming. We had to change the mindset of the managers, and the employees, that we don’t have to shout to get something done. It’s been a long process, but we are seeing the results.

A few of the managers expressed their belief that migrants work harder than local South Africans. One of the managers commented on how the history of the workers coming from tribal communities reflects their culture and value systems today, because of this it is not in the culture for men to work hard. Also, within the Black African culture, equality is very important. At the textile mill, the manager has noticed this when it comes to the issue of overtime. He found that if one department has to work overtime, it will be seen as favoring certain people. So if overtime is
provided for one person, he must be able to provide it to all. Because of this the textile mill had to train all workers on multiple machines so that when overtime is available all workers can take turns and have a chance to work overtime.

Within the Coloured communities of the Western Cape where the garment manufacturer is located, people become resentful of those that have more than them. The manager explains why this is hard when it comes to promoting women from machinist to team leader:

Because they [team leader] live on the same street and travel on the same taxis as the machinist, there is always a conflict between the machinist and the Team Leader. Unfortunately, the Team Leader is not skilled enough that she can earn that much more that she can live in a different area. There is a bitter line between the hierarchies. Although you would think that having come up from being a machinist would help. Unfortunately in the culture, and we’ve done a lot of research in our company specifically around culture and climate, the culture of the Cape Coloured comes from a place of entitlement. You don’t like it if your peer gets something that you don’t get.

Extended Services Provided

Each factory provided additional services for their workers and it was the norm to provide health services to workers. All three locations also offer additional education opportunities in order to address the educational gap present in the country. The garment manufacturer allows workers to take educational classes half on the clock, and half on their own time. The textile mill offers educational resources on a variety of topics that are available to every worker.

In addition, the garment manufacturer provides numerous services including a canteen that offers healthy meals at very low costs, an on-site clinic, family planning services, access to a doctor, social service workers, a financial planning department, and employee wellness programs. They also had a program that takes care of tasks
outside of work such as picking up chronic medicine from the hospital or going to the court to collect maintenance (child support) money. The spinning facility offers savings accounts for those workers that do not have a bank account, a clinic for HIV/AIDS counseling, creates menus to facilitate healthy eating on low incomes, and a low cost canteen serving healthy meals.

Community Support

One aspect that may help spur social upgrading and decent work is the degree of community support. While at the farm and gin nodes the community worked to support the farms, at the industrial nodes these firms worked to support the community. The desire to improve the surrounding communities was mentioned by managers at every facility. The garment manufacturer produces low cost clothing with the majority of South Africans as their consumer. The manager stated that she sees that providing quality low cost goods to the community benefits them:

Because the customer [of the garment manufacturer] is the majority of people who live in South Africa, that’s where the development needs to take place. Ultimately, if you have a textile pipeline that is effective and efficient, the people in the country will benefit, which means the economy will benefit.

The textile mill provides training for those in the community through their learnership program. The learners are trained at the facility while receiving 80% of a standards wage. After they complete the training in various areas such as machine operation or accounting, which can take one to two years, they receive a certificate. This will provide them a better opportunity to find work elsewhere if there are not jobs available at the facility. There is an average of 30 learners at all times. This helps to provide those in the community with additional skills.
When speaking about the high unemployment rate of people under the age of 30 and the desperate need to create more job opportunities, the manager of the spinning mill mentioned how job creation in garment manufacturing is a great opportunity. This is because jobs can be created in the garment manufacturing industry for around R100,000 rather than the government’s benchmark of R500,000 to create a new job.
Chapter 5

DISCUSSION AND CONCLUSIONS

The purpose of this study was to understand the current situation of workers employed throughout a pilot sustainable supply chain created by the Southern African Sustainable Cotton Textile and Apparel Cluster, using indicators of social upgrading and decent work. This study also highlights challenges and areas of concern within the pilot supply chain to inform the creation of interventions, which can specifically address the potential shortcomings.

The globalization of buyer driven apparel supply chains has fostered an industry where suppliers are generally chosen based upon price, which forces suppliers to take the low road of cost cutting strategies. Within these supply chains, the majority of power and value is taken by the lead apparel firms, while the suppliers assume little power and value added (Barrientos, et al., 2011b; Gereffi & Frederick, 2010; Hurley, 2005; Hurley & Miller, 2005; Milberg & Winkler, 2010). In addition to this, there is little visibility and communication within members of the supply chain (Barrientos, et al., 2011b; Valero & Dickson, 2014). Many members of the apparel industry are now aware that they need to take steps to improve the working conditions and ensure decent work throughout their supply chains. Past efforts to address working conditions have consisted of top down private governance from multinational corporations (MNCs) in the form of codes of conducts, monitoring, and auditing (Barrientos, et al., 2011b; Schrage, 2004; Valero & Dickson, 2014). Public governance has been in the form of initiatives such as government regulation of labor
laws, promotion of social dialogue, providing social security to citizens, and promotion of the industry (Barrientos, et al., 2011b; Rossi, 2014; Warnecke & de Ruyter, 2012). Past research has suggested that a combination of both public and private governance mechanisms will provide the greatest results when it comes to improving working conditions and livelihoods of workers (Locke, 2013).

A case study of the pilot supply chain in South Africa was conducted. Desktop research was conducted to gain a broader understanding of the context for workers within South Africa. Main contextual challenges were highlighted and taken into account during the creation of the instrument. Field research was conducted for two weeks in various sites across South Africa. Interviews were conducted with workers and managers at each node of the supply chain: farms, gins, a spinning facility, a textile facility, and at a garment manufacturer. A total of ten managers, eight workers, and two extension officers were interviewed. Workers at the farms and gins were not interviewed because it was not harvest season at the time field research was conducted and the majority of workers were not employed. Field research also consisted of archival data collection in the form of Bargaining Council agreements and company documents.

Data were coded in accordance with 11 social upgrading and decent work indicator categories; inductive analysis led to new themes being realized. Due to the small sample size of workers interviewed there was not enough data to create profiles of working conditions for each node. However, challenges and positive areas were highlighted within the nodes.

The remainder of this chapter provides an overview of the literature that served as a basis for this study. Next, a summary and discussion of the research findings is
presented. Finally, conclusions of the study are presented, followed by implications of the research for both the cluster’s work and for future research.

**Review of Literature**

In order for living standards to be improved and for people to escape poverty, they need to have decent work. Decent work is employment that allows for people to live a dignified life. It entails adequate availability of jobs, proper working conditions, social protection and the ability for workers to take place in social dialogue (ILO, 2008b). Decent work can be achieved through the process of social upgrading, which is the improvement in work place aspects such as wages, working conditions, equality, and rights (Barrientos, et al., 2011b; Goto, 2011; Milberg & Winkler, 2010).

In order for social upgrading to take place economic upgrading needs to take place. Economic upgrading is the process of firm, industries, or nations to improve economic standing through improvements in aspects such as productivity, technology, and adding value to their products or services (Barrientos, et al., 2011b; Goto, 2011; Milberg & Winkler, 2010; Rossi, 2013). Economic upgrading supports social upgrading because it allows for firms to be more competitive, have steadier business processes, and can increase financial resources (Barrientos, et al., 2011b; Milberg & Winkler, 2010; Rossi, 2013).

In order for economic upgrading to take place firms must increase their competitiveness. Firms can become competitive by developing their capabilities and resources, which follows the theory of the Resource Based Perspective (RBP). This theory states that a firm’s competitiveness comes from the intangible and tangible resources and capabilities that they possess. Some examples of intangible resources are employee skill level, firm reputation, and employee loyalty. Some examples of
tangible resources are financial resources and assets. Tangible resources are necessary for the investment and development of intangible capabilities (Branco & Rodrigues, 2006).

Decent work, social upgrading, economic upgrading, and the RBP are all related, interconnected, and support each other. When investments are made to increase employee skill level (an indicator for social upgrading), economic upgrading, and decent work are more likely to take place (Branco & Rodrigues, 2006; Geren 2010; Locke & Romis, 2010). Also, tangible resources such as sufficient financial capital allows firms to invest in technology improvements, which can lead to economic upgrading and therefore support social upgrading and the creation of decent work (Branco & Rodrigues, 2006). Further economic upgrading can then reinforce the financial standing of the company. While changes can be made at the firm level, there are many contextual factors that impact decent work, social upgrading, decent work, and RBP. A few of these contextual factors are governmental regulations, industry support, and trade relations of the nation that the firm is located (Barrientos, et al., 2011a; Pipkin, 2011; Plank, et al., 2012).

**Summary and Discussion of Results**

The research findings are discussed with the following four sections: current working conditions, contextual challenges, instrument refinement, and suggestions for the cluster. Those main areas of interest and concern relating to decent work and social upgrading will be addressed. Key points will be compared to past research presented within the literature review of this thesis.
Current Working Conditions

The first objective of this study was to identify potential challenges for achieving social upgrading and decent work in the pilot supply chain. Another objective of this study was to establish profiles of current working conditions for each supply chain node, thus creating a benchmark for future determination of social upgrading. Throughout desktop research and field research current working conditions that will be challenges to social upgrading and decent work, and also those that will be supportive of social upgrading and decent work were found. Some positive aspects that relate to decent work and social upgrading related to social dialogue, wages, social security, and employee training.

Almost all of the workers at the spinning mill, textile mill, and garment manufacturer were part of the main union, the Southern African Clothing and Textile Worker’ Union (SACTWU). Bargaining Councils, which are made up of employer organizations and trade unions, for the different sectors are responsible for setting wages and regulating benefits. Companies can choose to be a part of an employer organization and take part in the Bargaining Council, however national law imposes the Bargaining Council’s agreements (both the National Textile Bargaining Council for spinning to textile, and the Bargaining Council for the Clothing Manufacturing Industry of South Africa for garment/like product manufacturers) on all companies and workers within the nation (Kriel, 2013b; National Textile Bargaining Council, 2013).

Past research has highlighted union rights and the ability to organize as the most important aspect for workers to support decent work and social upgrading (Barrientos, et al., 2011a; Goto, 2011; Milberg & Winkler, 2010; Rossi, 2013; Selwyn, 2013). The ability for workers to organize and join unions creates empowered
workers. Empowered workers have the ability to stand up for their rights and fight for workplace improvements. Union rights are strong and protected by law within South Africa; this should support future social upgrading and the creation of decent work.

There were no unions at the farms and gins visited, which is consistent with trends found in desktop research that indicated low rates of unionization in agriculture (COSATU, 2013; HRW, 2011). While there were no unions, it was common for the farmers interviewed to be part of farmer associations, which act as a way for smallholder and commercial farmers to organize, share knowledge, and support one another. One of the gin managers was involved in an agriculture union, however the focus of that union seemed to be on supporting the farmers rather than workers at the gin. Special consideration needs to be taken to ensure that farmworkers, even those at smallholder farms, receive proper representation and protection.

One gin used to have a union, however the fact that it is no longer present could represent an issue of suppressed worker dialogue and protection. Workers were not interviewed at the gins and farms, so there may be issues relating to social dialogue that remain unknown at those nodes. Because the workers at the gins were not members of unions, they may not have the power and support to speak up to improve working conditions (Barrientos, et al., 2011b; Goto, 2011; Milberg & Winkler, 2010; Rossi, 2013; Selwyn, 2013). The majority of the workers at gins and farms are seasonal, and past research has shown that temporary workers are more likely to be excluded from social dialogue (Rossi, 2013). Measures should be taken to ensure these workers have necessary protection.

The wage law is complex in South Africa. There is not a national minimum wage throughout the country, but there are legally mandated wages set through
Bargaining Councils and Sectoral Determinations for different industries, job positions, and regions. Workers at the more industrial nodes, spinning, textile, and garment manufacturing, received wages set by Bargaining Councils, which contrasted with desktop research that stated some clothing manufacturers fail to pay minimum wages. While some see the strong unions as a sign of power for the workers, various managers interviewed stated that wages set by the Bargaining Councils were too high. Managers of farms and gins stated that minimum wages set by Sectoral Determinations were paid, however those hired for harvesting were paid based on amount of cotton picked. Lack of oversight of working days and hours raises the possibility that seasonal workers hired at smallholder farms receive less than minimum wage. This is consistent with desktop research that revealed cases of farmworkers receiving less than minimum wage. Workers at the gin and farms were not interviewed so their perspective and opinion on the wages they receive is unknown.

Past research has identified wage determination as a fundamental aspect of social upgrading (Milberg & Winkler, 2010). Two theories of wage determination base them on either technology or worker bargaining power (Milberg & Winkler, 2010). The bargaining power of workers in the industrial nodes is strong and therefore they are able to secure minimum wages and ensure yearly increases. Because workers at smallholder farmers may have little opportunity to organize within a union or association and lack protection, the wages may not be enforced.

Within South Africa, social security is regulated by the government and also through Bargaining Councils. Pensions are provided to those citizens over the age of 60 by the government. Workers can choose to take part in an additional security fund referred to as Provident funds, which companies and workers pay into. In the apparel
industry provident funds, unemployment insurance, the skill development fund, and workers compensation are regulated and paid to the Bargaining Council. At smallholder farms employment benefits such as sick leave and maternity leave were not provided to workers hired for harvest season.

Throughout the entire supply chain, field research showed there was training provided to workers and farmers. Investments in worker capabilities allow for workers to become more skilled. When workers become more skilled, theory states that productivity should also increase (Branco & Rodriguez, 2006), which could allow for social and economic upgrading to take place. Training was provided for farmers from industry organizations, the government, and within the community. At the industrial nodes the companies interviewed provided workers with education and work related skill development. An increase in the training offered at the industrial nodes in the past resulted in increased productivity, efficiency, and/or employee moral. Economic upgrading through product upgrading, increasing the value of the product, could help to further develop the skills and the knowledge of the workers (Barrientos, et al., 2011a; Rossi, 2013). While this study did not collect quantitative data on productivity, skill development, or company competitiveness, the notion of resource based perspective supports the idea that increased skill development will benefit both workers and firm competitiveness (Branco & Rodriguez, 2006).

In addition to working conditions found that foster social upgrading and decent work, there was one main challenge that could potentially be addressed through changes in management practices. Desktop research highlighted worker safety as a concern at farms and it did not appear to be properly addressed by those interviewed in the field research. Serious accidents served as a red flag during field research at the
farm and gin nodes. Proper and reoccurring safety training to all workers coupled with management enforcement could decrease the accidents at the workplace and also provide workers a safer work environment.

When it comes to the future potential of decent work and social upgrading there were a few areas of concern that could pose as major challenges. A few of the largest areas of concern are the lack of employment security for seasonal and casual labor, work hours, lack of employment opportunities in the industry, discrimination and equal opportunity, and pressure to keep prices low. Workers at the farm and gin nodes are generally hired on seasonal contracts. This presents a major issue for decent work and social upgrading as past research has shown that temporary workers have a greater chance of being excluded from social upgrading. Past research pointed out that seasonal workers generally do not receive equal wage increases to permanent employees, as many employment benefits, and also have shown to have lower amounts of social dialogue (Barrientos, et al., 2011a; Rossi, 2013). While functional upgrading that increases the activities that a firm is involved in could add additional pressure and the need for a flexible staff, further negatively impacting social upgrading (Barrientos, et al., 2011a; Rossi, 2013), it could provide the farms and gins additional work during their off seasons. At the gins and farms the majority of workers were temporary due to the nature of the work rather than the need for a flexible staff to meet the demands of buyers upstream. Increasing the activities of these farms and gins could allow for workers to be employed on a permanent basis rather than a temporary basis.

Working hours were shown to be an issue through field research at farms and at one facility in the industrial nodes. At the farms, workers are paid by the amount
they harvest and are able to choose the amount of time they work; therefore their hours are often unregulated. This could lead to overtime being worked without additional pay. Also, at one industrial facility visited there was underemployment in regards to work hours. Due to low demand and work available, workers were not able to work fulltime. This case of underemployment of work hours can negatively impact decent work, as it does not provide workers the ability to earn a complete weekly wage.

The high unemployment rate of the country shows that there are not enough job opportunities currently being offered. The apparel industry has been in decline for the past decade within South Africa, therefore many workers skilled in this industry have lost their jobs and been forced into unemployment or other industries. The fact that many workers interviews did not have anything to say about the quality of the job or issues present just the fact that they had a job, shows that many people are happy to have any job available. The number of jobs offered is partially determined by financial resources of a firm (Branco & Rodrigues, 2006), therefore economic upgrading must take place in order to increase the job opportunities.

Field research showed discrimination and lack of equal opportunity for legal migrants, women, and some ethnic groups, which is consisted to the findings of the desktop research that indicated this is a problem in South Africa. Some farms and one gin interviewed did not hire migrants. This is an issue that relates to a larger contextual issue of xenophobia towards immigrants. There was a lack in equal opportunity for women as they tended to be employed in lower paying positions, especially at the farms and gins. Also, White people tended to have the upper management positions while Blacks and Coloureds worked the lower paying lower skilled jobs throughout the supply chain. Past research suggested that worker
characteristics, including gender and ethnicity, could limit social upgrading and decent work (Goto, 2011). Therefore, the tendency for these groups to be employed in lower positions represents a future challenge for these groups to take part in social upgrading.

Contextual Challenges and Advantages

According to past research the broader context of the firms can play a role in the ability for workers to benefit from social upgrading. Local organizations and governments have been shown to help foster aspects of decent work such as social dialogue and social security (Pipkin, 2011; Plank, et al., 2012; Warnecke & de Ruyter, 2012). Currently there are strong labor laws in place, social security is provided to workers, and worker rights are protected at nodes of the supply chain although these were not apparent for seasonal workers at smallholder farms. At the industrial nodes there is strong social dialogue. These aspects have all been shown in the past to positively support future social upgrading and decent work (Pipkin, 2011; Plank, et al., 2012; Warnecke & de Ruyter, 2012).

Many regarded the public education within South Africa to be lacking. This led to low levels of education being common in the workplace, this was especially apparent at the farms and gins were literacy rates were low. The low levels of education could impact smallholder farmers’ ability to be productive. If they are not literate they may not be able to read educational materials or instructions on seed and pesticide packaging and put them at increased risk or harm. Education and knowledge also help when it comes to critical thinking and solving problems. Also, because people are not properly educated in public schools, the firms had to provide additional educational facilities at the workplace. This is a nationwide issue, therefore supply
chain members should initiate public dialogue to raise this issue to the government and other influential members of society such as union leaders.

Another contextual aspect that can hurt or support social upgrading is the risks and opportunities associated with cotton farming. The two main risks associated with cotton farming are the weather and the volatility of cotton price. Too much rain, too little rain, or hailstorms impact the farmer’s ability to produce sufficient cotton yields, can result in the farmer losing money, and the possible inability to pay workers. The fluctuating price of cotton and volatility of the market can also hurt farmer’s profits and may result in them paying more to plant the cotton than it is actually worth. The risks involved with planting cotton can result in high uncertainty, a decrease in employment opportunities within cotton farming, and decreased profits or wages for farmers and workers. Some farmers in South Africa are choosing to invest in nets to defend against hail, however this is a large financial investment. Setting up a system to offer a guaranteed minimum price for cotton and crop insurance could help mitigate some of the risk that farmers ensue, however the risk would then be dispersed onto other players such as the gins or other cluster members.

Although there are risks that can negatively impact social upgrading and decent work, there are also opportunities present for cotton farming. The opportunities revealed in field research are the current ability to expand cotton production within South Africa, the region is ideal for cotton agriculture, and the high skill of cotton farmers within South Africa. There is the opportunity to expand cotton farming because there is potential land for expansion, there is the demand for local cotton, there is available capacity at the gins to process the cotton, and there are many unemployed workers to hire as laborers. Also, cotton agriculture can increase
employment opportunities through an increase in smallholder farmers and also increased workers hired as farmworkers. Cotton farming is a form of income because it is a cash crop; rather than some crops being subsistence crops for personal consumption. These opportunities can bring more income or higher wages for farmers and workers and more employment opportunities.

Another contextual aspect that could impact social upgrading and decent work within the pilot supply chain is certain financial aspects. While some financials are firm and farm specific, there are some financial aspects that are determined by the context. One main aspect revealed through interviews is the lack of financing available for smallholder farmers. In South Africa many smallholder farmers do not own the land they plant on and do not have land deeds. As a result, they are not able to provide collateral to receive loans from banks. Because of the high costs for planting inputs of cotton farming, many smallholder farmers have difficulty in affording the initial investment for planting inputs. Also, smallholder farmers may not receive payment until the cotton lint is sold through the gin. This can result in farmers and the laborers hired for harvest receiving payment after work is conducted. The limited financial resources available for smallholder farmers can decrease their ability to plant cotton and to pay their workers in a timely manner, decreasing the opportunity for social upgrading and decent work. There is a need for proper commodity financing to provide farmers with the inputs needed to plant cotton. Special precautions would need to be taken to ensure farmers do not incur debt if their crop is damaged on account of weather or other risks; a form of crop insurance could be developed. A guaranteed minimum price for the cotton would also decrease some on the risk farmers’
encounter. Proper commodity financing would provide farmers with more security and could promote the planting of more cotton within the country.

In addition, cotton merchants play an influential role in this supply chain. The gins currently sell their cotton to international cotton merchants and the spinning mill is dependent on purchasing cotton on credit through merchants. The gins could add value by taking over the activities conducted by the merchants, however, this may negatively impact the ability for the spinning mill to buy on credit. Creating a fixed price for cotton, as some interviewees mentioned, could possibly decrease risk for farmers and also for the spinning mill. This would require either the gins to take over the activities of international cotton merchants and sell directly to spinning mills, or for a national cotton merchant within South Africa to facilitate the buying and selling within country.

The negative impact that cheap imports had on the firms was mentioned at all nodes except for the farms and gins. This creates pressure on firms to keep low prices in order to be competitive. The inability for companies in South Africa to offer low prices has decreased the demand for South African products and caused many companies to close or decrease in size. Past research commented that the top down pressure to lower prices could remove the potential for social upgrading even if economic upgrading took place (Plank, et al., 2012). Economic upgrading through process and product upgrading can help to increase the value added at the firm, which could help firms take the high road and compete on quality rather than low price (Barrientos, et al., 2011a; Rossi, 2013). Initiatives could be developed to increase value added, such as promoting the production of sustainable products or investing in new technology for production processes (Barrientos, et al., 2011a).
There are also contextual aspects that can impact economic upgrading and therefore social upgrading. There were signs of industry support from the government and local communities at the farm level. Government policies, such as the PPPFA policy and subsidized training, have the opportunity to support economic development, which will support social upgrading and can increase employment opportunities (Pipkn, 2011; Plank, et al., 2012; Warnecke & de Ruyter, 2012). However, a few managers expressed their concern for the ability of the South African government to enforce these policies. Field research revealed that there was strong support of the community at the farm level. The willingness to support others in the community can prove to be beneficial when it comes to social dialogue, training, knowledge transfer, and collaboration.

Other contextual issues present are the impacts that arise from the culture of the various communities within South Africa. The cultures within the context of the pilot supply chain in South Africa can have an impact on the degree of social upgrading and decent work that can be achieved. Factors such as high absenteeism and a resistance of some workers to become more successful in the workplace because it could lead to alienation in the community could act as suppressors to social upgrading. Also, the high rates of crime and violence in the communities negatively impact worker wellbeing and also their ability to be productive at work. The fact that absenteeism is high can impact the ability for companies to be competitive at a global level. Also field research showed that different communities look down on those individuals that achieve more. This can suppress the desire for individuals to take advantage of social upgrading and pull themselves above the common level of livelihood within their communities. Focus groups or interviews with workers to better
understand these issues and ways that companies could help mitigate would be necessary to develop initiatives to address these issues.

Refinement of the Instrument

A third objective of this study was to develop an instrument to measure working conditions in each node of the supply chain and track progress towards social upgrading and decent work. The instrument created was based on past conceptual and empirical research that proposed indicators to measure social upgrading and decent work for workers at a micro/firm level and was augmented by information from desktop research about the specific issues in South Africa. After using this instrument in field research, a few areas that need to be refined were realized. The instrument created is very in-depth, however there was not sufficient time and opportunity to discuss in-depth all questions and uncover aspects relating to all indicators. Some of the managers seemed to take the request to interview workers and time spent more seriously. In the future, a first step should be taken to get archival documents from firms prior to interviews and the need to interview workers should be stressed. This will allow for initial questions to be answered and a framework of the current situation to be constructed. Therefore, a broad idea of the practices, conditions within the firm, and basic information could be answered before the interview takes place. The face-to-face interviews could then be used to discuss topics that require more in-depth questioning.

In regards to adjustments of the actual indicators used, broader contextual indicators should be added. The instrument was initially created with a focus on micro/firm level indicators, however it is now apparent that there are many contextual and macro level aspects that have large impacts on the micro/firm level. This was
revealed through field research and the inductive analysis of the data collected. A few topics that should be included are government initiatives, support from the community or industry, and the impact from local communities and cultures. This could highlight aspects that positively or negatively impact working conditions and help to determine areas for improvements. Managers should be asked if there are any government policies that help or hurt their business. Managers and farm owners should be asked about different ways they have received support; either from industry groups, organizations, other businesses, or from any other party. Questions concerning the impact that local cultures have on the workplace can be directed towards managers, while questions uncovering issues in local communities can be directed towards workers.

Those aspects relating to firm and farm financials were revealed to be very important because they determine its success and competitiveness; which supports the past notion that social upgrading depends on economic upgrading and the sustained success and competitiveness of a firm. While the instrument did include some financial aspects, it was based on numerical data and proved to be difficult to collect. During interviews it was found that it was more comfortable for managers to discuss financial success in terms of the amount produced, capacity, productivity, reject rates, input costs, percentage of labor cost, and major expenses. At the farm level competitiveness and success can be determined with the cost of inputs, the hectares of cotton planted, the yield per hectare, the duration of time spent harvesting, and current international cotton prices. Measures of productivity and efficiency should be emphasized in order to assess whether investments in employee skill development improve competitiveness and thus, economic upgrading and social upgrading.
Indicators that can determine potential risks for the farms and firms would help determine the stability of business. Risks at the farm and gin level were revealed to be a main concern, however further investigation at other nodes should be sought out. Including open-ended questions for managers about their largest risks can highlight areas where improvements can be made.

In addition, there should be an indicator added to assess the extended services provided to workers by the firm or farm. Firms interviewed provided various extended services to workers such as education opportunities, banking, health services, and family services. Although these extended services are not necessary for social upgrading and is not a prerequisite for decent work, these services positively impact workers’ wellbeing and can show efforts made to improve worker livelihood.

This research makes important contributions to research on indicators of social upgrading and decent work. This research has shown that an instrument can be created to assess micro/firm level social upgrading and decent work indicators across an entire supply chain. This research provides a necessary initial attempt to evaluate levels of social upgrading and decent work for workers across an entire apparel production supply chain.

Socially Sustainable Supply Chain Operationalized

The last objective of this study was to operationalize what a sustainable supply chain is from a social perspective for the Southern African Sustainable Cotton Textile and Apparel Cluster. In order for the supply chain within South Africa to be socially sustainable, all members need to promote a uniform concept of social sustainability. Therefore, it is necessary to create a shared definition and shared goals for social
sustainability that can be used within the context of the Southern African Sustainable Cotton Textile and Apparel Cluster.

Based on this research I propose that a socially sustainable supply chain is one that is composed of competitive firms and farms, offers an adequate quantity of employment opportunities, systemic and cultural challenges are addressed through continuous improvement to ensure that all workers enjoy quality jobs in relation to the key indicators of decent work, plays a role in improving local communities, and has long term strategies for continued success.

Conclusions

Three conclusions can be made from this research. The first conclusion is that positive aspects within the pilot supply chain should foster future social upgrading and decent work. Two aspects that can be highlighted are the labor laws in place and strong unions help ensure implementation, and the companies within the supply chain have taken steps to address gaps in social development that are not currently provided by the government.

Strong labor laws support many of the indicators of social upgrading and decent work (Plank, et al., 2012; Rossi, 2014; Warnecke & de Ruyter, 2012). For example, minimum wages, sick leave, maternity leave, social security, work hours, occupational health and safety standards, and union rights are all included within national labor laws either dictated by the South African government, Bargaining Councils, or Sectoral Determinations. The unions within South Africa are strong within certain nodes, which allows workers to organize and bargain. Union rights have been shown to be one of the most important aspects when it comes to social upgrading and decent work (Plank, et al., 2012; Rossi, 2013; Selwyn, 2013). This is because it
allows workers to organize and stand up for their rights. Also, the institutionalist theory of wage determination ties wages to the bargaining power of workers (Selwyn, 2013), which is consistent with the study’s findings that show the union regulation of wages and annual increases. However, while unions are strong at the industrial nodes, they were not present at the farm and gin nodes. Many farmers join farmer associations that act as a method for organization and empowerment.

The second positive aspect revealed in this pilot supply chain is that all companies in the industrial nodes are progressive and have taken steps to address gaps that are not currently fulfilled by the government. They offer extended services in the form of education, training, health services, and family planning to address gaps and support personal development. Personal development is one aspect that is promoted through decent work (ILO, 2008b). Even though there has been progress when it comes to offering services to those left behind due to apartheid, there are still gaps that need to be addressed.

While these positive aspects are very strong and set a solid foundation for future social upgrading and decent work, there is one area that seems to be lacking. The workers at the bottom of the supply chain, mainly the smallholder farmers and their workers, may not be benefiting like workers in the industrial nodes. Labor laws are not enforced with inspection at smallholder farms, workers at smallholder farms do not receive employment benefits and may not receive minimum wage, unions are often not present at smallholder farms, and there are not extended services offered to them to address the gaps that the government cannot provide.

This leads to the second conclusion of this study, which is that it is necessary to assess entire supply chains when looking at social upgrading and decent work. This
study shows that the majority of challenges and concerns were found at the bottom of the supply chain, where traditional efforts often fail to reach, and also that working conditions can be impacted by downstream and upstream suppliers.

At farms and gins workers tend to be seasonal and are hired on a temporary basis. Past research has shown this to be a major challenge to social upgrading and decent work, as these workers are often excluded from upgrading (Rossi, 2013). While unionization of seasonal workers may not be feasible, steps need to be taken to ensure that these workers have sufficient protection and received the same treatment as regular workers. Also, most problems of discrimination against migrants and women, even if not done on purpose, were found at the farms and gins. This can lead to fewer opportunities available for these groups and can exclude them for potential social upgrading (Plank, et al., 2012). These areas of concern will be challenging to solve because they are culturally based and systemic, however in order for a supply chain to be sustainable, these issues must be addressed. Strategies can be developed that provide opportunities to any individual that is qualified to work ensuring women and migrants equal opportunities. Ensuring that seasonal workers have comparable benefits and opportunities as permanent workers will provide them the ability to gain from future social upgrading.

Past research and private governance systems have mainly been based from a top down perspective that has failed to look beyond the first tier of the supply chain (Rossi, 2013). This is inadequate, as it does not address the majority of workers within the supply chain, especially those most at risk towards the bottom of the supply chain. Assessment of a supply chain can indicate where the majority of the power is, if it is buyer driven, the governance systems in place, and also the degree of collaboration,
communication, support, and knowledge transfer; aspects which have been shown to impact social upgrading and decent work (Goger, 2013).

The second reason that supports the need to assess entire supply chains is that working conditions are impacted by the supply chain upstream and downstream. In buyer driven supply chains the power is directed from top down, there is often a lack of financial support provided to suppliers, and high uncertainty for suppliers (Gereffi & Frederick, 2010). This is consistent with the findings of this study and could pose as a challenge to social upgrading. In the pilot supply chain buyers determined prices at all nodes, many managers commented on inconsistent orders, and some did not have financial capital to make investments. While private top down governance systems have not shown great improvements in working conditions (Barrientos, et al., 2011b; Schrage, 2004; Locke, 2013), the new bottom up governance system being put in place by the cluster in South Africa has potential to positively influence workplace and contextual factors throughout the supply chains, which impact working conditions. Although support for the industry was present in the pilot supply chain, this governance system can foster further collaboration, communication, support and knowledge transfer. Assessing factors within an entire supply chain can provide a more holistic understanding of those contextual aspects that impact working conditions and highlight areas where improvements can be made.

This leads to the third conclusion of this study. To make real progress, contextual information should be considered when creating a plan towards decent work. While past research has looked at the larger context when assessing social upgrading and decent work (Goto, 2011; Hedberg, 2013; Pipkin, 2011; Plank, et al., 2012; Rossi, 2013), a holistic approach will also need to be used to create solutions
that take the context into consideration. Because decent work and social upgrading is impacted not only by the individual firm, all factors impacting social upgrading and decent work must be included in proposed solutions. This is consistent with Selwyn (2013), who conceptualized the importance of a bottom up approach to social upgrading and decent work.

Past research has considered contextual factors that can positively or negatively impact social upgrading and decent work include trade (Milberg & Winkler, 2010; Pipkin, 2011: Rossi, 2013), government initiatives (Barrentos, et al., 2011b; Rossi, 2014; Warnecke & de Ruyter, 2012), history of the industry (Pipkin, 2011), and the history of economic and social rights of workers (Plank, et al., 2012). This research has indicated a need to also consider industry support, community and culture impacts, and effective government enforcement. All these factors can impact the development of firms’ or farms’ capabilities and resources. The improvement of capabilities and resources is consistent with the RBP theory and can increase competitiveness (Branco & Rodrigues, 2006). These aspects can also guide an industry to be more socially sustainable. Incorporating contextual factors into development of solutions will decrease downward price pressure, create more stable demand, disperse value added more evenly throughout the supply chain, and increase competitiveness; which may pose as challenges to overcome within this pilot supply chain.

While contextual factors can positively influence the economic and social development of this supply chain, if the support of key stakeholders proves to be insufficient in the future the stability of the industry may be undermined. The success of the cluster’s work to develop the industry within South Africa depends on the
commitment of the government, industry groups, and retailers to ensure stable demand for the supply chain’s goods. If the government does not effectively enforce the domestic procurement policies put in place, as some interviewees mentioned as a concern, the companies and farms may not benefit from the demand for their products they are relying on. Proper taxation of imports should act as a form of protection for local companies. Likewise, if South African retailers choose not to purchase goods from this supply chain, economic upgrading will be substantially curtailed and social upgrading and decent work within this supply chain will be limited. Interventions developed to improve the competitiveness of the industry should take into consideration these and other contextual factors that can positively or negatively impact economic and social upgrading.

**Implications for the Cluster’s Work**

This research allowed for areas of concern to be highlighted that can be addressed by the cluster. Steps should be taken to make sure that social upgrading and decent work opportunities are created and expanded within the South African cotton and apparel industry. The Cluster has initially planned interventions to promote environmental sustainability and economic development, therefore special steps can also be taken to ensure that the social aspects affecting the quantity and quality of jobs are also addressed and promoted.

A set standard of working conditions that will foster social upgrading and decent work should be developed. While there are national labor laws, issues such as safety and discrimination were found to be lacking in some parts of the supply chain. A system also needs to be put in place to ensure that these standards are followed. While the conditions were generally good within the pilot supply chain, in the future
the cluster must address the varying levels of working conditions revealed through this research. This was pointed out as an area of concern in past research focused on nation-wide apparel industry development and ethical-branding initiative, Garments Without Guilt, in Sri Lanka. It was shown that some companies sourcing from Sri Lanka were hesitant to believe that the entire industry had similar levels of working conditions, and also that some firms within Sri Lanka had more access to support and investment, therefore more opportunity to improve working conditions (Goger, 2014). Developing a system that involves workers and unions in the enforcement of these standards could be one bottom up strategy to ensure the standards are met. One aspect that could assist standard implementation in all factories is through the creation of a grievance mechanism such as LaborVoices, which allows workers to call into a hotline to voice concerns anonymously (Leiber, 2013).

A second implication for the cluster is that there needs to be economic support for investments and commodity financing. This will prove to be a deciding factor of whether future social upgrading and decent work takes place. Initiatives can be put in place that improve firm and farms ability to upgrade. There are various methods in which economic upgrading can take place, such as technology development, more efficient processes, and skill development (Barrientos, et al., 2011a; Milberg & Winkler, 2010; Rossi, 2013). Areas in which value added should also be sought, such as to the products (Sathe & Crooke, 2010) or through more efficient business strategies. Lastly, financial resources need to become available in order for firms and farms to make investments for improvements. A system for commodity financing will benefit smallholders tremendously, as this is a major set back they are currently facing. Gereffi and Frederick (2010) propose that at the input stage (cotton farming,
ginning, and spinning) a viable value added strategy would be to increase research and development, while at the textile node design could be used as a value added strategy. Research and development can increase yield, efficiency, and product benefits. Throughout the rest of the cluster, production, logistics, marketing, and services are areas to focus on developing value added strategies (Gereffi & Frederick, 2010).

Cotton SA plays a valuable role within the South African cotton industry. They oversee cotton production and work with various external stakeholders to promote the industry. This organization is already deeply integrated into the agriculture communities and industry, therefore there is great opportunity for Cotton SA to expand its work to address current challenges. Cotton SA can play a role in overseeing commodity financing, crop insurance, and setting a guaranteed minimum price for smallholder farmers even if the actual transactions take place via gins. If it is decided that international cotton merchants should be removed from this supply chain or if a set price for cotton is decided as the best option, Cotton SA can play a major role in overseeing transactions. The last aspect that Cotton SA can be involved with is to promote decent work and social upgrading at farms and gins. Currently they promote skill development, safety, and some environmental aspects at farms, however, they should also work with farmers to train them on topics that are of main concern when it comes to decent work. Training could relate to aspects of decent work such as regulating hours of work, ensuring farm workers enjoy employment protection, and working to better understand and address the issue of discrimination.

The cluster also needs to create a platform to facilitate open dialogue. Many of the concerns that were revealed are challenging, culturally based, and systemic. Issues such as discrimination, educational standards, set wage disagreements, and seasonal
work at the farms and gins require a solution that takes the larger context into account. Because the context needs to be in the solution, civil society could lend support in the creation of solutions. Members of the cluster include the government, industry organizations, businesses, and unions. The collaboration of their broad knowledge and expertise in the industry and with national issues can provide valuable information to propose initial steps.

**Future Research**

There are three areas that should be addressed by future research. First, research should expand data collection from workers within the South African cotton apparel supply chain to include a sufficient number of workers from each node. A main limitation of this study was the small number of workers interviewed. This would create a broader perspective when looking at social upgrading and decent work for the entire South African industry and also allow for a greater understanding of worker perspective. Special attention should be paid to the workers at smallholder farmers, where the majority of concerns were found, to shed more light on their current situation. This could lead to potential areas where improvements at the bottom of the supply chain could be made from a worker perspective.

Also, the main union is very powerful within the South African apparel industry and some think that it is resulting in wages that are too high. While past research stressed the importance of unions and enabling rights, research needs to be conducted to better understand the right balance of social upgrading and economic upgrading. Social upgrading without the necessary economic upgrading will not be sustainable, because economic upgrading needs to first provide resources to support
social upgrading. Future research can seek to determine the right balance of social upgrading and economic upgrading, and also how to quantitatively compare the two.

Lastly, there should be future research to determine the risks and opportunities present currently throughout the entire supply chain. While this was a theme that was revealed during interviews at cotton farms and gins, it was not used as a deductive criterion in interviews at the industrial nodes. One major issue with apparel supply chain being buyer driven is that the majority of the value and power is within the lead firms while the lowest value and highest risk is found at the beginning of supply chains (Barrientos, et al., 2011a; Gereffi & Frederick, 2010; Hurley & Miller, 2005). Because the lead firms have most of the power, they can transfer possible risks to the suppliers. A few examples of how lead firms do this is by not giving suppliers long term contracts, sourcing only a limited amount from each supplier so that they are not held responsible for that facility, and dictating price points (Gereffi & Frederick, 2010). The distribution of risks and opportunities at each node within the supply chain could unveil areas where power and value could become more equally distributed. For example, if risk is decreased for farmers and they initiative value added strategies to increase product worth, they will automatically have more power within the supply chain.
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### Appendix A

#### SOCIAL UPGRADING AND DECENT WORK INDICATORS

<table>
<thead>
<tr>
<th>Social Upgrading/Decent Work Indicators</th>
<th>Main issues relating to the SA context</th>
<th>Key points and key questions for workers</th>
<th>Key points and key questions for managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment Opportunities (EO)</td>
<td>Number of jobs and for whom?</td>
<td>How many employees do you have? (#4)</td>
<td>Please describe the types of jobs here? (#5)</td>
</tr>
<tr>
<td>Number of Workers per job (Milberg &amp; Winkler, 2010)</td>
<td>Oppression of women- less employment, wages, promotions (COSATU, 2013)</td>
<td>How many employees do you have? (#4)</td>
<td>Please describe the types of jobs here? (#5)</td>
</tr>
<tr>
<td>High quantity of jobs esp. female workers (Barrientos, Gereffi, &amp; Rossi, 2011)</td>
<td></td>
<td>What percent of the total workers are women? (#6)</td>
<td>What percent of the total workers are temporary?</td>
</tr>
<tr>
<td>Adequate Earnings and Productive Work (PW)</td>
<td>Pay rate; training and promotion</td>
<td>What type of person is employed here? -Are there any main cultural groups? -Are there mostly men or women? -Are there any temporary workers? -How many people do you think have HIV or AIDS? (#6)</td>
<td>What percent of the workers quit their jobs every year (month)? (i.e., turnover?) (#9)</td>
</tr>
<tr>
<td>Low pay rate (below 2/3 of median hourly earnings) (International Labour Organization, 2008)</td>
<td>Women get paid less; underpayment of farmers and migrants (US state dept, 2012; HRW, 2011)</td>
<td>How do you get paid? Do you get paid per hour, per day, per piece?</td>
<td>How is pay determined? -Do you pay by piece, bag, hour, day, etc. (#)</td>
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<td>Social Upgrading/Decent Work Indicators</td>
<td>Main issues relating to the SA context</td>
<td>Key points and key questions for workers</td>
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<tr>
<td>Average hourly earnings in selected occupations (ILO, 2008)</td>
<td>How much do you usually get when you are paid? -What is the most you have ever been paid? Least? How do you know your pay is correct? -Do you get pay stubs? Pay slips?</td>
<td>How much does the average man get paid? (per what?) How much does the average woman get paid? (per what?)</td>
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<tr>
<td>Wage growth (Milberg &amp; Winkler, 2010)</td>
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<td>How has worker pay changed over the last three years? (paid more, less, how much more/less?)</td>
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<td>Average real wages (ILO, 2008)</td>
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<tr>
<td>Employees with recent job training (past year/past 4 weeks) (ILO, 2008)</td>
<td>Tell me about new skills you have learned at work? -How many trainings or classes have you had at work? Have you gotten a new/better job while working here? (describe)</td>
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<tr>
<td>No skill improvement (repetitive scrappy work ) (-) (Barrientos, et al, 2011)</td>
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<td></td>
<td>How much of your living expenses can you cover with your pay? -all, most, or very little? What do you have trouble paying for? -School for children? -Food? Health care? Are you able to save money?</td>
<td>What impacts the wage that you can pay your workers? (variation-What would have to change in order for your workers to have higher wages?) -Are there times you have to pay your workers less? Get to pay them more? How many training courses have you offered workers this year? -Training to improve work skills? Or, extra education?</td>
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<tr>
<td>Decent Working Time (WT)</td>
<td>Work too much or too little</td>
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<td>Social Upgrading/Decent Work Indicators</td>
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<td>Excessive working time (more than 48 hours per week; 'usual' hours) (ILO, 2008)</td>
<td>When is the busy season for your work? -How many hours a day do you work during the busy season? Days per week? -What about when it is slow—how many hours a day? How many hours a day do you work the rest of the time?</td>
<td>How many hours a day do workers work in the busy season? Days per week? (#17) How many hours a day do workers work regularly? (#16) Days per week? What kind of laws about working hours apply to this work? (#18)</td>
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<tr>
<td>Annual hours worked per employed person (ILO, 2008)</td>
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<tr>
<td>Time-related underemployment rate (ILO, 2008)</td>
<td>How often do you have too little work or no work at all? -all, most, very little</td>
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<td>Maximum hours of work (Legal) (ILO, 2008)</td>
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<td>Paid annual leave (Legal) (ILO, 2008)</td>
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<tr>
<td>Absence of fixed working hours (-) (Barrientos, et al., 2011)</td>
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<tr>
<td>Long and insecure working hours and poor conditions (-) (Barrientos, et al., 2011)</td>
<td>How would you change your work hours if you could? (#20)</td>
<td>Please give me an example of why your employees have to work more. Please give me an example of when they have to work less.</td>
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<tr>
<td>Combining work family and personal life (PL)</td>
<td>Work life balance</td>
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<td>Social Upgrading/Decent Work Indicators</td>
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<tr>
<td>Asocial/unusual hours (ILO, 2008)</td>
<td>Discrimination of women- many households headed by women (HR&amp;B, 2006)</td>
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<td>Can you give me an example of when family issues have impacted employees ability to work?</td>
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<td></td>
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<td>-How often does this happen?</td>
<td>-Are the workers penalized?</td>
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<tr>
<td>Maternity protection (ILO, 2008)</td>
<td>On farms- there are cases of no maternity leave (HRW, 2011) ‘farm dwellers’ aren’t allowed visitors can’t see family (HRW, 2011)</td>
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<tr>
<td>Maternity leave (weeks of leave, and rate of benefits) (Legal) (ILO, 2008)</td>
<td>What happens if a woman working here gets pregnant?</td>
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<tr>
<td>Parental leave (Legal) (ILO, 2008)</td>
<td></td>
<td>What changes are made in work for women that are pregnant or have a new baby?</td>
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<tr>
<td>Women can balance productive and reproductive work (+) (Barrientos, et al., 2011)</td>
<td>How happy are you with the time you have to spend with your family every week? -Happy face scale</td>
<td>Do most workers’ families live nearby?</td>
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<td>Work that should be abolished (WA)</td>
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<tr>
<td>Child labor (defined by ICLS resolution (ILO, 2008)</td>
<td>Forced labor- Migrant boys in agriculture, migrant men in mobile sweatshops (US state dept, 2012)</td>
<td>How old is the youngest person you work with? -If under 15, what do they do? -Does she/he also go to school?</td>
<td>What is the youngest worker you have here? -If under 15- what do they do? -Are there special pay rates for young workers? (if so, what?)</td>
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<td>Social Upgrading/Decent Work Indicators</td>
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<td>Hazardous child labor (ILO, 2008)</td>
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<td>Forced child labor (ILO, 2008)</td>
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<td>Likelihood of unpaid family, labor including child labor (-) (Barrientos, et al., 2011)</td>
<td>Small holder farmers- Who in your family helps with the work on the farm? -What do they do? -Do they get paid?</td>
<td>Small holder farmers- Who in your family helps with the work on the farm? -Do they get paid?</td>
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<td>Stability and security of work (SSW)</td>
<td>Contracts and temporary workers; termination; benefits</td>
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<td>Precarious employment rate (ILO, 2008)</td>
<td>Seasonal/causal farmers (HRW, 2011)</td>
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<td>Job tenure (ILO, 2008)</td>
<td>Use of labor brokers on farms (HRW, 2011)</td>
<td>How many years have you worked here? -Do you think that you will work here for a long time? How much longer? (#7) How did you get the job? -Was it through a friend? Advertisement? A broker? -If broker- Did you pay the broker? (#5)</td>
<td>What is the average length of time that your employees work for you?</td>
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<td>Subsistence worker rate (ILO, 2008)</td>
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<td>Real earnings casual workers (ILO, 2008)</td>
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<td>Termination of employment (notice of termination in weeks) (Legal) (ILO, 2008)</td>
<td>Are workers given a notice when they are fired? -How far in advance do they know? -Do they receive any money or help finding another job?</td>
<td>How do you get rid of workers that do not perform their jobs well? -What procedures do follow when it comes to firing employees?</td>
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<tr>
<td>Lack of contracts or security (-) (Barrientos, et al., 2011)</td>
<td>What percent of workers have contracts? 100% 99%-75% 74%-50% less than 49%</td>
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<td>Lack of employment security and other benefits (-) (Barrientos, et al., 2011)</td>
<td>Is your employer supposed to help you if you get sick and have to miss work? -If yes, do they?</td>
<td>What kind of health or other benefits are you required by law to provide to workers? -How much do you pay for worker benefits per worker? -How long do they have to work here before they receive them? -If temp workers are present- Is there a difference in the benefits provided for regular vs. temporary workers?</td>
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<tr>
<td>Operation of labor relations predominantly on a flexible, causal basis (-) (Barrientos, et al., 2011)</td>
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<tr>
<td>Relatively high job security in vertically integrated firms but increased use of flexible employment (+/-) (Barrientos, et al., 2011)</td>
<td>Do you have a contract with the company? (#6)- Did you sign an agreement when you started work?</td>
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<td>Equal opportunity and treatment in employment (EOTE)</td>
<td></td>
<td>Discrimination</td>
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<td>Occupational segregation by sex (ILO, 2008)</td>
<td>High xenophobia of immigrants/refugees (COSATU, 2013; Rugunanan, 2011)</td>
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<td>Female share of employment in senior and middle management (ILO, 2008)</td>
<td>Vulnerable groups- women, black, coloured, migrants, indigenous, HIV/AIDS, homosexuals (Human Rights &amp; Business, 2006)</td>
<td></td>
<td>See earlier question about employment opportunities</td>
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<td></td>
<td></td>
<td>Do you feel that you or others you work with are treated differently for any reason?</td>
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<tr>
<td>Gender wage gap (ILO, 2008)</td>
<td></td>
<td>- Are different races treated differently?</td>
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<tr>
<td>Share of women in wage employment in the non-agriculture sector (ILO, 2008)</td>
<td></td>
<td>- Migrants present- Are migrants treated differently?</td>
<td></td>
</tr>
<tr>
<td>Gender equality of employment and wages (female intensity of paid employment) (Milberg &amp; Winkler, 2010)</td>
<td></td>
<td>- Are men and women treated differently?</td>
<td>How do you decide whether to hire men or women?</td>
</tr>
<tr>
<td>Measure for discrimination by race/ethnicity/indigenous people/migrant workers/ rural workers (ILO, 2008)</td>
<td></td>
<td>- Are there any workers here that have a disability? How are they treated?</td>
<td>- Regular or temporary employees?</td>
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<td>Social Upgrading/Decent Work Indicators</td>
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<td>Equal opportunity and treatment (Legal) (ILO, 2008)</td>
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<td>Equal remuneration of men and women for work of equal value (Legal) (ILO, 2008)</td>
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<tr>
<td><strong>Safe work environment (SW)</strong></td>
<td><strong>Hazards in the workplace and prevention</strong></td>
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<tr>
<td>Occupational injury rate, nonfatal (ILO, 2008)</td>
<td>Sexual harassment on farms (HRW, 2011) and in the culture in general (Reach, 2006)</td>
<td>How safe is it/would it be for women to work here? -scale -What are some of the problems that women have to deal with? -Please give me an example of a recent problem that involved women? How often do people get injured on the job?</td>
<td>What is the most dangerous task for workers here at work? How do you prevent injuries? How many workers have been injured in the last year? -What happened? -How many total days of work did your injured workers miss last year?</td>
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<tr>
<td>Time lost due to occupational injuries (ILO, 2008)</td>
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<td>Employment injury benefits (Legal) (ILO, 2008)</td>
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<td>Main issues relating to the SA context</td>
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<td>Key points and key questions for managers</td>
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<tr>
<td>Safety and health labor inspection (Legal) (ILO, 2008)</td>
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<td>Has the farm/factory ever been monitored by the government or someone else for safety and health? - When was it? (days ago- #) - What did they find? - Who ordered it? And who monitored?</td>
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<tr>
<td>Improved standards in plant monitoring (M-audit criteria) (Milberg &amp; Winkler, 2010)</td>
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<tr>
<td>PPE (ME!)</td>
<td>What are the different ways that someone could get injured working here? Have you ever had safety training? - Please describe it? When was it? - Were you ever taught safe ways to do things? Please explain? Do you have to wear special clothes for your job? - What do you wear? When do you have to wear it? - How often do you wear the special clothes?</td>
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<tr>
<td>Fire Safety (ME!)</td>
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<tr>
<td>Social Upgrading/Decent Work Indicators</td>
<td>Main issues relating to the SA context</td>
<td>Key points and key questions for workers</td>
<td>Key points and key questions for managers</td>
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<tr>
<td>Chemical safety (ME!)</td>
<td></td>
<td>Do you train workers on safety? -How do you do the trainings? -What training topics were covered last year? -What percent of workers attended the trainings? What do you provide your workers in order to be safe? -Do you provide workers PPE or safety clothing? -Are workers trained how to properly wear/use it? Do the workers wear the clothing/PPE?</td>
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<tr>
<td>Machinery (ME!)</td>
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<tr>
<td>Social Security (SS)</td>
<td>Social security</td>
<td></td>
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<tr>
<td>Healthcare exp. not financed out of pocket by private households (ILO, 2008)</td>
<td>Small farms not providing benefits for workers (US State dept, 2012)</td>
<td>What happens if a worker is sick and can’t come to work? -What happens to their pay? -What are your policies on sick leave?</td>
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</tr>
<tr>
<td>Sick leave (ILO, 2008)</td>
<td>(#31 for SSW)</td>
<td></td>
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<tr>
<td>Pension (Legal) (ILO, 2008)</td>
<td>When people are old and stop working, are they supposed to get any help from their employer or government?</td>
<td>Pension/benefits combines with question # 27 ?</td>
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<tr>
<td>Social Dialogue, workers’ and employers’ representation (SD)</td>
<td>Enabling rights (union density)</td>
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<tr>
<td>Social Upgrading/Decent Work Indicators</td>
<td>Main issues relating to the SA context</td>
<td>Key points and key questions for workers</td>
<td>Key points and key questions for managers</td>
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<tr>
<td>Collective bargaining coverage rate (ILO, 2008)</td>
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<tr>
<td>Days not worked due to strikes and lockouts (ILO, 2008)</td>
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<tr>
<td>Lack of social protection or rights (-) (Barrientos, et al., 2011)</td>
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<tr>
<td>Lack of empowering Rights (-) (Barrientos, et al., 2011)</td>
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<tr>
<td>Knowledge of empowering rights (ME!)</td>
<td>If you have a concern about your work, what are the ways that you can let the managers know? -Please give me an example of a concern that you have shared with the managers and what happened? (#34)</td>
<td>How many times have workers come to you over the last year to express concerns about their work? -Please describe an example of a concern that was raised and also what you did?</td>
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</tr>
<tr>
<td>Economic and social context for decent work (ES)</td>
<td>Literacy</td>
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<tr>
<td>Social Upgrading/Decent Work Indicators</td>
<td>Main issues relating to the SA context</td>
<td>Key points and key questions for workers</td>
<td>Key points and key questions for managers</td>
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<tr>
<td>Estimated % of working age population who are HIV positive (ILO, 2008)</td>
<td>Increase in migration, high prevalence of communicable diseases (COSATU, 2013). Xenophobia but still highest rate of asylum seekers in the world (UNHCR, 2013)</td>
<td></td>
<td>What percentage of workers can read and write? -</td>
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<tr>
<td>Education of adult population (adult literacy rate, adult secondary-school graduation rate) (ILO, 2008)</td>
<td>Not enough labor inspectors (US State Dept, 2012)</td>
<td></td>
<td>What is the minimum level of school workers need for employment here?</td>
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<tr>
<td>Poverty Reduction (Milberg &amp; Winkler, 2010)</td>
<td>Discrimination and violence towards women (Bhana, 2012)</td>
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<td></td>
<td>Difficult to access education in rural areas (Human Rights &amp; Business, 2006)</td>
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# Appendix B

## ADDITIONAL INDICATORS

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Key points and key questions for workers</th>
<th>Key points and key questions for managers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First name, age, sex, position, years of schooling, literate, do you have children or take care of anyone else? How many people in the household? Do they also work or are you the only provider of the household?</td>
<td>First name: Age: Sex: How many years of school have you had? Position: How many years have you worked here? What type of work did you do before you had this job? Have you had any special training or certification in the last three years?</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional Broad questions</th>
<th>Key points and key questions for workers</th>
<th>Key points and key questions for managers</th>
</tr>
</thead>
</table>
| What type of work did you do before you had this job? (#2) Where are you from? (#3) Did you move here to take this job? (#4) How good was your life before you started working here? -Happy face scale How good is your life now that you work here? -Happy face scale Did this job make it better or worse? Why? What do you like most about your job? What do you like least about the job? -What could make your job better? Can you tell me a short story about a usual day for you? | What makes employees want to work for you? What impacts the relationships you have with your workers? -Do you have a better relationship with some employees? Why? Can you tell me a little about your company’s involvement with the Sustainable Cotton Cluster? -How could this help or hurt your company? What does sustainability mean to you? Have you changed any business practices to be more sustainable? (#46) -When and what? -Why did you choose to do that? -What were the costs/benefits of it? Do any other outside parties talk with you about sustainability or social responsibility? Who? When? -Are you part of any groups, organizations, NGOs that promote sustainability? -What about the government, is there any
<table>
<thead>
<tr>
<th>Key points and key questions for workers</th>
<th>Key points and key questions for managers</th>
</tr>
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<tbody>
<tr>
<td>way that they help you or promote sustainability or social responsibility? Is there anything else you want to tell me about the company and its workers?</td>
<td></td>
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<tr>
<td><strong>Company financials</strong></td>
<td></td>
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<tr>
<td>What different activities is the farm/factory involved in? (#1) What is the company’s annual revenue? -How has this changed in the last three years? What is the company’s gross profit margin? -How has this changed in the last three years? Do you pay anything for employee benefits or retirement? -How much? What are the conditions? -Does the company have to pay that? What is the minimum that you have to pay?</td>
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<tr>
<td><strong>Open-ended for RBP/CSR capabilities</strong></td>
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<tr>
<td>What makes your company competitive? -What could be changed to make the company more competitive? How do workers impact the competitiveness of the company? What are your company’s main goals? (#2)</td>
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</tbody>
</table>
Appendix C

WORKER INTERVIEW SCHEDULE

Workers

Demographics
First name:
Age:
Sex:
Position:
How many years of school have you had?
Can you read/write?
Do you have children or do you take care of anyone else? How many people in the household? Do they also work or are you the only provider of the household?

1. (BW) Please tell me a short story about a usual day at work for you? (open)
2. (BW) What type of work did you do before you had this job?
3. (BW) Where are you from?
4. (BW) Did you move here to take this job?
5. (SSW) How did you get the job? (open)
   5.1. Was it through a friend? Advertisement? A broker?
   5.2. Broker- did you pay the broker? (#)
6. (SSW) Do you have a contract with the company? (Y/N)
6.1. Did you sign an agreement when you started work? (Y/N)
7. (SSW) How many years have you worked here? (#)
7.1. Do you think that you will work here for a long time? How much longer? (open/#)
8. (EO) What type of person is employed here? (open)
   8.1. Are there any main cultural groups?
   8.2. Are they mostly men/women?
   8.3. Are there any temporary workers?
9. (EOTE) Can people with HIV/AIDS work here? (y/n)
   9.1. How many people, do you think, have HIV or AIDS?
10. (WT) When is the busy season for your work?
   10.1. How many hours a day do you work during the busy season? Days a week? (#)
   10.2. What about when it is slow? How many hours a day and days per week? (#)
11. (WT) How many hours a week do you work the rest of the time? How many days per week?(#)
12. (WT) How often do you have too little work or no work at all? (scale)
   12.1. all, most, very little
13. (WT) How would you change your work hours if you could? (open)
14. (PL) What happens if a woman working here gets pregnant? (open)
15. (PL) How happy are you with the time you have to spend with your family every week? (happy face scale)
16. (PW) How do you get paid? Do you get paid per hour, per day, per piece, per bag? (open)
17. (PW) How much do you usually get when you are paid? (#)
18. (PW) What is the most you have ever been paid? Least? (#)
19. (PW) How do you know your pay is correct? (open)
   19.1. Do you get pay stubs? Pay slips? (open)
20. (PW) How much of your living expenses can you cover with your pay? (scale)
   20.1. All, most or very little?
21. (PW) What do you have trouble paying for? (open)
   21.1. Has children- are they in school? (Y/N; details-open)
   21.2. Food? Health care? Are you able to save any money? (details-open)
22. (PW) Tell me about new skills you have learned at work (open)
   22.1. How many trainings or classes have you had at work?(Open)
   22.2. Have you ever had extra training or classes at work? (Y/N)
23. (PW) Have you gotten a new/better job while working here? Describe. (open)
24. (WA) How old is the youngest person you work with? (#)
   24.1. If under 15- What do they do? (open)
   24.2. Does she/he also go to school? (y/n)
25. (WA) (Small holder farmers) Who in your family helps with the work on the farm? (open)
   25.1. What do they do? (open)
   25.2. Do they get paid? (y/n)
26. (SSW) Are workers given a notice when they are fired? (y/n)
   26.1. How far in advance do they know? (#)
   26.2. Do they receive any money or help finding another job? (y/n)
27. (EOTE) How are you treated here at work? (happy face scale)
   27.1. Please tell me a time that you were treated poorly? Disrespected? How often is this? (open)
   27.2. Please tell me a time that you were treated good? With respect? How often is this? (open)
28. (EOTE) Do you feel that you or others you work with are treated differently for any reason? (open)
   28.1. Are different races treated differently?
   28.2. Migrants present- are migrants treated differently?
   28.3. Are men and women treated differently?
   28.4. Are there any workers here that have a disability? How are they treated?
29. (SW) How safe is it/would it be for women to work here? (scale)
   29.1. Very safe, some risks dangerous
   29.2. What are some of the problems that women have to deal with? (open)
   29.3. Please give me an example of a recent problem that involved women? (open)
30. (SW) What are the different ways that someone could get injured working here? (open)
31. (SW) How often do people get injured on the job? (open)
32. (SW) Have you ever had safety training? (y/n)
   32.1. Please describe it? When was it? (open)
   32.2. Were you ever taught safe ways to do things? Please explain? (open)
33. (SW) Do you have to wear special clothes for your job? (y/n)
   33.1. What do you wear? When do you have to wear it? (open)
   33.2. How often do you wear the special clothes? (open)
34. (SSW/SS) Is your employer supposed to help you if you get sick and have to miss work? (y/n)
   34.1. If yes- Do they? (open)
35. (SS) When people are old and stop working, are they supposed to get any help from their employer or government? (y/n)
36. (SD) Is there a union here? (y/n)
   36.1. If yes- Are you a member? (y/n) How many workers are in the union? (#)
   36.2. How has the union helped? (open)
   36.3. Do you feel safe being in a union? (happy face scale)
37. (SD) If you have a concern about anything here at work, what are the ways that you can let the managers know? (open)
   37.1. Please give me an example of a concern that you have shared with the managers and what happened? (open)
38. (BW) How good was your life before you started working here? (Scale)
   38.1. Happy face scale
39. (BW) How good is your life now that you work here? (scale)
   39.1. Happy face scale
40. (BW) Did this job make it better or worse? Why? (open)
41. (BW) What do you like most about your job? (open)
42. (BW) What do you like least about the job? (open)
   42.1. What could make your job better? (open)
43. Is there anything else you would like to tell me about your work?
Thank you for answering these questions and helping me with my project!
Appendix D

MANAGER INTERVIEW SCHEDULE

Manager

Demographics
First name:
Age:
Sex:
How many years of school have you had?
Position:
How many years have you worked here?
What type of work did you do before you had this job?
Have you had any special training or certification in the last three years?

1. (CF) What different activities is the farm/factory involved in? (open)
2. (RBP) What are your company’s main goals? (open)
3. (EO) How many employees do you have? (#)
4. (EO) Please describe the types of jobs here? (open)
   1.1. What types of jobs do women work in?
5. (EO) What percent of the total workers are women? (#)
6. (EO) What percent of the total workers are temporary?
7. (EO) What percent of the total workers are migrant?
8. (EO) What percent of the workers quit their jobs every year (month)? (i.e., turnover?) (#)
   1.2. Why do they leave? (open)
9. (EOTE) How do you decide whether to hire men or women? (open)
   1.3. Regular or temporary employees?
   1.4. Migrant workers?
10. (EOTE) Are some workers better workers than others? How? (open)
    1.5. Men vs. women?
    1.6. Different races or migrants?
11. (PW) How many training courses have you offered workers this year? (#)
    1.7. Training to improve work skills? Or, extra education?
12. (WT) How many hours a day do workers work regularly? Days per week? (#)
13. (WT) How many hours a day do workers work in the busy season? Days per week? (#)
14. (WT) What kind of laws about working hours apply to this work? (open)
15. (WT) Please give me an example of why your employees have to work more. (open)
16. (WT) Please give me an example of when they have to work less. (open)
17. (PW) How is pay determined? (open)
1.8. Do you pay by piece, bag, hour, day, etc.

18. (PW) How much does the average man get paid? (per what?) (#)
19. (PW) How much does the average woman get paid? (per what?) (#)
20. (PW) How has worker pay changed over the last three years? (#)
   1.9. (paid more, less, how much more/less?)

21. (PW) What impacts the wage that you can pay your workers? (open)
   1.10. variation-What would have to change in order for your workers to have higher wages? (open)
   1.11. Are there times you have to pay your workers less? Get to pay them more? (open)

22. (PL) Please give me an example of when family issues have impacted employees' ability to work? (open)
   1.12. How often does this happen?
   1.13. Are the workers penalized?

23. (PL) What changes are made in work for women that are pregnant or have a new baby?
   1.14. Any changes in the hours?
   1.15. Do they get paid time off?

24. (PL) Do most workers’ families live nearby? (open)

25. (WA) What is the youngest worker you have here? (#)
   1.16. If under 15- what do they do? (open)
   1.17. Are there special pay rates for young workers? If so, what? (#)

26. (WA) Small holder farmers- Who in your family helps with the work on the farm? (open)
   1.18. Do they get paid? (y/n)

27. (SSW) What is the average length of time that your employees work for you? (#)
28. (SSW) How do you get rid of workers that do not perform their jobs well? (open)
   1.19. What procedures do you follow when it comes to firing employees? (open)

29. (SSW) What percent of workers have contracts? (scale)
   1.20. 100%  99%-75%  74%-50%  Less than 49%

30. (SSW) What kind of health or other benefits are you required by law to provide workers?
   1.21. How much do you pay for worker benefits per worker? (#)
   1.22. How long do they have to work here before they receive them? (#)
   1.23. If temporary workers- Is there a difference in the benefits provided for regular vs. temporary workers? (y/n)

31. (CF) Do you have to pay anything for employee benefits or retirement? (y/n)
   1.24. How much? What are the conditions? (#; open)
   1.25. Does the company have to pay that? What is the minimum that you have to pay? (#)

32. (SS) What happens if a worker is sick and can’t come to work? (open)
   1.26. What happens to their pay? (open)
   1.27. What are your policies on sick leave?

33. (SW) What is the most dangerous task for workers here at work? (open)
34. (SW) How do you prevent injuries? (open)
35. (SW) How many workers have been injured at work in the last year? (#)
   1.28. What happened? (open)
   1.29. How many total days of work did your injured workers miss last year? (#)

36. (SW) Do you train workers on safety? (y/n)
   1.30. How do you do the trainings? (open)
1.31. What training topics were covered last year? (open)
1.32. What percent of workers attended the trainings? (#)
37. (SW) What do you provide your workers in order to be safe? (open)
1.33. Do you provide workers with PPE or safety clothing? Are workers trained how to properly wear/use it? (open)
38. (SW) Do the workers wear the clothing/PPE? (open)
1.34. How often? All, most, some of the time?
39. (SD) Are any of your workers in a union? (y/n)
1.35. What percent of workers? (#)
1.36. How does this impact the farm/factory? (open)
1.37. Are there any collective bargaining agreements? How have they changed the workplace? (open)
40. (BM) What makes employees want to work for you? (open)
41. (BM) What impacts the relationships you have with your workers? (open)
1.38. Do you have a better relationship with some employees? Why? (open)
42. (SD) How many times have workers come to you over the last year to express concerns about their work? (#)
1.39. Please describe an example of a concern that was raised and also what you did? (open)
43. (ES) What is the minimum level of school workers need for employment here? (#)
44. (ES) What percentage of workers can read and write? (#)
45. (BM) Please tell me a little about your company’s involvement with the Sustainable Cotton Cluster? (open)
1.40. How could this help or hurt the company?
46. (BM) What does sustainability mean to you? (open)
47. (BM) Have you changed any business practices to be more sustainable? (open)
1.41. When and what?
1.42. Why did you choose to do that?
1.43. What were the costs/benefits of it? (#)
48. (BM) Do any other outside parties talk with you about sustainability or social responsibility? Who? When? (open)
1.44. Are you part of any groups, organizations, NGOs that promote sustainability? (open)
1.45. What about the government, is there any way that they help your or promote sustainability or social responsibility?
49. (SW) Has the farm/factory ever been monitored by the government or someone else for safety and health? (y/n)
1.46. When was it? (days ago- #)
1.47. What did they find? (open)
1.48. Who ordered it? And, who monitored it? (open)
50. (RBP) What makes your company competitive? (open)
1.49. What could be changed to make the company more competitive? (open)
51. (RBP) How do workers impact the competitiveness of the company? (open)
52. (CF) What is the company’s annual revenue? (#)
1.50. How has this changed over the past three years? (#)
53. (CF) What is the company’s gross profit margin? (#)
1.51. How has this changed in the last three years? (#)
Is there anything else you want to tell me about the company and its workers?
Thank you for participating in this interview and helping with my project!
## Appendix E

### CODING GUIDE AND DESCRIPTIVE FRAMEWORK

<table>
<thead>
<tr>
<th>Node Name in NVivo</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>Employment Opportunities</strong></td>
<td><em>Number of jobs and for whom</em></td>
</tr>
<tr>
<td>Number and quantity of workers per job (differentiate between men/women)</td>
<td></td>
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<tr>
<td>Number of employees</td>
<td></td>
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<tr>
<td>Types of jobs (types of jobs for women)</td>
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<tr>
<td>Percent of total workers that are women, temporary, and migrant</td>
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</tr>
<tr>
<td>Type of people employed here (cultural groups, men/women, temp, HIV pos)</td>
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<tr>
<td>Turnover- why do they leave</td>
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<tr>
<td>Laws applying</td>
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<tr>
<td><strong>Earnings</strong></td>
<td><em>Pay Rate; training and promotion</em></td>
</tr>
<tr>
<td>How is pay determined? (piece, hour, day)</td>
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<tr>
<td>How much are workers paid? (difference for women)</td>
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<td>Pay slips</td>
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<td>Change of worker pay</td>
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<td>Training or skill development</td>
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<td>Promotions</td>
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<tr>
<td>Living expenses</td>
<td></td>
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<tr>
<td>Variation of wages- what impact the wages earned</td>
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<tr>
<td>Laws that apply to wages</td>
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<tr>
<td><strong>Work Time</strong></td>
<td><em>Work too much or too little</em></td>
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<tr>
<td>Hours per week</td>
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<tr>
<td>Days per week</td>
<td></td>
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<td>Busy season, days per week, hours per week</td>
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<tr>
<td>Laws that apply to work hours</td>
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<td>Time related underemployment</td>
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<tr>
<td>Max hours of work</td>
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<tr>
<td>Paid annual leave</td>
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<tr>
<td>Fixed working hours</td>
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<tr>
<td>Want to change work hours?</td>
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<tr>
<td>Node Name in NVivo</td>
<td>Description</td>
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<tr>
<td>Family and work</td>
<td><em>Work life balance</em></td>
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<tr>
<td>Overtime?</td>
<td></td>
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<tr>
<td>Asocial/unusual hours</td>
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<tr>
<td>Family issues and ability to work</td>
<td></td>
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<tr>
<td>Workers penalized for family matters?</td>
<td></td>
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<tr>
<td>Issues pertaining to mothers and work</td>
<td></td>
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<tr>
<td>Maternity/parental protection/leave</td>
<td></td>
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<tr>
<td>Women can balance productive and reproductive work</td>
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<tr>
<td>Time spent with family</td>
<td></td>
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<tr>
<td>Families nearby?</td>
<td></td>
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<tr>
<td>Child labor</td>
<td><em>Presence and dangers to child workers</em></td>
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<tr>
<td>Child labor</td>
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<tr>
<td>Forced labor</td>
<td></td>
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<tr>
<td>Unpaid family labor</td>
<td></td>
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<tr>
<td>Stability/Security</td>
<td><em>Contracts and temporary workers; termination; benefits</em></td>
</tr>
<tr>
<td>Seasonal work</td>
<td></td>
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<tr>
<td>Labor brokers</td>
<td></td>
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<tr>
<td>Years worked there</td>
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<tr>
<td>Future with the company</td>
<td></td>
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<tr>
<td>How they got the job</td>
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<tr>
<td>Average length of time that employees work there</td>
<td></td>
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<tr>
<td>Termination of employment</td>
<td></td>
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<tr>
<td>Employment security and benefits (sick and health)</td>
<td></td>
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<tr>
<td>Labor relations- flexible- casual basis?</td>
<td></td>
</tr>
<tr>
<td>Treatment</td>
<td><em>Discrimination</em></td>
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<tr>
<td>Occupational segregation by sex, race, migrant</td>
<td></td>
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<tr>
<td>Female share of employment in management</td>
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<tr>
<td>Gender wage gap</td>
<td></td>
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<tr>
<td>Share of women in wage employment in non-agri sector</td>
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<tr>
<td>Gender equality of employment and wages</td>
<td></td>
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<tr>
<td>Discrimination- race, ethnicity, migrant, disability, health</td>
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<tr>
<td>How they decide to hire men/women, regular/temp migrant, etc.</td>
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<tr>
<td>Equal opportunity and treatment</td>
<td></td>
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<td>Equal pay for equal work</td>
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<tr>
<td>Treated at work?</td>
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<tr>
<td>Node Name in NVivo</td>
<td>Description</td>
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<td>--------------------------</td>
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<tr>
<td>Safety</td>
<td>Some workers better than others?</td>
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<td></td>
<td><em>Hazards in the workplace and prevention</em></td>
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<tr>
<td>Injury rate</td>
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<td>Safe to work here</td>
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<tr>
<td>Injury prevention</td>
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<td>Time lost due to injuries</td>
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<tr>
<td>Employment injuries benefits (legal)</td>
<td></td>
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<tr>
<td>Safety and health inspections/monitoring</td>
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<td>PPP</td>
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<td>Fire safety</td>
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<td>Chemical safety</td>
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<tr>
<td>Machinery</td>
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<tr>
<td>Social security</td>
<td><em>Social security</em></td>
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<tr>
<td>Healthcare paid for by the people</td>
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<tr>
<td>Sick leave</td>
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<td>Pension</td>
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<tr>
<td>Social dialogue</td>
<td><em>Enabling rights (union density)</em></td>
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<td>Union density rate</td>
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<td>Collective bargaining rate</td>
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<td>Strikes</td>
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<td>Social dialogue at work with managers, expressing concerns</td>
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<td>Context</td>
<td><em>Literacy</em></td>
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<td>HIV positive</td>
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<tr>
<td>Literacy</td>
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<tr>
<td>Education levels</td>
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<tr>
<td>Required education to work</td>
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<tr>
<td>Lack of labor inspectors</td>
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<td>Discrimination</td>
<td></td>
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<td>Difficulty in accessing education in rural areas</td>
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<tr>
<td>Financials</td>
<td>Different activities company is involved in</td>
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<tr>
<td>Annual revenue</td>
<td></td>
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<tr>
<td>Profit margin</td>
<td></td>
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<tr>
<td>Pay for employee benefits or retirement</td>
<td></td>
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<tr>
<td>Capacity/farm yields??????</td>
<td></td>
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<tr>
<td>RBP/CSR</td>
<td>What makes the company competitive</td>
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<tr>
<td>How they will be competitive</td>
<td></td>
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<tr>
<td>How workers impact the competitiveness</td>
<td></td>
</tr>
<tr>
<td>Company’s main goals</td>
<td></td>
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</tbody>
</table>
Title of Project: Identifying environmentally sustainable and socially responsible business practices across a cotton apparel supply chain in South Africa.

Principal Investigator(s): Leslie Siron and Crescent Scudder (graduate students)

Other Investigators: Drs. Marsha Dickson and Huantian Cao (advisors)

You are being asked to participate in a research study. This form tells you about the study including its purpose, what you will do if you decide to participate, and any risks and benefits of being in the study. Please read the information below and ask the research team questions about anything we have not made clear before you decide whether to participate. Your participation is voluntary and you can decide not to be interviewed or stop the interview at any time without getting into trouble. You can choose to skip any question you feel uncomfortable answering. After we read you this form and if you agree to answer questions, you will need to verbally say yes; meaning that you are aware of why we are asking you questions as a part of our study and you are voluntarily taking part in this study.

WHAT IS THE PURPOSE OF THIS STUDY?

The purpose of this study is to understand what work is like for workers in the cotton supply chain in South Africa and also the impacts that this supply chain has on the environment. In other words, we are interested in seeing how the cotton industry and its business practices affect people and the environment in South Africa. This study will allow us researchers to know what work is like and find problem areas. We can then make suggestions on ways that will make this industry better for the workers and
better for the environment. This research is for Leslie Siron’s and Crescent Scudder’s masters thesis.

You are being asked to take part in this study because your company is part of a supply chain that is being developed that focuses on improving working conditions, provide better jobs, and is less harmful for the environment. It is important to get a workers point of view to understand exactly what your job is like, the good parts and the bad. In the future researchers can come back, ask you these same questions and then see if there was progress in making your jobs better. In total we will interview around 11 managers and 22-33 workers from farmers, cotton ginners, textile manufacturers, and apparel manufacturing.

WHAT WILL YOU BE ASKED TO DO?

We will ask you several questions about your job here, your background and a few broad questions about your life to learn more about you. We would appreciate your honest answers. There are no right or wrong answers. Your answers will be kept private and nobody will know your answers except for our research team. The interview should not be longer than an hour. We will tape record our conversation, if that’s ok with you to make sure we don’t miss anything that you say.

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS?

All questions are basic questions that are not meant to make you feel uncomfortable, but to get a better understanding of the current working conditions for you. There should be no risks involved with answering these questions. Your name and your company’s name will not be recorded. Nobody will be able to know who said what.

WHAT ARE THE POTENTIAL BENEFITS?

There are no direct benefits to you as a result of participating. We are working to help make the cotton and apparel industry in South Africa more competitive. By helping us we can learn about the real situation in the supply chain and what might be done to improve jobs offered to workers, reduce negative impacts on the environment, and improve the success of companies. Because your company/farm is part of a pilot supply chain being put together by the retailer Mr. Price and Organimark, there could possibly be improvements in the working conditions for you and others that work here.

HOW WILL CONFIDENTIALITY BE MAINTAINED?
No individual or company names will be recorded in this research. We will use a tape recorder for these interviews to make sure that we do not miss anything that you say. We will type up what we talked about and save that with a password on the computer. Nobody will have access to the computer document except for us and our research advisors/teachers. All recordings and copies will be locked up in a file cabinet and nobody will have access to them except for us. There are rules from our school that we have to keep this interview information for three years. After that it will be destroyed and erased.

Generalizations will be made across many workers therefore no information will be published that says anyones name or the company name. If quotes are used in the paper, we will not include your name only job position and type of facility.

This research may be used in the future to see if there have been improvements in the jobs offered, environmental impacts, and economic success for the companies involved in this pilot supply chain.

Your research records may be viewed by the University of Delaware Institutional Review Board, but the confidentiality of your records will be protected to the extent permitted by law.

**WILL THERE BE ANY COSTS RELATED TO THE RESEARCH?**

There will be no costs for the participants of this study.

**WILL THERE BE ANY COMPENSATION FOR PARTICIPATION?**

There will be no compensation for the participants

**DO YOU HAVE TO TAKE PART IN THIS STUDY?**

Taking part in this research study is entirely voluntary. You do not have to participate in this research. If you choose to take part, you have the right to stop at any time. If you decide not to participate or if you decide to stop taking part in the research at a later date, there will be no penalty or loss of benefits to which you are otherwise entitled. Your refusal will not influence current or future relationships with the University of Delaware, OrganiMark, or the Sustainable Cotton Cluster.

**WHO SHOULD YOU CALL IF YOU HAVE QUESTIONS OR CONCERNS?**
If you have any questions about this study, please contact one of the Principal Investigator, Leslie Siron at lsiron@udel.edu, (+1 720 341 2385) or Crescent Scudder at crescent@udel.edu, (+1 928 699 5116).

If you have any questions or concerns about your rights as a research participant, you may contact the University of Delaware Institutional Review Board at 302-831-2137.
Title of Project: Identifying environmentally sustainable and socially responsible business practices across a cotton apparel supply chain in South Africa.

Principal Investigator (s): Leslie Siron and Crescent Scudder (graduate students)

Other Investigators: Drs. Marsha Dickson and Huantian Cao (advisors)

You are being asked to participate in a research study. This form tells you about the study including its purpose, what you will do if you decide to participate, and any risks and benefits of being in the study. Please read the information below and ask the research team questions about anything we have not made clear before you decide whether to participate. Your participation is voluntary and you can decide not to be interviewed or stop the interview at any time without getting into trouble. You can choose to skip any question you feel uncomfortable answering... After we read you this form and if you agree to answer questions, you will need to verbally say yes; meaning that you are aware of why we are asking you questions as a part of our study and you are voluntarily taking part in this study.

WHAT IS THE PURPOSE OF THIS STUDY?

The purpose of this study is to understand the current status of workers and environmental management practices in the cotton apparel supply chain in South Africa. In other words, we are interested in seeing how the cotton industry and its business practices affect people and the environment in South Africa. This study will help us researchers to understand what the working conditions and environmental impacts are in the supply chain from farm to retail. It will also allow us to help make suggestions on how the supply chain can become more environmental and socially

Appendix G
MODIFIED CONSENT NARRATIVE- MANAGER
University of Delaware
Consent Script-Managers
sustainable in the future. This research is for Leslie Siron’s and Crescent Scudder’s masters theses.

You are being asked to take part in this study because your company is part of a supply chain that is being developed that focuses on improving social conditions of workers, economic competitiveness of companies, and reducing negative impacts on the environment. It is important to us to understand the manager’s perspective on the current impacts your company has on workers, business, and the environment. This can provide a measure from which future success of the apparel supply chain can be determined. In total we will interview around 11 managers that work for companies throughout the supply chain. In addition we will interview about 22-33 workers.

WHAT WILL YOU BE ASKED TO DO?

We will ask you several questions about the jobs workers have at your company, environmental practices, and the economic success of your company. We would appreciate your honest answers to these questions. The more honest the answer the better we can understand and provide input. There are no right or wrong answers. Your answers will be kept private and nobody will know your answers except for our research team. The interview should not be longer than an hour. We will tape record our conversation, if that’s ok with you, to make sure we don’t miss anything that you say.

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS?

All questions are basic questions that are not meant to make you feel uncomfortable, but to get a better understanding of the current situation of your company regarding the jobs provided to workers, the environmental concerns and practices, and the company’s economic success. There should be no risks involved with answering these questions. Your name nor your company’s name will be recorded or used. Nobody will be able to know who said what.

WHAT ARE THE POTENTIAL BENEFITS?

There are no direct benefits to you as a result of participating. We are working to help make the cotton and apparel industry in South Africa more competitive. By helping us we can learn about the real situation in the supply chain and what might be done to improve jobs offered to workers, reduce negative impacts on the environment, and improve your company’s business success. Because your company/farm is part of a
pilot supply chain being put together by the retailer Mr. Price and Organimark, there could possibly be improvements in your company.

**HOW WILL CONFIDENTIALITY BE MAINTAINED?**

No individual or company names will be recorded in this research. We will use an audio recorder for these interviews to make sure that we do not miss anything that you say. We will type what we talked about word-for-word and save that with a password on the computer. Nobody will have access to the computer document except for us and our research advisors/teachers. All recordings and copies will be locked up in a file cabinet and nobody will have access to them except for us. There are rules from our school that we have to keep this interview information for three years. After that it will be destroyed and erased.

Generalizations will be made across many workers and companies therefore no information will be published that highlights a single individual or company by name. If quotes are used in a paper, we will not include your name only job position and type of facility.

This research may be used in the future to see if there have been improvements in the jobs offered, environmental impacts, and economic success for the companies involved in this pilot supply chain.

Your research records may be viewed by the University of Delaware Institutional Review Board, but the confidentiality of your records will be protected to the extent permitted by law.

**WILL THERE BE ANY COSTS RELATED TO THE RESEARCH?**

There will be no costs for the participants of this study.

**WILL THERE BE ANY COMPENSATION FOR PARTICIPATION?**

There will be no compensation for the participants.

**DO YOU HAVE TO TAKE PART IN THIS STUDY?**

Taking part in this research study is entirely voluntary. You do not have to participate in this research. If you choose to take part, you have the right to stop at any time or you can choose to not answer a question and skip to the next. If you decide not to participate or if you decide to stop taking part in the research at a later date, there will
be no penalty. Your refusal will not influence current or future relationships with the University of Delaware, OrganiMark, or the Sustainable Cotton Cluster.

WHO SHOULD YOU CALL IF YOU HAVE QUESTIONS OR CONCERNS?

If you have any questions about this study, please contact one of the Principal Investigator, Leslie Siron at lsiron@udel.edu, (+1 720 341 2385) or Crescent Scudder at crescent@udel.edu, (+1 928 699 5116).

If you have any questions or concerns about your rights as a research participant, you may contact the University of Delaware Institutional Review Board at 302-831-2137.
Appendix H

PROTOCOL

HUMAN SUBJECTS PROTOCOL
University of Delaware

Protocol Title: Identifying environmentally sustainable and socially responsible business practices across a cotton apparel supply chain in South Africa

Principal Investigators
Name: Leslie Siron (graduate student)
Department/Center: Fashion Studies
Contact Phone Number: (720)341-2385
Email Address: lsiron@udel.edu

Crescent Scudder (graduate student)
Department/Center: Fashion Studies
Contact Phone Number: (928)699-5116
Email Address: crescent@udel.edu

Advisors (if student PI):
Name: Marsha Dickson
Contact Phone Number: (302)831-8714
Email Address: dickson@udel.edu

Name: Huantian Cao
Contact Phone Number: (302)831-6124
Email Address: hcao@udel.edu

Other Investigators: N/A

Investigator Assurance:

By submitting this protocol, I acknowledge that this project will be conducted in strict accordance with the procedures described. I will not make any modifications to this protocol without prior approval by the IRB. Should any unanticipated problems involving risk to subjects occur during this project, including breaches of guaranteed confidentiality or departures from any procedures specified in approved study documents, I will report
such events to the Chair, Institutional Review Board immediately.

1. **Is this project externally funded? □ YES □ NO**

   If so, please list the funding source:

2. **Research Site(s)**

   □ University of Delaware

   □ Other (please list external study sites)

   **Data will be collected January 20-January 31, 2014** at 11 different locations in South Africa: Two small holder farms, one commercial farm, and one ginnery in Marble Hall. One small holder farm in Makhatini. The retailer Mr. Price and one textile mill in Durban. One spinning operation, one textile mill in Pietermaritzburg. Two apparel and home goods manufacturers in Cape Town.

   Is UD the study lead? □ YES □ NO (If no, list the institution that is serving as the study lead)

3. **Project Staff**

   Please list all personnel, including students, who will be working with human subjects on this protocol (insert additional rows as needed):

<table>
<thead>
<tr>
<th>NAME</th>
<th>ROLE</th>
<th>HS TRAINING COMPLETE?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leslie Siron</td>
<td>Interviewer/data analysis</td>
<td>yes</td>
</tr>
<tr>
<td>Crescent Scudder</td>
<td>Interviewer/data analysis</td>
<td>yes</td>
</tr>
<tr>
<td>Marsha Dickson</td>
<td>Interviewer/data analysis</td>
<td>yes</td>
</tr>
<tr>
<td>Huantian Cao</td>
<td>Interviewer/data analysis</td>
<td>yes</td>
</tr>
</tbody>
</table>

4. **Special Populations**

   Does this project involve any of the following:
Research on Children?  No
Research with Prisoners?  No
If yes, complete the Prisoners in Research Form and upload to IRBNet as supporting documentation
Research with Pregnant Women?  No
Research with any other vulnerable population (e.g. cognitively impaired, economically disadvantaged, etc.)? please describe
The majority of apparel supply chains are in lower income areas due to the desire for low labor costs. Due to that, some of the workers and/or farm owners may be economically disadvantaged.

5. RESEARCH ABSTRACT  Please provide a brief description in LAY language (understandable to an 8th grade student) of the aims of this project.

A new sustainable supply chain is being developed in the South African cotton industry and it is intended to have positive impacts on the workers involved in the supply chain and on the environment and the business success of companies involved. Because “sustainability” entails human, environment, and economic aspects it is important to research all three aspects within the supply chain.

There are two parts to this research each of which are associated with MS students’ thesis research.

The purpose of the first part of this study and one of the students’ research is to understand the current situation of workers employed throughout the sustainable supply chain using indicators related to social upgrading and decent work, or in other words the quality of jobs and working conditions. Senior managers and workers in South Africa will be interviewed. Because this research is being conducted at the start of the pilot supply chain, this research will be used as a baseline for future determination of whether the quality of jobs and working conditions has improved. The criteria that will be used in the benchmark have been derived from past research on social upgrading and decent work.

The second part of the project aims to look at the environmental performance of this same supply chain. The purpose of this part of the research and one of the students’ research is to observe current practices in the cotton supply chain to identify areas of good sustainable environmental practices and to identify areas to improve practices. This second part will look at the current environmental management practices by interviewing managers or owners of cotton farms and production facilities. The researcher will also conduct interviews with a cotton merchant and a chemical supply company. Because this research is being conducted at the start of the pilot supply chain...
chain, this research will also be used as a baseline for future determination of environmental management practices that support sustainability goals. The criteria that will be used in the benchmark have been derived from cross-referencing industry standards and assessments for cotton farming (Better Cotton Initiative Criteria), textile production (Global Organic Textiles Standard), and apparel production (Higg Index 1.0 Facility Module).

6. **PROCEDURES** Describe all procedures involving human subjects for this protocol. Include copies of all surveys and research measures.

Semi-structured face-to-face interviews will be conducted with both managers and workers at each location visited. The interviews will be tape recorded and last around one hour per interview. If needed an interpreter will be used, however the majority of our interviewees do speak English.

7. **STUDY POPULATION AND RECRUITMENT**

Describe who and how many subjects will be invited to participate. Include age, gender and other pertinent information.

1-2 managers per facility will be interviewed; in total approximately 11 managers will be interviewed. This number may change due to available time and manager availability. 2-3 workers per facility will be interviewed; in total approximately 22-33. This again will change due to available time and worker availability. Besides requiring interviewees to be 18 years of age or older, there will be no criteria based upon age or gender, diversity will be sought to gain broad perspectives.

Attach all recruitment fliers, letters, or other recruitment materials to be used. If verbal recruitment will be used, please attach a script.

The South African organization, OrganiMark, will arrange the interviews. Willing senior managers will be interviewed. If possible workers will be chosen randomly at each location. If not, managers will choose which workers can be interviewed.

Describe what exclusionary criteria, if any will be applied.

There is no exclusionary criteria.

Describe what (if any) conditions will result in PI termination of subject participation.

N/A

8. **RISKS AND BENEFITS**

List all potential physical, psychological, social, financial or legal risks to subjects (risks
listed here should be included on the consent form).

There are no risks involved.

In your opinion, are risks listed above minimal* or more than minimal? If more than minimal, please justify why risks are reasonable in relation to anticipated direct or future benefits.

(*Minimal risk means the probability and magnitude of harm or discomfort anticipated in the research are not greater than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests)

What steps will be taken to minimize risks?

Participants will remain anonymous. The interviews from workers will not be shown to the managers so there will be no chance for repercussion in the workplace. Participation is voluntary and questions can be skipped if the interviewee is uncomfortable.

Describe any potential direct benefits to participants.

There are no direct benefits to participants. The research adds to the body of literature pertaining to sustainable supply chain development. Successful supply chain development can result in improvements of the social and economic situation of workers in addition to decreased environmental impact.

Describe any potential future benefits to this class of participants, others, or society.

This research will inform the interventions carried out in development of the supply chain to enhance sustainability. It will also allow for the future determination of the benefits that come from sustainable supply chain development. In the future this research will be used as a benchmark for determining whether positive growth was achieved in the social, economic, and environmental aspects of the workers and firms involved. If proven effective, this model of development can be incorporated into supply chains around the world for more expansive benefits to the world and its people.

If there is a Data Monitoring Committee (DMC) in place for this project, please describe when and how often it meets.

N/A

9. **COMPENSATION**
Will participants be compensated for participation?

No
10. DATA
Will subjects be anonymous to the researcher?
No

If subjects are identifiable, will their identities be kept confidential? (If yes, please specify how)
Yes. No names will be recorded and the data will only be used to create general profiles. For tracking purposes, consecutive numbers will be assigned to the interviews. No individual names or company names will be used in the publication of this research.

How will data be stored and kept secure (specify data storage plans for both paper and electronic files. For guidance see http://www.udel.edu/research/preparing/datastorage.html)
Interviews will be transcribed from the tape recording and both electronic and paper files will be kept secure. The students will not retain any copies of these files after transcribed and will only use the transcriptions for data analyses using codes to identify each interviewee. Electronic files will be kept in password protected files belonging to Drs. Marsha Dickson and Huantian Cao, on a secure University network. The paper copies will be kept in locked file cabinets in the offices of Drs. Marsha Dickson and Huantian Cao.

How long will data be stored?
This data will be kept for a minimum of three years.

Will data be destroyed? □ YES □ NO (if yes, please specify how the data will be destroyed)
Paper copies will be shredded. The electronic files will be deleted and data will be scrubbed. The tape recordings will be erased and then destroyed.

Will the data be shared with anyone outside of the research team? □ YES □ NO (if yes, please list the person(s), organization(s) and/or institution(s) and specify plans for secure data transfer)

How will data be analyzed and reported?
Data will be analyzed using both deductive and inductive techniques and NVivo software. Quantitative data will be analyzed using descriptive statistics. Data will be used to create general profiles of the workers involved in the supply chain depicting current social
aspects for those workers. The environmental management practices will be coded and
genral profiles of each supply chain node will be created. No personal or firm names will
be used if the data is published.

11. CONFIDENTIALITY
Will participants be audiotaped, photographed or videotaped during this study?

Yes, audio recordings will be used.

How will subject identity be protected?

Only first names will be used for organization purposes. Names will not be used for
publication of data.

Is there a Certificate of Confidentiality in place for this project? (If so, please provide a
copy).

No there is not a certificate of confidentiality. There is a possibility that interviewees are
illiterate and/or not accustom to signing foreign documents. It would be unreasonable to
expect that our interviewees would be comfortable signing anything. However, we will
verbally explain their confidentiality at the beginning of each interview and ensure that the
interviewees understand.

12. CONFLICT OF INTEREST
(For information on disclosure reporting see:
http://www.udel.edu/research/preparing/conflict.html )

Do you have a current conflict of interest disclosure form on file through UD Web forms?

Yes, the faculty advisors do.

Does this project involve a potential conflict of interest*?

No.

* As defined in the University of Delaware's Policies and Procedures, a potential conflict of interest (COI)
occurs when there is a divergence between an individual's private interests and his or her professional
obligations, such that an independent observer might reasonably question whether the individual's
professional judgment, commitment, actions, or decisions could be influenced by considerations of
personal gain, financial or otherwise.

If yes, please describe the nature of the interest:

13. CONSENT and ASSENT
___ Consent forms will be used and are attached for review (see Consent Template under Forms and Templates in IRBNet)

___ Additionally, child assent forms will be used and are attached.

___X___ Waiver of Documentation of Consent (attach a consent script/information sheet with the signature block removed).

___ Waiver of Consent (Justify request for waiver)

14. **Other IRB Approval**
Has this protocol been submitted to any other IRBs?

No.

If so, please list along with protocol title, number, and expiration date.

15. **Supporting Documentation**
Please list all additional documents uploaded to IRBNet in support of this application.

Waiver of Documentation of Consent - Managers
Waiver of Documentation of Consent - Workers
Interview Schedule-Farmers
Interview Schedule-Ginnery
Interview Schedule-Spinners
Interview Schedule-Textile Producers
Interview Schedule-Chemicals Suppliers
Interview Schedule-Apparel Producers
Interview Schedule-Retail
Interview Schedule-Merchant
Appendix I

IRB APPROVAL FORM

DATE: January 16, 2014

TO: Leslie Siron, MS
FROM: University of Delaware IRB

STUDY TITLE: [549116-1] Benchmarking social upgrading and decent work indicators in a sustainable supply chain

SUBMISSION TYPE: New Project

ACTION: DETERMINATION OF EXEMPT STATUS
DECISION DATE: January 16, 2014

REVIEW CATEGORY: Exemption category # 2

Thank you for your submission of New Project materials for this research study. The University of Delaware IRB has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations.

We will put a copy of this correspondence on file in our office. Please remember to notify us if you make any substantial changes to the project.

If you have any questions, please contact Nicole Farmese-McFarlane at (302) 831-1119 or nicolefm@udel.edu. Please include your study title and reference number in all correspondence with this office.

cc: