UNIVERSITY OF CAMBRIDGE

Towards Sustainable and Equitable Textile Manufacture:

Evaluation Frameworks for Poverty-Alleviation Interventions

Simantini Mitra-Behura

Newnham College

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Supervised by **Dr. David Morgan**

Preface

This dissertation is the result of my own work and includes nothing which is the outcome of work done in collaboration except where specifically indicated in the text. The main body of this dissertation does not exceed 15,000 words. It is exactly 15,000 words.

Acknowledgements

Abstract

Trends in consumerism and consumption have led to the expansion of a global textile and apparel industry (TAI) supply chain that exploits both people and the planet, created by primarily Western consumer demand for the new and vibrant, and enabled by factory operations dependent on loose labour and environmental laws in developing countries of the Global South. These supply chains exploit producers often living below the poverty, for whom development interventions have had little success so far. One solution bridging gaps in both TAI and development are Base of Pyramid (BoP) organizations which focus on uplifting producers and center their strategy on reflecting the true value of these textile artisan's skills in market prices through marketing and education tactics. However, it is not clear whether they take a structured approach to evaluating the impact of their initiatives on the communities in question, nor whether they address development gaps.

Six case studies were used to address this gap by examining the impact assessment (IA) and decision-making structures of BoP TAI producer-focused organizations. By compiling existing BoP IA frameworks and applying principles to all supply chain stages, a comprehensive textile-specific IA framework was developed to categorize existing IA protocols and to guide semi-structured interviews. With-in and cross-case analyses revealed a lack of IA but successful interventions nonetheless because of factors like financial independence as a baseline, deep stakeholder dialogue, the structural role of the producer, and alternative governance structures.

While thorough stakeholder engagement and centering producers as decision-makers helped ensure economic and social value return to producers, it remains unclear whether other impacts, addressed in formal IA, are missed as a result of biased engagement. An advantage to other aid interventions, economic independence allowed organization the advantage of remaining free of external influences in decisions-making, ensuring organizations were able to prioritize producers. While this financial independence allowed organizations a pseudo-regulatory role in the ecosystem that helped producers in the short term, it is possible that organizations filling this void also relieved pressure on government to adapt anti-exploitation policies. This pseudo-regulatory role also gave organizations power to shape producer futures. It remains unclear whether conceptions of these futures were agreed between organizations and producers. Furthermore, environmental IA was largely an afterthought. This study demonstrates how structurally centering the producer allows producer agency, contributing to social development beyond economic, but challenges remain in ensuring producer development and resilience in an ecosystem that includes few equitable actors. Recommendations are made for BoP organizations, policy-makers, and producers to strive towards models of sustainable and equitable textile manufacture together.

Impact Statement

This research was originally motivated by key sustainable development issues in the textile and apparel industry (TAI), whose exploding production rates continue to exploit environment and people for short-term fashion trends and profit. TAI's opaque and complex supply chain means that many of these impacts remain unseen and underreported, blurring connections between the TAI and the continuation of poverty and environmental harm. This dissertation places a critical lens on how clothing is produced and how this links to both people and planet, highlighting the role producers play. Informed by more nuanced views of poverty, the research emphasizes producer agency and wellbeing through financial sustainability and explores organizations that claim to center impacts on producers (BoP organizations). Furthermore, attention is paid to how environmental concerns drive these organizations and how these concerns impact producers, incorporating relationships between historical influences, farming and artisan practices, and resultant impacts on livelihoods and freedoms. Interviews and case studies are used to understand how these various relationships and the ways they are reported (impact assessment) influence decision-making within BoP organizations in this area.

This exploration highlighted key factors that contribute to equitable engagement with producers in BoP organizations and identified approaches to incorporating these key factors into organizations structurally. Further research into BoP organizations is recommended to build on identified weaknesses and explore remaining open questions.

Key beneficiaries of this study are management divisions of BoP organizations. They can interrogate their own organizations' structures using the developed framework and pinpoint areas of improvement, leading to better management and a deeper understanding of the host of impacts their organization may be related to. Research engagement with organizations has already led to some amount of self-reflection on adopted practices. Management can also reflect on what voice and agency producers have in the decisions organizations themselves make and how power dynamics may be leading to agency suppression. Entrepreneurs entering this space can look to these principles to ensure producers are valued rather than exploited. Producers can also benefit from pushing organizations to incorporate their voice and leadership in higher decision-making entities within organizations.

Policy-makers must also be encouraged to develop adaptive policies that address concerns of exploitation. Adaptiveness is only possible through consistent engagement with poor populations to understand developing issues and releasing bureaucratic barriers to adjusting livelihood-dependent policies. Policy development and conscious organizational management will lead to a transformative change agenda in which only organizations who prioritize producers exist.

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"And the strangest thing about the nightmare street was that none of the millions of things for sale were made there. They were only sold there. Where were the workshops, the factories, where were the farmers, the craftsmen, the miners, the weavers, the chemists, the carvers, the dyers, the designers, the machinists, where were the hands, the people who made? Out of sight, somewhere else. Behind walls. All the people in all the shops were either buyers or sellers. They had no relation to the things but that of possession." (Ursula K. Le Guin, *The Dispossessed*)

1 Introduction

1.1 Two-Fold Problem: TAI Overproduction and Current Poverty Alleviation Interventions

1.1.1 Overproduction in the TAI

The global textile and apparel industry (TAI) is notorious for producing environmental and social harms throughout its supply chain. According to the United Nations Economic Commission for Europe (2018), the fashion industry is responsible for producing 20% of global wastewater and 10% percent of global greenhouse emissions. Moreover, workers upstream the supply chain often work in dangerous conditions for low wage and few benefits, putting their own well-being at risk and barely surviving on the income generated (Cai & Choi (2020)). COVID-19 has also severely worsened garment workers' labor and living conditions, many facing increased economic hardship and labor abuse (LeBaron et al. (2021)). Part of the reason these harms go unregulated is the complex geographical threads linking garment design, production, retail, consumption, and wear, obfuscating the broad impacts this map of interconnections has on producers and middlemen along the way (Crewe (2008)). Some of these impacts have been brought to harsh light; one such example is the Rana Plaza incident in Bangladesh in which over 1,000 garment workers died in a building collapse that injured over 2,500 others (Cai & Choi (2020), BBC (2013)). Largely, however, the fashion industry's global scale and complexity have obscured the real impact it has on its workers and the environment (Cai & Choi (2020)).

1.1.2 Current Poverty Alleviation Interventions

Most TAI labor comes from poor populations in developing countries of the global South. Billions of dollars have been poured into foreign aid efforts to alleviate poverty in these areas but long-lasting improvement of lives of the poor, including those in TAI, have not been realized (Riddell (2007)). Assessment of poverty alleviation interventions so far is not comprehensive enough to conclude that foreign aid has the impacts it champions (Riddell (2007), Banae & Yandell (2006)) and some research suggests it creates unsustainable dependencies in the communities it tries to help (Moyo (2009)).

1.2 Possible Solution: Handcrafted and Handwoven Indian Cloth

One possible solution to this two-fold problem is India's hand-woven and hand-crafted sector (referred to as Khadi). Khadi is treasured in India because of Mahatma Gandhi's handloom initiatives in India's independence movement. The initiative to hand-spin and hand-weave textile garments allowed Indians to boycott foreign cloth offered by the British Empire and became a symbol of self-reliance within the independence struggle (Sinha (2018)). The Khadi sector in India officially employs around 3.5 million workers in India (India Brand Equity Foundation (2020)). This employment is focused in historically poor states in rural areas as Khadi has a long history in village-based artisan tradition. Because Khadi uses little machinery, its carbon footprint and water consumption are also reported as lower than typical mill-spun fabrics (one meter consuming three liters of water as opposed to fifty-five), leading many proponents to champion Khadi as a more sustainable form of textile (Khanna (2020)).

Some literature has looked at textile initiatives in this sector of India. This literature often describes these organizations as "Base of Pyramid"-focused (BoP-focused) because they focus on uplifting those who inhabit the lowest socioeconomic classes of the pyramid in India (Ramachandran et al. (2011), Hall et al. (2014)). Ramachandran et al. (2011) especially focuses on FabIndia, an Indian handloom retailer, which has engaged with communities of handloom artisans in India for the past six decades. It highlights FabIndia's role as a "bridging enterprise" that connects BoP communities and nonlocal markets, joining disparate parts of the pyramid (Ramachandran et al. (2011)). While these pieces of literature describe BoP producer-oriented ventures, few describe any form of impact assessment and focus more on the nature of the partnerships developed. Because of this lack of impact assessment, it is difficult to ascertain the true value of these organizations and whether they focus on individuals in the BoP as they claim to.

1.3 Aims and Objectives

The overarching research question driving this study is as follows: **How might BoP organizations address sustainability and poverty alleviation gaps identified in current development interventions?** In order to evaluate this, contemporary BoP organisations will be studied with a view to establishing how they organize themselves and

what structural benefits this may have over aid driven poverty alleviation interventions. This will be addressed through two component questions:

1. What are the gaps between a BoP organization's goals and structures and what they measure?

2. To what extent do BoP organizations structurally address issues in previous aid-dependent development interventions?

1.4 Scope of Research

The scope of this research encompasses the analysis of aims, objectives, and structures related to IA of textile-based BoP organizations in India who focus on empowering producers through financially sustainable mutual value creation. While government entities, other NGOs, and producers are important stakeholders in this system, they are considered out of the scope of this research. Economic, social, and environmental IA is considered within the scope. The organizations focused on in this study are Urmul Desert Crafts, RangSutra, Khamir, Kaskom, Magan Khadi, and Dastkar. The information sources include each organization's websites and interviews with key managing employees and other employees knowledgeable about IA. While current issues in the TAI motivate part of this dissertation, it is out of the scope of this research to evaluate whether these BoP organizations can be scaled to resolve TAI issues at a large scale.

1.5 Research Overview

The following research is separated into five chapters. Chapter 2 provides a literature review that includes an overview of the Khadi TAI supply chain, gaps in development interventions, how sustainability outcomes for producer communities are currently assessed in BoP initiatives, gaps in these assessments, and offers a comprehensive TAI-specific IA framework. Chapter 3 describes the methodology, covering the research approach, ethics, and limitations. Chapter 4 presents the results of the within-case analysis and cross-case analysis, describing the aims, objectives, structures, and impact assessment protocols of the BoP organizations as well as common themes across the organizations. Chapter 5 offers a discussion of BoP organizations' ability to address gaps identified in Chapter 2, based on insights drawn from the application of the framework in Chapter 2

to each organization. Finally, Chapter 6 draws conclusions and recommends actions for stakeholders.

2 Literature Review

This chapter lays out a theoretical literature review that describes the Khadi supply chain, the impacts of BoP organizations so far, and BoP IA protocols that already exist. Based on this review, a comprehensive textile-specific IA framework is presented.

2.1 Khadi TAI Supply Chain

In the Khadi sector, textile suppliers are involved in multiple activities to produce the raw fabrics from which garments can be produced. Fabric production begins with fibre production. Primarily, this involves cotton farming although it sometimes also includes other fibres like sheep wool (Kothari et al. (2019)). 80% of cotton grown in India is now *Bt* cotton, a genetically modified crop introduced in 2002 designed to address massive pest problems of the mid 1990's (Plewis (2020, 2019)). *Bt* cotton was developed as an alternative to American cotton, the original staple of cotton in India due to colonialist influences and technology that favored long staple cotton (Prasad (1999)). This switch was implemented despite noted resilience and lower resource demands of indigenous cotton varieties (Kranthi & Stone (2020)). Now, both *Bt* cotton and American cotton use greater amounts of pesticides, fertilizer, and water compared to rain-fed indigenous varieties, leading to some championing a return to indigenous cotton (Kranthi & Stone (2020)). Differences in impacts of *Bt* cotton versus indigenous cotton in this part of the supply chain are important to consider in evaluating the sustainability of an organization. This includes impacts on farmers who depend on cotton for livelihood as *Bt* cotton is becoming an increasingly capital-intensive option (Kranthi & Stone (2020)).

The next stage involves processing picked cotton through ginning to remove seeds, carding to disentangle, clean, and intermix fibres, and then spinning to convert fibres into yarn (Sewagram Khadi (n.d.)). Each process typically involves machines driven by electricity or human power. *Khadi* yarn depends on hand-powered machinery although some yarn with this designation is spun by externally powered machinery (sometimes solar-powered) that does not exceed a certain maximum capacity of spindles (Sewagram Khadi (n.d.)). These processes often leave behind seeds, and low-grade lint cotton as waste products (Prasad (1999)).

After spinning, yarn is woven into fabric on a handloom (Sewagram Khadi (n.d.)).

Such processes are primarily hand-driven to retain the Khadi label but some Khadi organizations now also employ solar looms (Jha et al. (2019)).

This cloth is then embellished through a variety of methods based on the prescribed design of the garment. It can be dyed or printed, both processes that require large quantities of water (Sewagram Khadi (n.d.)). The cloth may also be hand-embroidered with yarns dyed different colors (RangSutra (n.d.)). Some of these processes may occur before or after stitching the final garment.

The final step is garment production. It usually involves the production of CAD templates of garments which are cut out and then stitched together. This process of cutting leaves behind scraps of fabric that are difficult to reuse and often become another form of textile waste (Techpacker App (2018)). The final garment is shipped to the consumer.

Overall, Khadi garment production involves five stages: growing, spinning, weaving, embellishing, and stitching. Producers who drive each stage are discussed below.

2.2 Gaps in Current Poverty Alleviation Interventions

In the Indian context, 50% of those who work at the top of the TAI supply chain in farming, spinning, and weaving are amongst those who live below the poverty line (Mahapatra et al. (2019)). Many are served by various NGOs often funded by foreign actors. Broadly, NGOs of this nature focus on alleviating poverty in various ways through foreign aid, capacity building, subsistence marketplaces, or microcredit amongst other schemes (Riddell (2007), Kolk et al. (2014)). Many NGOs depend on funding from sources outside of the country they work in. As described by Riddell (2007), this external funding is often driven byl self-interested factors like geopolitical power or opening up trade channels rather than purely humanitarian interests. Because these NGOs depend on this external funding, a power relationship tipped towards the donor means that donors often push NGOs to make social or financial decisions that are against the betterment of the intended beneficiaries (Zimmer et al. (2020)). There is little real dialogue between NGOs and their funders, driven by this power imbalance, impeding further development progress (Zimmer et al. (2020)).

Some authors say that foreign aid, beyond being ineffective, has had several negative consequences on beneficiary countries. Moyo (2009) cites, "Between 1970 and 1998, when

aid flows to Africa were at their peak, poverty in Africa rose from 11 percent to a staggering 66 percent." Moyo (2009) reasons that this uptick is primarily related to persisting weak social capital. Little attention to accountability and removing pressures to reform policies and institutions mean that many of these countries remain dependent and do not develop their own governance and economic infrastructure to support their populace (Moyo (2009), Banae & Yandell (2006)). Other research suggests that the original premise behind NGOs, to address underdevelopment issues missed by the state, is flawed (Zaidi (1999)). NGO failure, facilitated by unequal partnerships between NGOs and nonlocal actors, is a sign that state reform must become a priority again (Contu & Girei (2014), Zaidi (1999)).

Finally, NGOs have also been criticized for not being truly representative of or accountable to the people they are supposed to help (van Zyl et al. (2019), Bebbington (2005)). Some of these issues have been attributed to how NGOs increasingly become biased towards the less poor because these NGOs are often informed by out-of-date information on their target populations (Bebbington (2005)). Other research has also pointed to aforementioned funding contradictions for the lack of accountability to beneficiaries (van Zyl et al. (2019), Assad & Goddard (2010)). NGOs often pay more attention to the demands and targets of their funding partners rather than their supposed beneficiaries as a result of the unequal power relationship (Assad & Goddard (2010)). Local ownership of NGOs sometimes leads to better accountability to beneficiaries but broadly, beneficiaries are often left to the whim of outside funding sources, with final decisions made with little input from beneficiaries (van Zyl et al. (2019), Assad & Goddard (2010)).

Furthermore, Riddell (2007) and other authors also state that much of the true impact of foreign aid is unknown because IA over longer timelines of 10 or 15 years is not performed consistently in most situations, another gap in our understanding of the influence of aid (Riddell (2007), Banae & Yandell (2006)). Nonetheless, because of these key issues in power dynamics and accountability, it is important to consider alternatives that level the playing field between various stakeholders and re-prioritize disadvantaged communities, their voice, and freedoms. One alternative in the space of business and social entrepreneurship is explored below.

2.3 Base of the Pyramid

The disadvantaged populations mentioned in Section 2.1 and Section 2.2 are typically called the bottom or base of the pyramid (BoP) in business literature, a term coined by Prahalad and Hart in 1999 (Prahalad & Lieberthal (1998), Prahalad & Hart (1999)). This term is usually specific to business cases and management strategies for multinational companies (MNCs). It was originally used to describe the missed business opportunity in the 3-4 billion people at the BoP whose purchasing power is considerably lower than the top 1% but whose sheer numbers can lead to great profit despite smaller profit margins per purchase (Prahalad & Hart (1999)). Prahalad & Hart (1999) describe in detail why these populations largely remain invisible: MNCs assume that their cost structure cannot be adjusted to compete in BoP markets, that BoP consumers have no use for their products, that BoP markets are irrelevant to the MNC's long term viability, and that MNC employees care little about the humanitarian impact of their products (Prahalad & Hart (1999)). To further delineate the extent of the problem, Prahalad & Hart bring out a number of paradoxes that BoP communities face. Despite developed society's desires to open their product market to developing communities, such communities have no access to financial capital to participate in this market economy. Furthermore, many MNCs developed their models in an era where resource scarcity and waste disposal were not issues, leading to resource and pollution-intensive products and services. As a result, BoP cannot have access to the same products at the risk of further environmental harm. From this baseline, the authors put forth their charge of creating a consumer market out of the BoP and outline several strategies to produce this shift (Prahalad & Hart (1999)).

While Prahalad & Hart (1999) and Prahalad & Lieberthal (1998) delineated the original BoP business case and championed BoP innovation for humanitarian purposes, the majority of their interventions were focused on turning the BoP into an accessible consumer market for MNCs with little focus on impact on BoP communities, now referred to as BoP 1.0. A number of scholars have questioned the assumptions underlying Prahalad's original BoP proposition and how business should be involved in poverty alleviation (Banerjee & Duflo (2007), Karnani (2007), Ansari et al. (2012)). These scholars argue that bringing social welfare to the market will simply create non-essential desires as opposed to fulfilling fundamental consumer needs (Davidson (2009)). Some describe this proposi-

tion as a 'discursive' curtain used to mask the unequal power relations and depoliticize corporate efforts in the lives of the BoP (Arora & Romijn (2011)). These critiques led to the transformation of the BoP concept to BoP 2.0 (Dembek et al. (2020)).

BoP 2.0 was directed towards a more effective, inclusive, and sustainable framework for poverty alleviation. It introduced new initiators, participants, and partnerships in BoP ecosystems as well as diversifying and elevating the participation of the disadvantaged communities in the BoP ecosystem's value chain. Furthermore, BoP 2.0 described the value of embedding co-creation, native knowledge, and deep dialogue with BoP communities in the BoP protocol, acknowledging the differences in Western-style patterns of economic development and BoP economic development (London et al. (2010), London & Hart (2004)). Added nuance on poverty definitions and deeper understanding of BoP communities led the field to consider co-creation logic as integral to the BoP process rather than optional (London & Hart (2011), Simanis & Hart (2008, 2009), Simanis et al. (2008)). Such papers also briefly mention sustainable technologies to reduce ecological footprint while expanding into BoP markets (Simanis & Hart (2009)).

BoP 3.0 shifted attention from poverty alleviation to sustainable development. It further expanded co-creation and NGO engagements to open innovation and cross-sector partnership to create larger innovation ecosystems rather than just co-creation (Casado-Caneque & Hart (2015)). It also considered more systemic triple bottom line (TBL) impact including economic, social, and environmental. Discussions included replicable and scalable business models that were better suited to open innovation and TBL constraints, with larger emphasis placed on how to translate environmental concerns meaningfully within BoP initiatives (Casado-Caneque & Hart (2015), Hart et al. (2016)). The focus became a polycentric network of many decision-making agents that unify resources and capabilities to address poverty alleviation and sustainable development in BoP ecosystems rather than a unidirectional, central approach of MNC entering the BoP environment. It further re-conceptualized poverty from a traditional income-based approach to a nuanced understanding of its complex, multidimensional nature (Dembek et al. (2020)).

2.3.1 Capabilities of BoP Interventions

The value of BoP organizations comes from several different factors that Nobre & da Silva (2021) call capabilities. In their work, Nobre & da Silva (2021) categorize all the BoP

research from 1998 to 2019 into four sets of BoP capabilities: *Responsible Consumption*, *Responsible Business Model*, *Responsible Management*, and *Responsible Innovation*. *Responsible Consumption* encompasses socioeconomic development and consumers' environmental education. It emphasizes production, distribution, consumption and disposal of products in culturally sensitive, ecologically responsible, and economically profitable ways. Research in this category also discusses sustainable product life cycles that start from the BoP and go to the top. Capabilities in this category include creating buying power, shaping aspirations, tailoring local solutions and improving access. *Responsible Business Model* involves integrating stakeholders and BoP voices into new, inclusive, and de-centered business models to enhance connectivity, transparency, and legitimacy. It includes capabilities like cross-sector partnerships, mutual values creation, and sensing and overcoming institutional voids. The goal of this category is to create innovation ecosystems and scalability. *Responsible Business Model* also incorporates sustainable business models that create value for multiple stakeholders by linking activities, products, and services (Dembek et al. (2018), Freudenreich et al. (2020), Geissdoerfer et al. (2018)). *Responsible Management* boosts developments in long-term sustainability values for stakeholders that participate in a BoP ecosystem (Calton et al. (2013)). Disadvantaged communities are treated as primary stakeholders (Santos et al. (2015)). This category includes capabilities like profitability, corporate social responsibility, triple bottom line (TBL) sustainability, impact assessment, and social and sustainable entrepreneurship. The final category of *Responsible Innovation* incorporates research, science, technology, and policy advancements that contribute to enhance poverty alleviation, social change, and sustainability in BoP ecosystems. Responsible and social innovation drive this category which include capabilities like innovation ecosystem, open innovation, and low-cost innovations (Nobre & da Silva (2021)).

Amongst these categories, *Responsible Consumption* and *Responsible Business Model* are both considered lower-order categories of capabilities while *Responsible Management* and *Responsible Innovation* are considered higher-order capabilities. Higher-ordered and lower-ordered capabilities are interdependent in that lower-ordered capabilities are embedded in higher-ordered capabilities. Focusing on higher-ordered capabilities gives more power to lower-ordered capabilities and allows them to accelerate development. This dissertation focuses on *Responsible Management* as it is a higher ordered capability. Nobre

& da Silva (2021) further shows how IA, a capability within *Responsible Management*, has been paid little attention in the past 20 years. For this reason, I consider how IA influences decision-making and enhances other capabilities.

2.3.2 Research Gap

Other scholars have also described little oversight in BoP interventions and low rates of objective IA (Dembek et al. (2020)) despite many BoP scholars pinpointing impact measurement as particularly important (London (2009)). There are also some scholars who posit that BoP interventions may in fact destroy social value and social capital on principle because ideologies based on individualism and liberal economics can be considered at odds with principles of social capital (Ansari et al. (2012)). Such interventions may unknowingly harm the social fabric of the community involved but very little understanding of how to measure and prepare for such destruction exists in current literature (Dembek et al. (2020), Dembek & Sivasubramaniam (2018)). Environmental IA similarly receives little attention in most current literature (Dembek et al. (2020)). IA is further explored in the next section.

2.4 Impact Assessment (IA) in BoP Interventions

2.4.1 Definitions of and Values within IA

To delve deeper into how and why IA is done, we must first understand what IA means and how it manifests as well as what value systems drive typical IA.

According to the OECD, IA and evaluation broadly "aims to understand to what extent and how a policy interventions corrects the problem it was intended to address (OECD Directorate for Science, Technology, and Innovation (2014))." IA is usually performed with respect to certain goals and targets laid out before IA occurs. Various indicators (discussed in Sections 2.4.2, 2.4.3, and 2.4.4) are used to define success and then measured to judge whether an intervention was successful or not. These indicators are often based on a set of assumptions about what is of true value to the beneficiaries and stakeholders in question (OECD Directorate for Science, Technology, and Innovation (2014)).

Because the BoP context was premised on mutual value creation (Prahalad & Hart (1999)), it is important to consider what value means to the various stakeholders involved

in a BoP organization. The two main stakeholders in this context are the firm and engaged BoP populations. Value to the firm, especially financial, has been considered extensively by business researchers previously (Kolk et al. (2014), Dembek et al. (2020)). Because of this, I will primarily focus on value as it applies to BoP populations. These populations are deprived of financial, social, and natural resources and therefore, value access to these resources (Scoones (1998)). This does not comprise the whole picture though as different models of value indicate that there are intangible components to human need and value. Two examples of these value models include Maslow's hierarchy of needs and Manfred Max-Neef's taxonomic system of needs, a refinement of Maslow's hierarchy (Maslow (1943), Max-Neef (1991)). Max-Neef's needs included subsistence, protection, affection, understanding, participation, leisure, creation, identity, and freedom with no built-in hierarchy (Max-Neef (1991)). In contrast to Maslow, Max-Neef makes the point that all needs must be satisfied to reach self-actualization (Maslow (1943), Max-Neef (1991)). While these systems pinpoint needs and how they are satisfied, other approaches like Sen (1999)'s Capability Approach center freedom instead of defined needs. This approach prioritizes *capabilities* which are the real freedoms that people have to achieve their dreamed beings and doings (Sen (1999)). Sen (1999)'s approach has been extensively used in human development contexts because it prioritizes both wellbeing and agency of the individual as opposed to reducing desires to just wellbeing (Robeyns (2005)). This discussion of values primarily highlights the intangible factors of value that should be considered in any discussion of IA. Such intangible and broad definitions of need and freedom are difficult to operationalize (Robeyns (2005), Rawhouser et al. (2019)), but links between indicators used and intrinsic value to the individual should be considered in the adoption of any IA measurement. The following sections detail the types of indicators currently used in BoP organizations.

2.4.2 Financial

Out of the research articles that performed some form of IA in the last two decades, most only did financial assessments. Economic impacts of BoP initiatives for a firm can be measured using profit or other proxies, such as price, cost, margin, profit, revenue, market penetration, customer-base growth, number of customers, dividends and market capitalization. Much of the literature does not measure explicit economic impact of the

firm and focuses instead on potential market size and implicitly describe profitability potential. Most case studies do not provide direct assessments and often, firm-level instead of initiative-level measures are used to assess profitability (Kolk et al. (2014)). There is also little theoretical understanding of how profit relates to poverty alleviation overall (Kolk et al. (2014)).

2.4.3 Social

For social IA, many case studies report a wide variety of measures like education, health care, water quality, employment, business income generation, and more complex terms like empowerment, quality of life, and reduced exploitation. Even so, few studies measure actual results. Of those reported, most are positive but objective assessment is rare. There are various potential social impacts of BoP initiatives: (a) basic need (food, energy, housing and water/sanitation); (b) basic infrastructure (transportation, health, and financial services); (c) basic education, skills training, and knowledge gathering; (d) information and communication; (e) discretionary purchases and "finer things in life" (personal care, clothing, negative goods such as tobacco and liquor, household appliances, TV, and entertainment); and (f) marketplace for selling labor, skills, craft, or produce. While these indicate social impact, there is little explicit and objective measurement of social impact in BoP literature to date (Kolk et al. (2014)). More nuanced understandings of social impact in poverty alleviation related to ideologies like the Capability Approach or social capital within a community are also little addressed in assessments that do exist (Sen (1999), Kolk et al. (2014)).

2.4.4 Environmental

In most BoP literature so far, environment has been paid the least amount of attention. Articles that go beyond a general call for environmental sustainability are typically limited to documenting waste generation. Much literature is devoted to the importance of changing consumption patterns to reduce environmental harm as BoP interventions develop but most of this work is theoretical and has not been documented (Hart & Christensen (2002)). In contrast, some literature also points to the negative impact current poverty has on the environment, leading to the proposition that alleviating poverty could also benefit the environment (Hahn (2009)). More recent literature describes more nuanced

links between social and environmental benefits of BoP ventures, noting that environmental improvements often only succeed if they are attached to the cost structure of the venture itself. Original environmental goals described at the outset of the venture are often difficult to follow through on (Duke (2016)).

2.4.5 Existing Frameworks

Overall, literature on BoP ventures lack empirical evidence in all three aspects of TBL sustainability. Despite this lack, there are a number of existing frameworks that have been set forth by scholars in the BoP area which attempt to provide a structure to IA in BoP ventures.

London (2009) developed the Base of the Pyramid Impact Assessment Framework to offer managers of ventures focused on disadvantaged communities a more systematic way of measuring the effects of their own activities in implementation on the ground. The framework involves looking at impacts on three broad categories of stakeholders: sellers (local distributors or producers), buyers (local consumers or agents), and communities. The toolkit recommends considering three types of transformations for each of these stakeholders caused by BoP ventures: potential changes in economics, potential changes in capabilities, and potential changes in relationships as described in Figure 2.1. While it considers economic and social impacts as detailed as certain facets of social capital (by the name "relationships"), the framework includes no mention of environmental impact and still assumes a distinction between the firm and participating BoP communities, implying little co-invention.

A few different frameworks that address social impacts in BoP contexts also exist. Ansari et al. (2012) developed a social capital framework for poverty alleviation by first recasting poverty alleviation as capability development using Sen (1999)'s Capability Approach. They then describe how bonding and bridging social capital can be used for capability development internal to the BoP community as well as capability transfer between groups as seen in Figure 2.2. They describe four factors to generate social capital (time, interdependence, interactions, and closure) and go on to demonstrate how social capital generation can lead to long-term poverty alleviation. Methods of quantification from previous literature are offered based on these conclusions although no specific method is recommended above others and the framework still does not address any component of

Sellers and Buyers	Community
POTENTIAL CHANGES IN ECONOMICS	
Income and income stability	Incomes of existing businesses as a result of competition
Debt levels; access to credit	Number/type of new businesses serving the community
Productivity (buyers)	Jobs and economic opportunities
Product pricing, availability, and choice (buyers)	Infrastructure
Prices received for products and services (sellers)	
Opportunity costs of not pursuing other livelihoods	
Vulnerability to economic or household shocks	
POTENTIAL CHANGES IN CAPABILITIES	
Skills and knowledge through training and education	Access to free information and educational opportunities
Health and morbidity as a result of involvement with venture or use of product or service	Perceptions about and awareness of opportunities (such as health care and education)
Self-esteem, self-efficacy, and contentment	Sense of dignity and respect
Aspirations and goals	Collective aspirations and goals
POTENTIAL CHANGES IN RELATIONSHIPS	
Access to individuals and networks	Relationship with government and other institutions
Dependence on intermediaries and partner organizations	Gender equity, or views about castes, races, or religions
Reputation, levels of trust, and respect	Social cohesion
Household roles and relationships	Values regarding traditional customs, consumption, and consumerism
Community roles and relationships	Relationship with natural environment (ecosystems, land and water quality)
Social status	

Figure 2.1: Ted London's BoP Impact Assessment Toolkit (London (2009))

environment (Ansari et al. (2012)).

Lashitew et al. (2021) also developed a social value creation framework based on a review of BoP literature. This conceptual framework describes the antecedents, constraints, capabilities, and contingencies that drive social value creation and which components managers may have influence on as described in Figure 2.3. Lashitew et al. (2021) also note the complexity in aggregating social value in an objective manner as there are very few clear standards of measurement given the multi-dimensionality of social value and the subjective nature of outcomes. Their framework conceptually helps understand how social value may be created but does not offer clear methods of evaluating social value after implementation and, similar to Ansari et al. (2012), mentions little about environmental

Figure 2.2: Ansari et al. (2012)'s social capital framework

Note: The shaded area of the figure indicates elements of the business model that are amenable to direct managerial influence.

Figure 2.3: Lashitew et al. (2021)'s social value creation framework

impact.

Within BoP literature, Hart et al. (2003) put forward a sustainable value framework based on two dimensions of tension. The vertical axis represents a firm's need to manage today's business while also creating tomorrow's technology and markets. The horizontal access represents the firm's need to develop internal organizational skills and capabilities while also incorporating new perspectives and knowledge from sources external to the organization. Drivers in this framework lead to four general categories of strategies:

clean technology, sustainability vision, pollution prevention, and product stewardship as described in Figure 2.4. Despite nuance on how such strategies can increase environmental value, there is little discussion about social impacts, addressing only part of TBL sustainability.

Figure 2.4: Hart et al. (2003)'s sustainable value framework

In non-BoP fields focused on development, other frameworks exist to address poverty alleviation. One of the most prominent is the Sustainable Rural Livelihoods Framework. This framework describes how sustainable livelihoods can be achieved through access to various forms of capital: natural, economic, human and social (Scoones (1998)). These forms of capital are combined for different livelihood strategies like agriculture intensification or extensification, or livelihood diversification and migration. While this framework can be useful for understanding the livelihoods of disadvantaged communities, it underplays the role of power relationships and social issues like gender or caste discrimination and operationalization is still unclear (Serrat (2017)).

Several more quantitative methodologies of environmental assessment exist like calculating carbon footprint, water footprint, ecological footprint, or performing a material flow analysis of tracking fibre, to yarn, to cloth, to garment (Roca & Herva (2015)). None of these have been performed in literature related to Khadi yet.

2.5 Comprehensive Impact Assessment Framework Development

To aid the study, I constructed an IA framework specific to the textile supply chain that attempts to incorporate economic, social, and environmental impacts at each stage of the

textile supply chain based on the existing frameworks described in Section 2.4.5. This framework can be seen in Figure 2.5. Five broad stages are included in the framework: growing, spinning, weaving, embellishment, and stitching, summarized from Section 2.1. Each of these stages has various impacts on the producer, the organization, the producer's community, or the environment. The IA indicator columns were primarily informed by London (2009)'s IA toolkit for both economic and social transformations. The blue social indicators were further supplemented by Ansari et al. (2012)'s social capital framework to account for impacts on binding social capital (community). The environmental indicator section in green was constructed by considering values from Hart et al. (2003)'s sustainable value framework combined with concepts of material flow analysis and ecological footprints (Roca & Herva (2015)).

Some concepts mentioned in previous IA and value creation frameworks could not be contained in one specific stage so these were congregated across all stages in the bottom ellipses of the framework. Environmentally, transportation emissions are a large component carbon footprint that occur between each stage. The three other ellipses are primarily informed by Lashitew et al. (2021)'s social value creation framework and partially by Ansari et al. (2012)'s social capital framework. These focus on the role of the producer, how the organization connects the producer to other entities through bridging capital, and the attention the organization pays to developing its full ecosystem. These are examples of the types of IA that may be occurring at an organization and were used to structure interview questions.

Growing (G)

includes all agricultural practices associated with growing of natural fibres, primarily cotton, for the purpose of garment production

Impact Assessment Indicators

Spinning (Sp)

includes all processes to convert natural fibre into various grades of yarn (i.e. carding, ginning etc.)

Impact Assessment Indicators

Weaving (W)

includes all processes to yarn into woven textiles including plain cloth processes (simple loom) and complex processes (jacquard loom)

Impact Assessment Indicators

Embellishment (E)

includes processes like dyeing, blockprinting, embroidery, and layer cutting that typically occurs before final assembly of garment

Impact Assessment Indicators

Stitching (St)

includes all processes involved in making final garment like stitching, hemming and quality checks; also includes marketing

Impact Assessment Indicators

ECONOMIC

PRODUCER
- income generation
- access to credit
- opportunity costs of other livelihoods
- resilience to financial shocks

ORGANIZATION
- financially sustaining group
- revenue generation
- ability to expand operations
- job creation

APPLY TO EACH STAGE →

SOCIAL

PRODUCER
- access to education
- access to healthcare
- shaping aspirations
- sense of dignity and respect
- expansion of freedoms

COMMUNITY
- changes in social capital (binding)
- changes in power dynamics and political situation
- gender equity and caste equity

APPLY TO EACH STAGE →

ENVIRONMENTAL

PRODUCER
- use of toxic chemicals (pesticide or herbicide) breathed in by user
- rates of cancer
- access to water

ENVIRONMENT
- water consumption
- nutrient consumption
- type of fertilizer used
- potential for regenerating and replenishing soil

ENVIRONMENTAL

PRODUCER
- exhaust from carding, ginning, or spinning machine depending on power delivery method

ENVIRONMENT
- usage of fossil fuels for power (i.e. diesel)
- consumption of materials in producing machines

ENVIRONMENTAL

PRODUCER
- exhaust from loom depending on power delivery method (irrelevant for handloom)
- drudgery associated with handloom

ENVIRONMENT
- usage of fossil fuels for power (i.e. diesel)
- consumption of materials in producing machines

ENVIRONMENTAL

PRODUCER
- toxic residues from chemical dyes contaminating water

ENVIRONMENT
- toxic dyeing chemicals seeping into water sources
- impact of production of synthetic chemicals

ENVIRONMENTAL

PRODUCER
- exhaust from sewing machine depending on power delivery method

ENVIRONMENT
- usage of fossil fuels for power (i.e. diesel)
- consumption of materials in producing machines

Transportation Emissions

Role of Producer and Co-creation Potential

Changes in Bridging Social Capital

Attention to Ecosystem / Full Value Chain

Key
- observed
- measured

Figure 2.5: Textile Supply Chain-Specific Impact Assessment Framework

3 Methodology

This chapter describes the rationale, methodology, and methods behind this research. It also describes ethics and limitations observed.

3.1 Research Approach

The research consisted of two stages. The first stage involved a literature review used to understand the current state of IA in BoP organizations in the economic, social, and environmental aspects of sustainability and how this can be used to evaluate the full textile value chain.

The second stage involved multiple case studies of six different textile-focused organizations that center their strategy on empowering the artisans or farmers involved in their supply chain. This approach is qualitative with a social constructivist approach, "whereby the research assumes that reality is constructed intersubjectively through meanings and understandings developed socially and experientially" (Harrison et al. (2017), Merriam & Tisdell (2015)). This position assumes that the researcher cannot be separated from the context of the research in question (Merriam & Tisdell (2015)). These case studies were used to understand IA protocols of the organizations and pinpoint gaps between aims and objectives and measured indicators.

3.1.1 Stage 1: Literature Review

The literature review was conducted to understand how current BoP interventions are evaluated and how thoroughly these evaluations addressed economic, social, and environmental sustainability as the field has not traditionally been focused on sustainability, instead focusing on mutual value creation between firm and base of pyramid with more recent focuses on poverty alleviation. The literature review was also conducted to understand the full textile value/supply chain. Each step of this chain involves economic, social, and environmental impacts that organizations have the potential to pay attention to. To systematically explore organizations selected, I also created a cohesive framework for IA analysis from this literature review that is discussed in Section 2.5. Google Scholar and IDiscover were queried with key words specific to Base of Pyramid and the textile value chain to develop the aforementioned framework.

3.1.2 Stage 2: Case Study Methodology

Case studies were chosen as the method of inquiry for this study because they are known as an effective methodology to investigate and understand the practices, process, and relations within complex institutions which is why they are suited to studying the IA protocols of organizations (Harrison et al. (2017)). It is difficult to analyze artisan-focused textile organizations outside of the context they exist in and case studies are one of the best approaches to use in such context-specific situations. According to Flyvbjerg (2011) and Stake (2008), case studies focus on an "individual unit", "functioning unit" or "bounded system". In this study, the individual unit of study is the organization engaged with producers. The bounds of the unit are those who are employed by the organization forming the unit of study.

Another prime advantage of a case study is the ability to study developmental factors within the organization relative to its environment (Harrison et al. (2017), Flyvbjerg (2011)). This means that case studies stress the fact that units evolve in time. Because IA is typically understood as occurring after an intervention takes place, this timeline is important to absorb into analysis as the typical order of operations within a specific organization can decide what type of choices are made within the organization. If a specific stakeholder is engaged before or after the intervention (or never), such input will have different types of impacts on the stakeholder engaged.

Finally, case studies are useful because of their focus on "relation to environment" or the context (Harrison et al. (2017)). The boundary of the case decides the unit and the context. In this study, based on the earlier defined boundary of the organization, the context is all communities and entities involved with textile production that are not directly employed or partnered with the organization. This includes factors as varied as India's government regulations of the Khadi sector, customer preferences, and other NGO's focused on various aspects of the textile supply chain. It also includes the different climatic and historical backgrounds of the artisan and farmer communities in question, some of which has been mentioned previously and some of which will be further explained in Chapter 4.

3.1.2.1   Case Study Selection Criteria

This study primarily takes notes from Merriam & Tisdell (2015)'s methodology on case studies which emphasizes the importance of rigorous procedures to frame the research process. This includes careful planning and requires rigorous selection criteria for the organizations chosen for study. These criteria are listed below:

1. The organization must be officially incorporated as a company or trust.

2. The organization must actively be involved in some portion of the textile supply chain (e.g. growing, spinning, weaving, embellishment, stitching).

3. The organization must engage with BoP stakeholders in poor, rural contexts (e.g. rural farmers or artisans) as their main producers of goods.

4. The organization must be sustained by its own economic productive activities with little to no external funding from donors.

For each organization, exploring currently existing IA protocols was prioritized but determining which employee was focused on this aspect was difficult so interviews first focused on the primary director of each organization. Snowball sampling was then used to find other employees with more specific IA knowledge (Goodman (1961)).

3.1.2.2   Case Study Research Methods

3.1.2.2.1   Data Collection   The primary sources of data were the websites of the organizations being studied and 8 semi-structured interviews with people working at the organization. The website data was primarily used to uncover what the aims and objectives of these organizations were. Because websites rarely had any information about IA, semi-structured interviews were used to query details of IA protocols that may exist within the organization and understand how these protocols matched up with organization's claims. Semi-structured interviews are a powerful tool in uncovering and understanding complex structures within organizations because although they are guided by specific questions targeting certain types of data (i.e. IA protocols), they are flexible enough to allow the interviewer to follow strands of conversation that may be of interest despite not fitting within the original intentions of data collection (Merriam & Tisdell

(2015), Bryman (2012)). Interview questions were designed to explore and understand IA indicators and protocols used, examples of which are summarized in Figure 2.5.

All website data and interview data was compiled into an Atlas.ti database for organized analysis as recommended by Merriam & Tisdell (2015).

3.1.2.2.2 Data Analysis Data analysis of both website and interview data involved the use of coding in Atlas.ti. Coding is a process used to to organize pieces of data into themes, using a system of identifying notations applied to different segments of website or interview data (Merriam & Tisdell (2015)).

3.1.2.2.2.1 Within-Case Analysis Case study analysis consists of two parts. The first part is within-case analysis. The within-case analysis is used to develop a deep understanding and description of the phenomenon being studied in a single case (Mills et al. (2010)). This allows each case's unique attributes and context to emerge before identifying themes across cases (Mills et al. (2010)). The within-case analysis in this study was focused on describing the context and origin of each organization and summarizing each organizations' aims and objectives. The textile-specific IA framework developed in Section 2.5 was also used to query and code specific instances of IA identified within the organization. These codes were then used to distill IA protocols into the framework so as to more easily understand IA strengths and weaknesses for each organization.

3.1.2.2.2.2 Cross-Case Synthesis and Analysis After the within-case analysis, a cross-case analysis was performed. Cross-case analysis is used to identify common themes across cases that can then be used to ensure the accuracy of trends, establish whether a trend is generalizable, and to potentially generate theories behind trends observed (Mills et al. (2010)). In this study, within-case analysis was used to pinpoint themes that were seen as key to successful interventions across organizations and uncover common gaps in IA.

3.2   Ethics and Limitations

3.2.1   Ethics

This study went through the ethical review process recommended by the University of Cambridge Department of Engineering. This process required a statement of purpose, rationale for conducting interviews, and acknowledgement of various risks and possible impacts on participating entities. Data collection only began after the Ethics Review Committee approved the project.

3.2.2   Limitations

3.2.2.1   Selection Bias

This study due to scope and time constraints could only cover six different organizations. These organizations were selected because their profiles fit a specific set of criteria for the purpose of exploring IA protocols in a particular context, implying they may be extreme cases of a specific phenomena. As Flyvbjerg (2011) points out, "selection bias may overstate or understate relationships." These organizations may have only responded because they were the ones who had the capacity to do so, placing them in a unique position to participate. Several other similar organizations may exist which may not have the same capacity or interest. Selecting extreme cases may also lead to focusing on cases that produce biased evidence of causal effects (Collier & Mahoney (1996)). This study only aims to explore unique cases and does not assume generalizability in other contexts.

Further selection bias comes from the choice to interview people involved with the organizations. This choice was made to explore internal organizational structures around IA but the true impact of these IA processes if they exist cannot be confirmed without further study of other stakeholders involved like producers in the system. Other stakeholders like government entities and NGOs based on separate funding models were also ignored despite their pivotal role in this space.

3.2.2.2   Language Constraints

English was not a first language to all interviewees selected. Due to my own language constraints, the majority of the interviews had to be conducted in English with small sections of Hindi interspersed for some participants. While all participants were fluent in English,

the translation may have led to inaccurate portrayal of complexity in some instances. It is difficult to ascertain the accuracy of these portrayals without also conducting the interviews in each interviewee's first language.

3.2.2.3 Framework-Specific Limitations

Several limitations come from the framework used. The framework misses interactions between different supply chain groups especially if it's out of scope for the organization and does not provide a good way to describe the network of farmers, spinners, and weavers and varying impacts on them depending on the strength of their relationship with the organization.

IA also does not always fit cleanly into one or another category as some IA protocols were established across all producers organizations worked with while other indicators applied only to very specific stakeholders in the organization. The framework also made little space to account for impacts of innovation and technology. Most of these impacts were categorized as either economic or environmental, but the synergy between innovation and economic development was lost.

Finally, designing a framework prior to interview and analysis opens up the possibility of missing relevant information of the organization's processes and procedures. Furthermore, because the framework is devoid of details of context, it may obscure the reasons why certain protocols were established or ignored. That is why it is important to absorb the framework results with the context of the organization in mind.

4 Results

This chapter presents the results of the case study analysis which incorporated both semi-structured interviews and document analysis of websites associated with organizations in case studies.

4.1 Within-Case Analysis

This section presents within-case analyses and describes both context, aims, objectives, and current IA protocols of each organization. Figures demonstrate prevalence of observed versus measured impacts.

4.1.1 URMUL Rural Health, Research and Development Trust

Sources of data:

- Pages "About URMUL" and "Moving in Sand and Time" from URMUL Trust's website (URMUL Trust (n.d.))

- Pages "How We Work" and "Impact Story" from URMUL Desert Craft's website (URMUL Desert Crafts (n.d.))

- Interviewee 1: Anshul Ojha, Founder & Principal Anchor, Desert Resource Centre, Urmul Group

- Interviewee 2: Prerna Agarwal, CEO, Livelihoods

- Some details provided by Better Cotton Initiative's Report, "BCI Principles and Criteria V2.1" (Better Cotton Initiative (2018))

Uttari Rajasthan Cooperative Milk Union Ltd. Rural Health, Research and Development Trust, Bikaner (URMUL Trust) refers to a family of organizations that work towards social and economic change in rural populations of western Rajasthan. This region of Rajasthan includes the Thar Desert, a harsh and inhospitable environment with few water resources placing stress on the several rural villages that occupy the space. The component of URMUL Trust that focuses on the textile supply chain is URMUL Desert Crafts (UDC) which functions as a social enterprise. UDC organizes artisans in Rajasthan to use skills that have existed within Rajasthani villages for generations to

produce traditional embroidery on garments that is then sold at prices scaled to ensure a liveable wage to the artisans.

UDC primarily manages the branding that sells the handcrafted items. It is advertised as a marketplace closing the gap between international consumers who appreciate the quality of traditional handcrafted products and artisans who make such products. UDC supports artisans in material procurement, design idea generation, skill improvement to improve product quality, and in determining pricing for products. Based on how self-sufficient the artisans already are in any of the aforementioned skills, UDC provides variable amounts of support from fully coordinating the whole supply chain to only advising artisans on design choices to simply giving access to the UDC marketplace (URMUL Trust (n.d.)). Figure 4.1 describes the typical supply chain of UDC and how it organizes artisans in villages to deliver high-quality craft products. A claimed advantage of this model is the artisans' ability to be based out of their ancestral village as opposed to a centralized factory.

Figure 4.1: Design process of Urmul Desert Crafts (URMUL Desert Crafts (n.d.))

UDC is one component of URMUL Trust, meaning that artisans who are involved with UDC also benefit from different initiatives pursued by URMUL Trust devoted to healthcare and education. URMUL Trust began as an offshoot of URMUL which itself was modeled on AMUL, a milk cooperative based in Gujarat. URMUL and AMUL were

a result of farmers' anger at exploitation from middlemen in India's milk market. The resultant cooperatives are owned by milk producers directly who organized together to sell directly to marketplaces rather than depend on monopolistic middlemen (Laidlaw (1977)). After the cooperative was established, URMUL still recognized many development issues within the Thar Desert leading to the formation of the Trust. The Trust manages several different healthcare and education programs that are then distributed to other organizations (like UDC) under URMUL Trust's umbrella (URMUL Trust (n.d.)). This umbrella encompasses multiple other value chains including the camel milk and wool value chains.

Figure 4.2 below describes IA protocols that exist within URMUL Trust and UDC presently. Observed impacts in black outnumber measured impacts in red.

Growing (G)

currently outside of organization's management and documentation scope

Impact Assessment Indicators

ECONOMIC

PRODUCER
- looking at diversifying natural fibre portfolio through addition of wool and silk for financial resilience

ORGANIZATION
- chooses Better Cotton Initiative-certified cotton to retain large-scale clients like IKEA

SOCIAL

PRODUCER
- ascribes to Better Cotton's labour standards dependent on International Labour Organization's principles: no child, or forced labour, non-discrimination, attention to health and safety, right to organize workers, reasonable working hours, and collective partnership

COMMUNITY

ENVIRONMENTAL

PRODUCER

ENVIRONMENT
- uses Better Cotton Initiative-certified organic cotton when working with organizations like IKEA
- natural resource management is one focus

Spinning (Sp)

currently outside of organization's management and documentation scope, yarn bought by weavers directly

Impact Assessment Indicators

ECONOMIC

PRODUCER
- financial modeling used to justify solutions

ORGANIZATION
- provides Better Cotton yarn to weavers when working with clients like IKEA

SOCIAL

PRODUCER

COMMUNITY
- social assurances associated with Better Cotton on specific projects and partners

ENVIRONMENTAL

PRODUCER

ENVIRONMENT
- environmental standards associated with Better Cotton on specific projects and partners

Weaving (W)

in scope of organization

Impact Assessment Indicators

ECONOMIC

PRODUCER
- financial modeling used to justify solutions
- production / output garment numbers
- income generation (% increase)
- operation optimization
- rejection rates
- wage calculated beyond gvmt standard

ORGANIZATION
- artisans able to scale up enterprise

SOCIAL

PRODUCER
- database of all artisans with details of socioeconomic profile and how interventions affect them (enterprise detail planning)
- access to banking
- women in leadership positions
- increased women confidence
- dropped child marriage
- changing aspirations
- increased choice

COMMUNITY

ENVIRONMENTAL

PRODUCER

ENVIRONMENT
- solar power used in some units
- in process of digitizing to reduce emissions

Embellishment (E)

in scope of organization

Impact Assessment Indicators

ECONOMIC

PRODUCER
- rate of adoption of new intervention
- solution internalized by community organizing to purchase together

ORGANIZATION
- consider price vs. value of product (if it will sell in market with labour costs integrated)
- always pay above government mandated price

SOCIAL

PRODUCER
- database of all artisans with details of socioeconomic profile and how interventions affect them (enterprise detail planning)
- access to banking
- women in leadership
- increased rates of education in younger generations
- healthcare provided by urmul

COMMUNITY

ENVIRONMENTAL

PRODUCER

ENVIRONMENT
- switching from chemical dyeing to all natural dying in 3-4 years
- solar power in some units
- in process of digitizing to reduce emissions

Stitching (St)

in scope of organization

Impact Assessment Indicators

ECONOMIC

PRODUCER
- rate of adoption of new intervention
- solution internalized by community organizing to purchase together

ORGANIZATION
- consider price vs. value of product (if it will sell in market with labour costs integrated)

SOCIAL

PRODUCER
- database of all artisans with details of socioeconomic profile and how interventions affect them (enterprise detail planning)
- access to banking
- women in leadership

COMMUNITY

ENVIRONMENTAL

PRODUCER

ENVIRONMENT
- waste fabric from stitching is redirected to waste weaving in the form of twisted rugs
- stitching machines solar-powered
- in process of digitizing to reduce emissions

Have transport maps but have not calculate emissions

Consider producers owners and partners in value chain

Primary component of model includes financial linkages to market

Key organization focus is green value chain development

Key
- observed
- measured

Figure 4.2: IA framework for Urmul Desert Crafts; observed impacts in black and measured impacts in red

4.1.2 RangSutra

Sources of data:

- Pages "About" and "Our Clusters" from RangSutra's website (RangSutra (n.d.))
- Interviewee 1: Sumita Ghose, founder and managing director of Rangsutra
- Interviewee 2: Partha Pratim Roychoudhury, technical director of Rangsutra
- Some details provided by Better Cotton Initiative's Report, "BCI Principles and Criteria V2.1" (Better Cotton Initiative (2018))

RangSutra is a social enterprise that was started by Mrs. Ghose who conceptualized the business while working at URMUL. She realized that an organization focused on the sustainable livelihood component of URMUL's desert crafts was necessary to make the endeavor financially sustainable. Amongst these case studies, Rangsutra is also unique in its shareholder model. The company is owned by a community of over two thousand artisans in various parts of rural India ranging from Kashmir to Uttar Pradesh to Rajasthan (RangSutra (n.d.)). RangSutra's main work and development strategy is called "Cluster Development", working directly with rural artisans to improve their skill sets through workshops and other educational endeavors focused on producing garments and setting up the supply chain to deliver such products. Another important focus is market linkage (or bridging social capital) that allows artisans to access larger consumer markets who have more ability to pay for the whole cost of labor and material put into a garment (RangSutra (n.d.)).

RangSutra chooses to focus on product-specific workshops because a major obstacle to the successful selling of garments is quality control. While rural artisans pass down embroidery techniques through generations, the standard of embroidery varies across different artisans and villages. To sell multiple items to a single seller and meet international customer standards, artisans must be trained to a similar standard in handcraft skill. This is how RangSutra intervenes and enables hand-skilled rural artisans to compete with the quality of factory-produced garments (RangSutra (n.d.)). According to Mrs. Ghose, RangSutra chose not to be distracted by other social endeavors because bridging this production gap led to an income increase that organically enhanced artisans' access to several other social services.

Figure 4.3 below describes the IA protocols that exist within RangSutra at the present moment. Observed impacts in black greatly outnumber measured impacts in red.

Figure 4.3: IA framework for RangSutra; observed impacts in black and measured impacts in red

4.1.3 Kachchh Heritage, Art, Music, Information and Resources (Khamir)

Sources of data:

- Pages "About - Who We Are" and "Our Work" from Khamir's website (Khamir (n.d.))
- Interviewee 1: Ghatit Laheru, Director of Khamir
- Report titled "Sandhani: Weaving Transformations in Kachchh" (Kothari et al. (2019))

Kachchh Heritage, Art, Music, Information and Resources (Khamir) is a trust that began as a response to an earthquake that hit the Kachchh region of Gujarat, India in 2001. The earthquake destroyed buildings in several villages and the city of Bhuj and took the lives of over 18,000 people in the area (Lahiri et al. (2001)). Khamir was one of the initiatives initially focused on reconstructing and developing the area in the aftermath. Its primary focus now is preserving and encouraging the artisanal traditions of the Kachchh region through workshops, exhibitions, research, and documentation of these traditions (Khamir (n.d.)).

For Khamir, preserving and encouraging artisanal traditions also entails facilitating trade and sales for increased income generation for said artisans. The motivation behind such facilitation is craft survival through livelihood support. Artisans who work with Khamir are guaranteed a minimum wage 25% higher than government mandate. Exhibitions are used to educate the public and customers of the practices that sustain Khamir and encourage consumers to purchase garments more conscientiously, highlighting the handcrafted labor put in and quality of materials produced. Khamir also offers small to medium-scale artisans an outlet platform to connect to a large base of customers, providing market linkage (Khamir (n.d.)).

Furthermore, Khamir offers social services to artisans, including registering artisans to have access to government healthcare and education schemes, and providing credit programs that allow artisans to purchase materials prior to income generation. Khamir also invests in exploring and developing other innovations that enhance artisans' financial resilience. Examples include camel wool, indigenous cotton (referred to as Kala cotton), and recycled plastic weaving (Khamir (n.d.)).

Figure 4.4 below describes the IA protocols that exist within Khamir presently. Observed impacts in black greatly outnumber measured impacts in red.
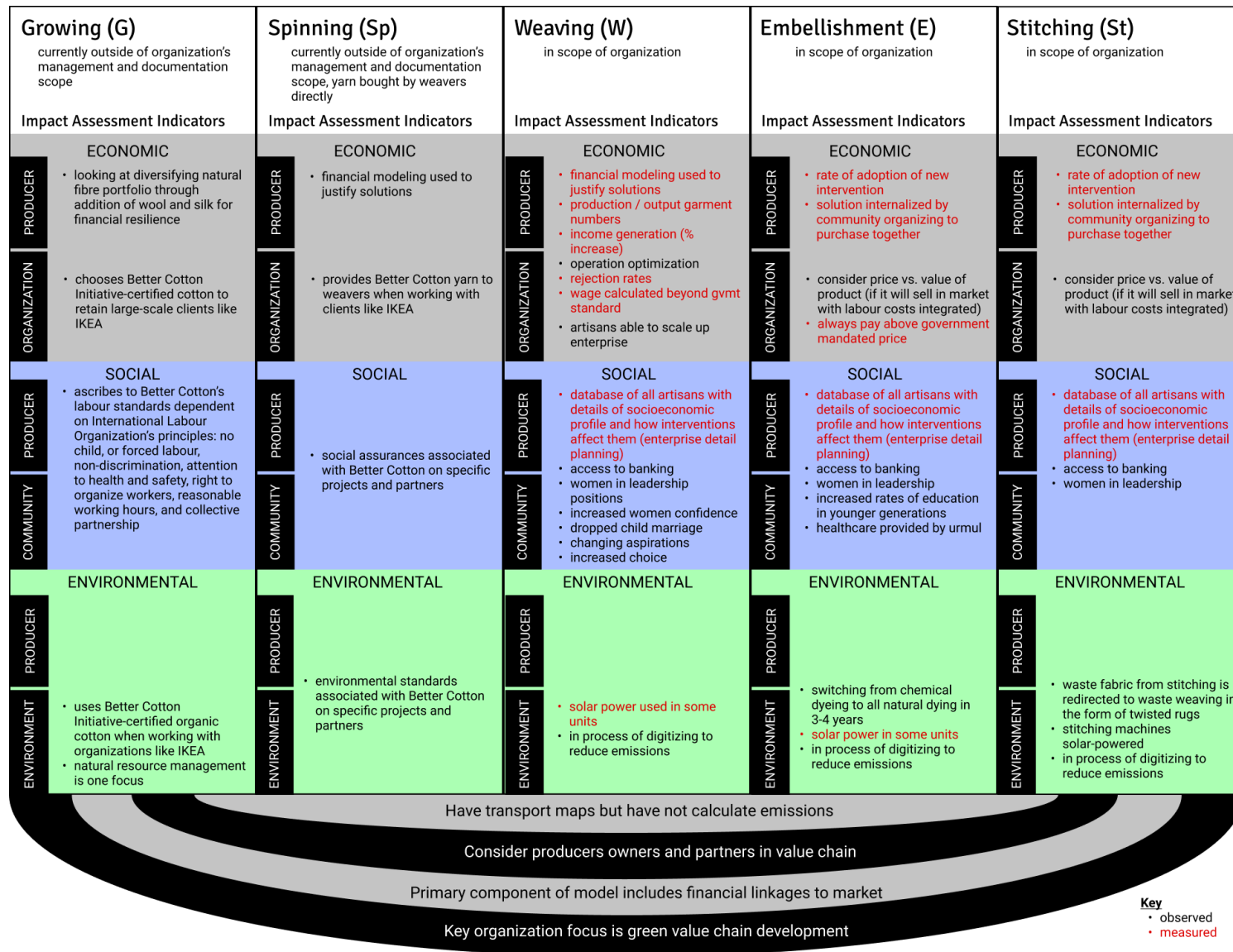
Growing (G)
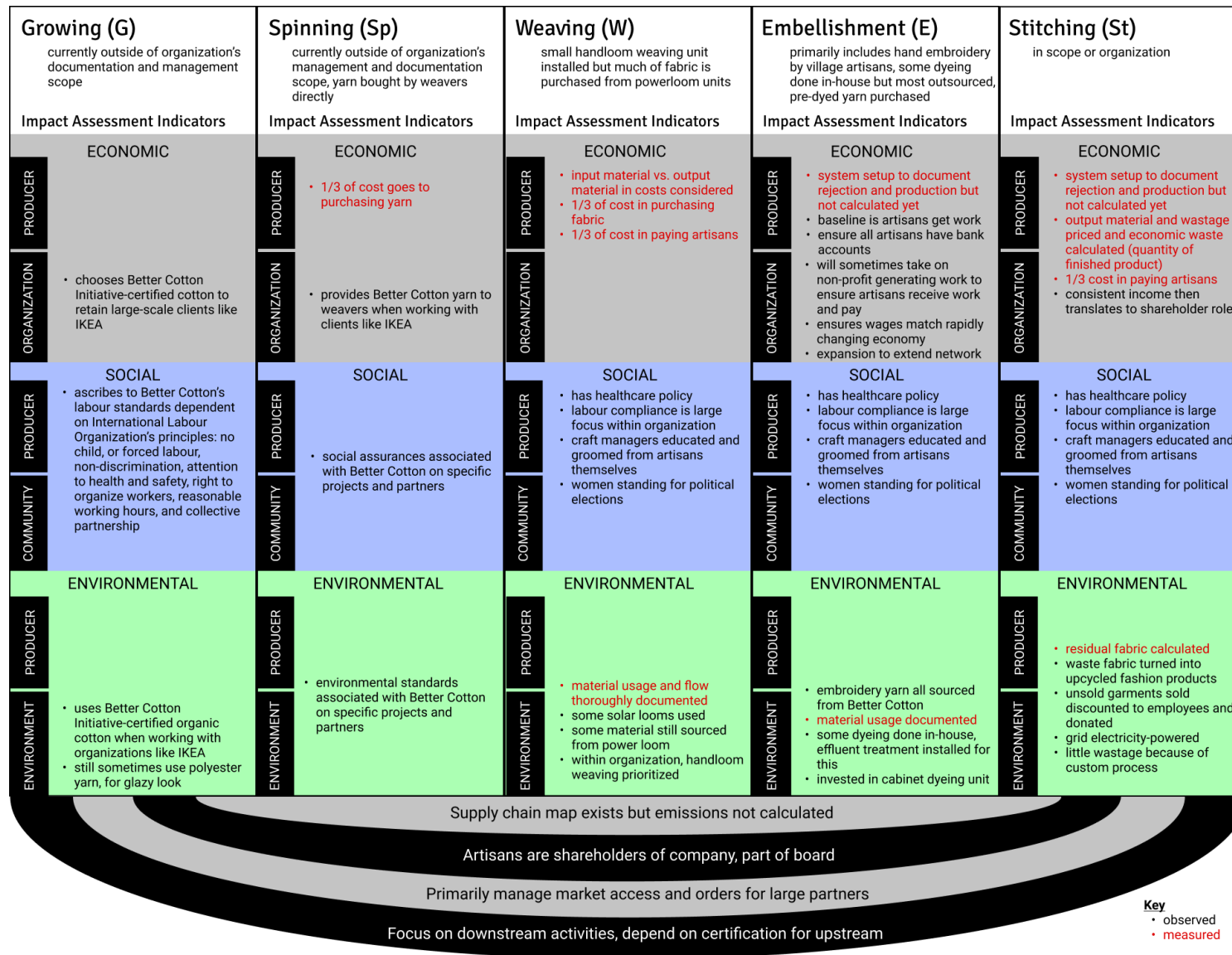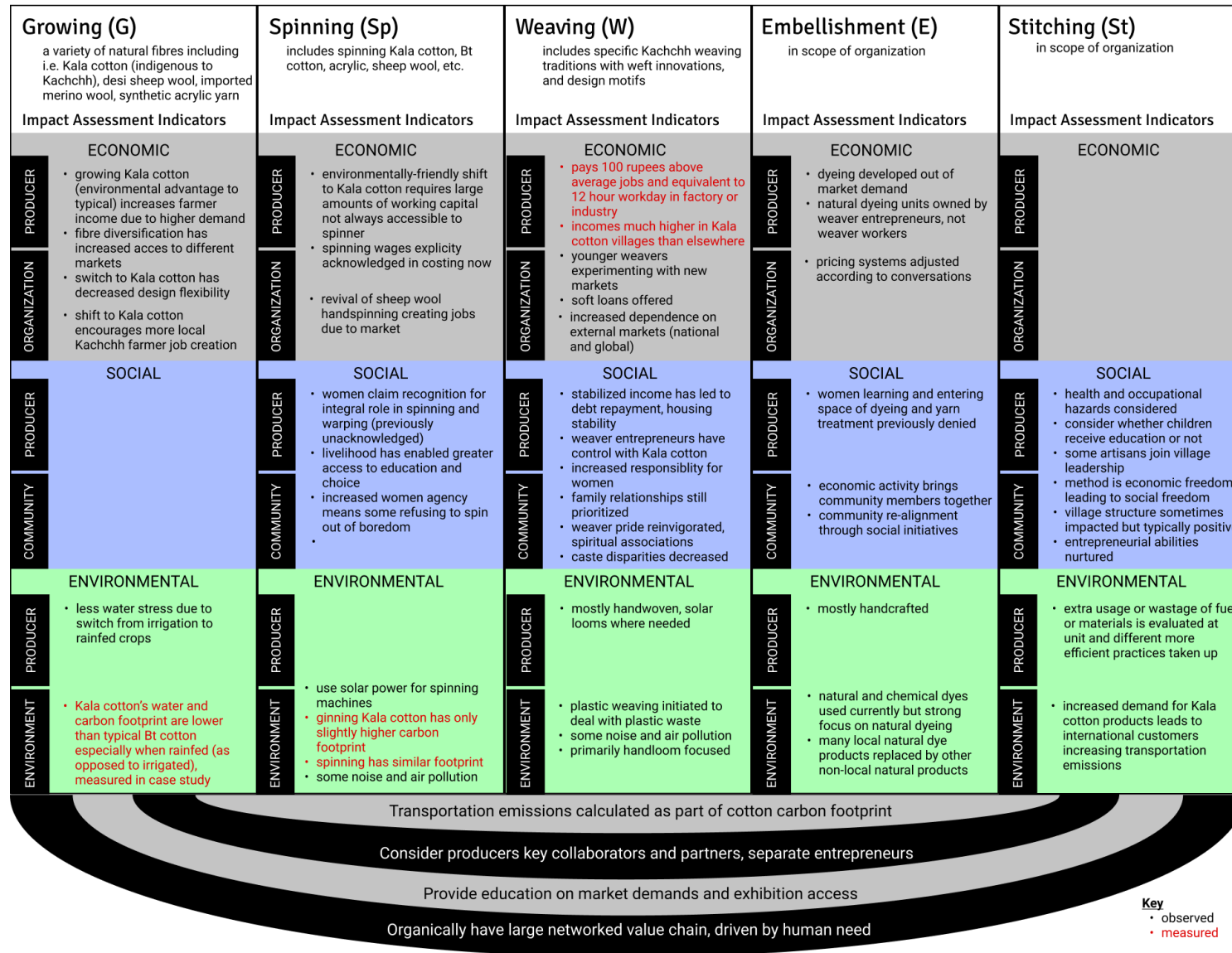
a variety of natural fibres including i.e. Kala cotton (indigenous to Kachchh), desi sheep wool, imported merino wool, synthetic acrylic yarn

Impact Assessment Indicators

ECONOMIC

PRODUCER
- growing Kala cotton (environmental advantage to typical) increases farmer income due to higher demand
- fibre diversification has increased acces to different markets

ORGANIZATION
- switch to Kala cotton has decreased design flexibility
- shift to Kala cotton encourages more local Kachchh farmer job creation

SOCIAL

PRODUCER

COMMUNITY

ENVIRONMENTAL

PRODUCER
- less water stress due to switch from irrigation to rainfed crops

ENVIRONMENT
- Kala cotton's water and carbon footprint are lower than typical Bt cotton especially when rainfed (as opposed to irrigated), measured in case study

Spinning (Sp)

includes spinning Kala cotton, Bt cotton, acrylic, sheep wool, etc.

Impact Assessment Indicators

ECONOMIC

PRODUCER
- environmentally-friendly shift to Kala cotton requires large amounts of working capital not always accessible to spinner
- spinning wages explicity acknowledged in costing now

ORGANIZATION
- revival of sheep wool handspinning creating jobs due to market

SOCIAL

PRODUCER
- women claim recognition for integral role in spinning and warping (previously unacknowledged)
- livelihood has enabled greater access to education and choice
- increased women agency means some refusing to spin out of boredom
-

COMMUNITY

ENVIRONMENTAL

PRODUCER

ENVIRONMENT
- use solar power for spinning machines
- ginning Kala cotton has only slightly higher carbon footprint
- spinning has similar footprint
- some noise and air pollution

Weaving (W)

includes specific Kachchh weaving traditions with weft innovations, and design motifs

Impact Assessment Indicators

ECONOMIC

PRODUCER
- pays 100 rupees above average jobs and equivalent to 12 hour workday in factory or industry
- incomes much higher in Kala cotton villages than elsewhere
- younger weavers experimenting with new markets
- soft loans offered
- increased dependence on external markets (national and global)

ORGANIZATION

SOCIAL

PRODUCER
- stabilized income has led to debt repayment, housing stability
- weaver entrepreneurs have control with Kala cotton
- increased responsiblity for women
- family relationships still prioritized
- weaver pride reinvigorated, spiritual associations
- caste disparities decreased

COMMUNITY

ENVIRONMENTAL

PRODUCER
- mostly handwoven, solar looms where needed

ENVIRONMENT
- plastic weaving initiated to deal with plastic waste
- some noise and air pollution
- primarily handloom focused

Embellishment (E)

in scope of organization

Impact Assessment Indicators

ECONOMIC

PRODUCER
- dyeing developed out of market demand
- natural dyeing units owned by weaver entrepreneurs, not weaver workers
- pricing systems adjusted according to conversations

ORGANIZATION

SOCIAL

PRODUCER
- women learning and entering space of dyeing and yarn treatment previously denied
- economic activity brings community members together
- community re-alignment through social initiatives

COMMUNITY

ENVIRONMENTAL

PRODUCER
- mostly handcrafted

ENVIRONMENT
- natural and chemical dyes used currently but strong focus on natural dyeing
- many local natural dye products replaced by other non-local natural products

Stitching (St)

in scope of organization

Impact Assessment Indicators

ECONOMIC

PRODUCER

ORGANIZATION

SOCIAL

PRODUCER
- health and occupational hazards considered
- consider whether children receive education or not
- some artisans join village leadership
- method is economic freedom leading to social freedom
- village structure sometimes impacted but typically positive
- entrepreneurial abilities nurtured

COMMUNITY

ENVIRONMENTAL

PRODUCER
- extra usage or wastage of fuel or materials is evaluated at unit and different more efficient practices taken up

ENVIRONMENT
- increased demand for Kala cotton products leads to international customers increasing transportation emissions

Transportation emissions calculated as part of cotton carbon footprint

Consider producers key collaborators and partners, separate entrepreneurs

Provide education on market demands and exhibition access

Organically have large networked value chain, driven by human need

Key
- observed
- measured

Figure 4.4: IA framework for Khamir; observed impacts in black and measured impacts in red

4.1.4 Kaskom

Sources of data:

- Pages "About" and "Blog" from Kaskom's website (Kaskom (n.d.))

- Interviewee 1: Swaminathan Vaithilingam, founder of Kaskom

- Slide Deck detailing Kaskom's pitch (Kaskom (n.d.))

While other case studies focus on craft and artisan preservation, Kaskom's starting point is the cotton used to produce garments. Kaskom's focus is restructuring how cotton is grown in India, transitioning to indigenous cotton seeds rather than American cotton seeds and using natural methods of fertilization and pest management. Their Farm to Fabric model also emphasizes better livelihoods for producers all along the value chain including cotton growers, spinners, and handloom weavers (Kaskom (n.d.)).

Some of Kaskom's work is also centered on re-developing technology to successfully process the shorter fibres of Indian indigenous cotton which require different cotton processing and spinning technologies to create strong and resilient yarn. Kaskom emphasizes natural processes throughout their value chain including natural dyes and handwoven techniques (Kaskom (n.d.)).

Figure 4.5 describes the IA protocols that exist within Kaskom presently. Observed impacts in black greatly outnumber measured impacts in red.
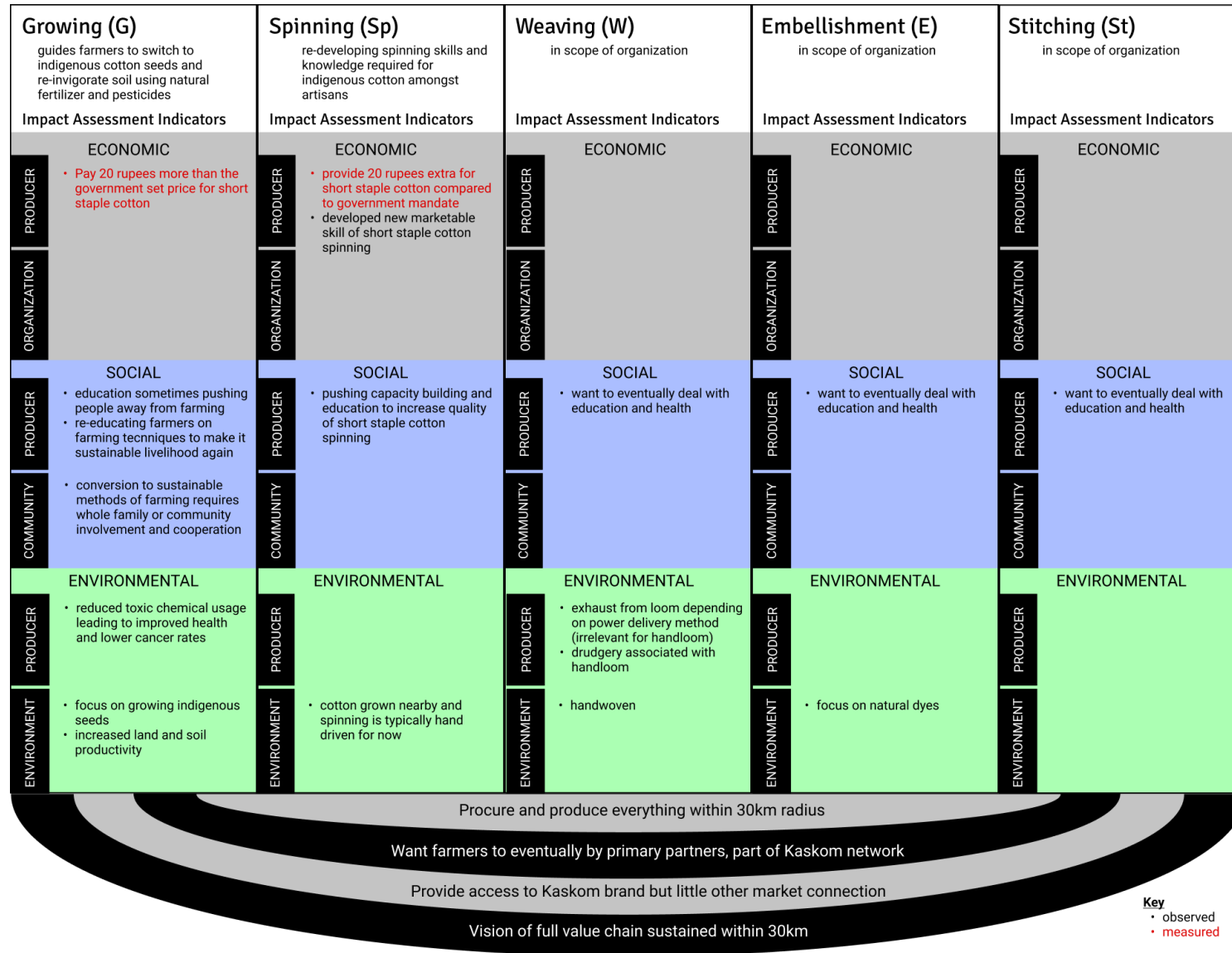
Figure 4.5: IA framework for Kaskom; observed impacts in black and measured impacts in red

4.1.5 Magan Sangrahalaya Samiti (Magan Khadi)

Sources of data:

- Pages "About Us", "Organic Khadi", and "Brochure" from Magan Khadi's website (Magan Khadi (n.d.))

- Interviewee 1: Mukesh Lutade, Director of Operations at Magan Khadi

Magan Khadi (MK) is a social enterprise that is an offshoot of Magan Sangrahalaya Samiti, an organization begun in 1949 by Mahatma Gandhiji to preserve handcrafted and handwoven traditions in museum form (Magan Khadi (n.d.)). MK also follows a farm to fabric model in which farmers are taught how to grow cotton using indigenous seeds (Desi cotton or gossypium arboreum) and organic methods. The garments produced by MK are handspun by necessity because factory-level equipment to spin short fibre Desi cotton does not exist. By farming, spinning, and weaving method, MK cloth is organic. This organic quality is also one of MK's main selling points (Magan Khadi (n.d.)).

Through employing artisans and guaranteeing fair rates to partner farmers in their value chain, MK also focuses on artisan empowerment by skilling and educating artisans and offering marked-up wages that allow artisans greater financial security and freedom. This continues the tradition originally set out by Gandhi to use artisan tradition and technology to empower local, rural communities and enable them to be independent of non-indigenous systems and entities (Magan Khadi (n.d.)). This ideology still drives MK.

Figure 4.6 describes the IA protocols that exist within MK at the present moment. Observed impacts in black greatly outnumber measured impacts in red.
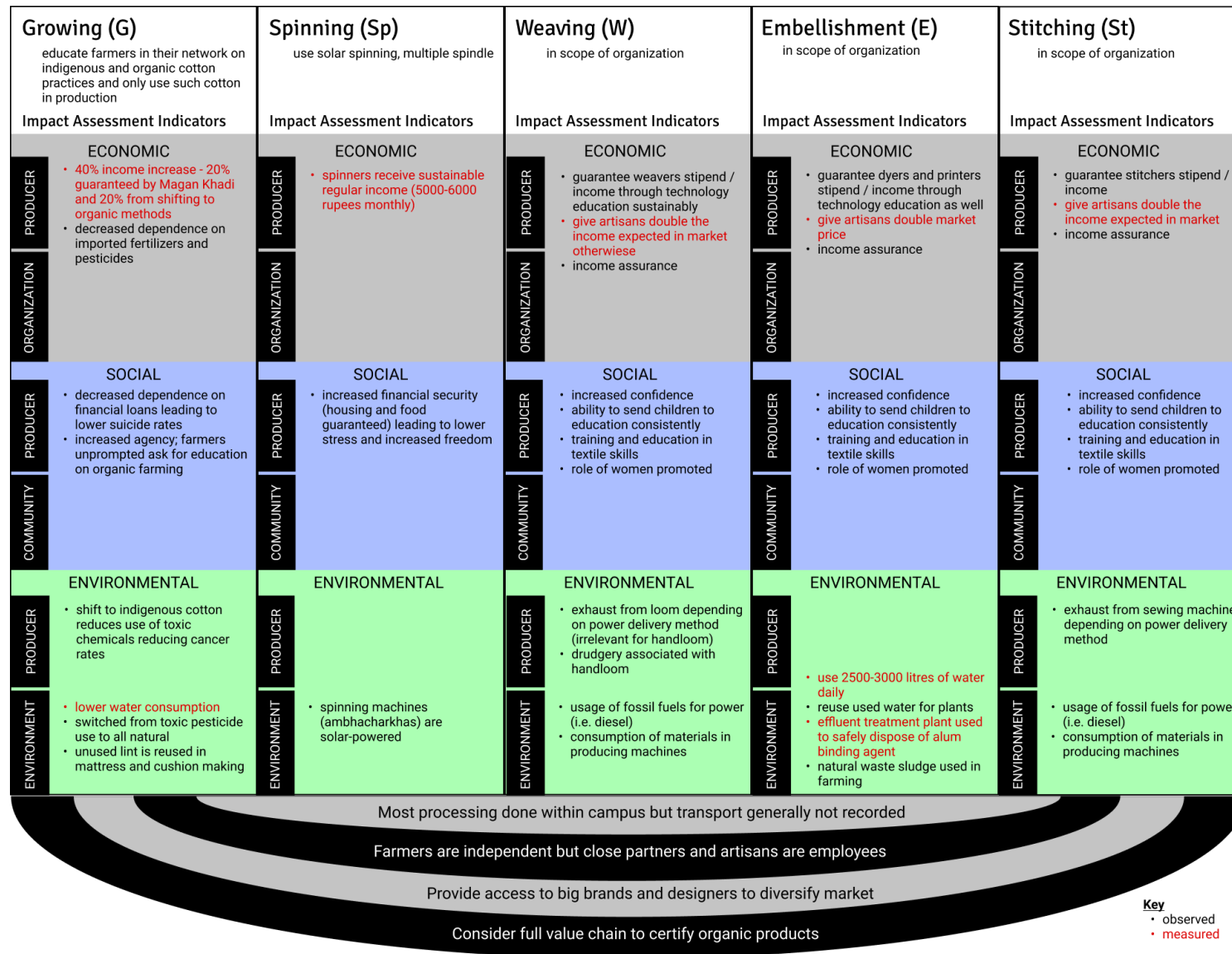
Figure 4.6: IA framework for Magan Khadi; observed impacts in black and measured impacts in red

4.1.6 Dastkar

Sources of data:

- Pages "About", "Blog", and "Crafting Sustainable Livelihoods" from Dastkar's website (Dastkar (n.d.))

- Interviewee 1: Laila Tyabji, Chairperson of Dastkar

Dastkar is a private NGO established in 1981 whose focus is providing support to traditional Indian craftspeople. Dastkar primarily offers this support by bridging the gap between rural, village-based craftspeople and an increasingly sophisticated marketplace of urban consumers. Bridging activities include conducting capacity building workshops, skills training, and encouraging collaborative design. Dastkar advises rural artisans on design choices in garment production to appeal to contemporary tastes (Dastkar (n.d.)).

Dastkar also claims a focus on giving artisans an option for independence that does not rely on government entities and schemes or on exploitative middlemen. It creates this by offering a marketing platform that allows artisans direct access to the market rather than previously-used indirect channels often including middlemen who keep the pricing and sales processes opaque to artisans involved. The aforementioned workshops and marketing platform all contribute to creating sustainable livelihoods for the artisans Dastkar collaborates with. The primary means of livelihood improvement is income generation which improves artisans' health, education, and lifestyle through increased choice and financial freedom (Dastkar (n.d.)).

Figure 4.7 describes the IA protocols that exist within Dastkar at the present moment. Impacts are only observed, not measured.
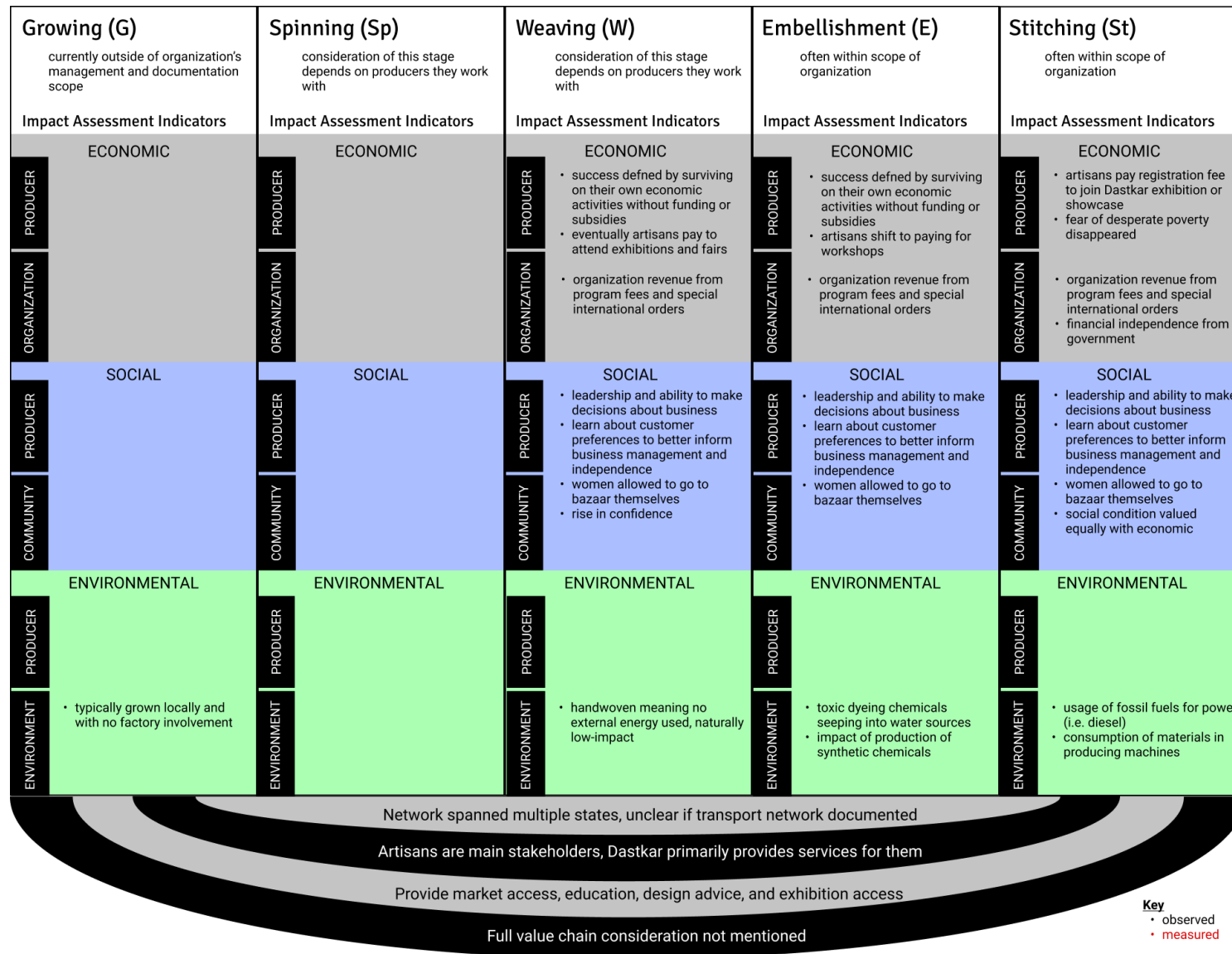
Growing (G)	Spinning (Sp)	Weaving (W)	Embellishment (E)	Stitching (St)
currently outside of organization's management and documentation scope	consideration of this stage depends on producers they work with	consideration of this stage depends on producers they work with	often within scope of organization	often within scope of organization

Impact Assessment Indicators (repeated across all columns)

ECONOMIC

	Growing	Spinning	Weaving	Embellishment	Stitching
PRODUCER			• success defned by surviving on their own economic activities without funding or subsidies • eventually artisans pay to attend exhibitions and fairs	• success defned by surviving on their own economic activities without funding or subsidies • artisans shift to paying for workshops	• artisans pay registration fee to join Dastkar exhibition or showcase • fear of desperate poverty disappeared
ORGANIZATION			• organization revenue from program fees and special international orders	• organization revenue from program fees and special international orders	• organization revenue from program fees and special international orders • financial independence from government

SOCIAL

	Growing	Spinning	Weaving	Embellishment	Stitching
PRODUCER			• leadership and ability to make decisions about business • learn about customer preferences to better inform business management and independence	• leadership and ability to make decisions about business • learn about customer preferences to better inform business management and independence	• leadership and ability to make decisions about business • learn about customer preferences to better inform business management and independence
COMMUNITY			• women allowed to go to bazaar themselves • rise in confidence	• women allowed to go to bazaar themselves	• women allowed to go to bazaar themselves • social condition valued equally with economic

ENVIRONMENTAL

	Growing	Spinning	Weaving	Embellishment	Stitching
PRODUCER					
ENVIRONMENT	• typically grown locally and with no factory involvement		• handwoven meaning no external energy used, naturally low-impact	• toxic dyeing chemicals seeping into water sources • impact of production of synthetic chemicals	• usage of fossil fuels for power (i.e. diesel) • consumption of materials in producing machines

Network spanned multiple states, unclear if transport network documented

Artisans are main stakeholders, Dastkar primarily provides services for them

Provide market access, education, design advice, and exhibition access

Full value chain consideration not mentioned

Key
• observed
• measured

Figure 4.7: IA framework for Dastkar; observed impacts in black and measured impacts in red

4.2   Cross-Case Analysis

This section describes the results of the cross-case analysis. Several themes noted across the six case studies are delineated and illustrated, primarily falling along the lines of economic, social with a focus on the role of the producer, and environmental impacts. Barriers to IA across the organizations are also described.

4.2.1   Economic Baseline and Role in Ecosystem

This section addresses the economic similarities between the six organizations and describes the financial role they play in the textile supply chain ecosystem as pseudo-regulatory entities.

4.2.1.1   Economic Baseline for Organization and Producer

> *Financial is a baseline that you have to ascribe to.* (Anshul Ojha, UDC)

This quote summarizes a primary impact that all six organizations described and based decision-making on. UDC, RangSutra, Khamir, Kaskom, MK, and Dastkar are all dependent on financial returns from their garment production or service operations to continue functioning in the same capacity. RangSutra and Dastkar specifically championed the independence provided by being economically sustainable. Because of this, said organizations did not have to choose projects based on external funders with different vested interests. Decision-making could be kept internal to the organization, without having to answer to entities that may not understand the context and complexity of each organization and the artisans it engaged with.

This economic baseline did not remain limited to organizational continuity. It was also a primary motivator and indicator for whether the organization felt artisans were supported sufficiently as illustrated by the quotes below from RangSutra and Dastkar respectively.

> *Our goal is to ensure sustainable livelihoods by which we mean regular work for our artists and shareholders and our artists and community. So one measurement of sustainability is simply that: our artisans get work.* (Sumita Ghose, Rangsutra)

The most obvious criteria of sustainability is that the organizations don't need further funding or subsidies, and they can survive on the economic activity of each organization. That is what Dastkar is all about: to help organizations use the skill of their hands and their traditions in order to generate income for themselves. (Laila Tyabji, Dastkar)

These quotes demonstrate the importance of economic impacts on artisans. All organizations cited farmer and artisan empowerment through consistent and appropriately priced livelihood as a core part of their purpose. UDC and Dastkar even indicated that their purpose would be fulfilled when they were redundant and producers could exist financially sustainably without need for their expertise. Economic sustainability for artisan groups was also the most common unprompted answer when queried about the organization's conception of sustainability especially for RangSutra and Dastkar. When asked what most commonly incited a change in project direction, Khamir also stated financial concerns as it was the most pertinent indicator of survival for most artisans and as such, the most commonly discussed and adjusted to.

4.2.1.2 Economic Role in Ecosystem: organizations as pseudo-regulatory agencies

What we do in the community is we set benchmarks, minimum benchmarks that you cannot be paid for this kind of task below this. It gives the artisans power to negotiate, be it with anybody, with local traders and sometimes even with us, they learn to negotiate. This did not exist before Urmul started working and so there was a lot of exploitation and we've seen that when Urmul stops working in a certain area, it comes back. We're kind of a funny equalizer. (Prerna Agarwal, UDC)

The quote above describes the unexpected role that UDC, RangSutra, Khamir, and MK began to play in the ecosystems that they worked in. As a result of their commitment to fair labour practices, these organizations became pseudo-regulatory bodies, ensuring that a livable wage option was always available to artisans in regions they worked in. This implies that producers were partially dependent on these organizations, due to government mandated wage rates that were insufficient for sustenance.

4.2.2 The Role of the Producer

As suggested by the last paragraph, impacts on producers are one of the main motivations for all six organizations. As such, the role the producer played in the organization was a universally important subject. All organizations shied away from using terms like employees or wage workers to describe the role producers played within their organization.

> *[The artisans] are the owners of the value chain.* (Anshul Ojha, UDC)

> *[The artisans] are collaborators, partners.* (Ghatit Laheru, Khamir)

> *Dastkar means craftperson. The artisan is at the center of whatever we do. If there were no artisans, there would be no Dastkar. We are a support facility for craftspeople, a federation of artisans.* (Laila Tyabji, Dastkar)

> *The farmers are part of Kaskom's family. Even in the future, I do not want the farmers to just become employees. They will be partners of the system.* (Swaminathan Vaithilingam, Kaskom)

These quotes showcase the conviction with which organizations described the integral role farmers and artisans played in their organizations. All the organizations emphasized the choice that producers retained as a result of primarily being partners as opposed to direct employees. Farmers or artisans who no longer wanted to be associated with an organization would not be negatively impacted in any direct way and UDC and Rang-Sutra both cited examples when artisans did choose to dissociate for cultural or other reasons. Producers are free to analyze benefits of associating with a specific organization themselves. None of the organizations interacted with producers on a donation basis and focused on a symbiotic relationship of production and market linkage. Because of this, artisans did not lose out on other benefits associated with the organization, partially leveling the power dynamic between producer and organization.

The specific role the producer plays in each organization were discussed in a variety of ways. These are described below in how organizations engaged with stakeholders, the specific way organizational structure lended itself to producer interaction, and governance models that centered producers.

4.2.2.1   Stakeholder Engagement and Participation: producer focused

A key component of prioritizing the role of producers within the organization was stakeholder engagement and participation.

> *The basic structure here is participation. Anything in this space has to be agreed upon and absorbed by many, many people. It [works] as a great filter for anything which may go wrong.* (Anshul Ojha, UDC)

> *We are constantly in touch with [artisan] communities and constantly keep interacting so when our teams go into new villages, we are able to immediately compare the situation of a new village with...those we've been working with for a long time. Those kind of comparisons are more organic, not necessarily documented but absorbed.* (Prerna Agarwal, UDC)

> *These issues, whether it's family planning, whether it's male-female gender roles, these are issues which naturally emerge in conversation, never a big lecture. The relationship is very much part of a family where you are trying to help them understand and grow. I think that Dastkar is very lucky that we can impart these social messages in a more spontaneous way and show results along the way.* (Laila Tyabji, Dastkar)

Each of these quotes shows how organizations are continually having conversations with village artisans in implementation. These conversations are facilitated by a more equal power relationship between producer and organization because the two are co-dependent for value creation. UDC, Khamir, and Dastkar cited and regular site visits to villages where farmers and artisans are located as integral to project continuation and transformation. Agreement to participate after understanding the benefits is key to any intervention moving forward because these organizations do not offer rapid access to finance and are clear about the effort and transformation required to build capacity. While many of these conversations are not formally documented, ideas for solutions to identified issues filter in through various channels and meetings anyways, as demonstrated by the quote below.

> *Whether through a coordinator or manager, that information is coming into the system. What matters is how we interpret, how do we look at that information over the years.* (Anshul Ojha, UDC)

Much information about producer impacts came to organizations through informal means and discussions. Anecdotes were also a common feature used to describe positive impacts, as demonstrated by the quote below.

> *A local doctor in Ranthambore said that "I can recognize a Dastkar woman from one mile away just by the way she holds her head."* (Laila Tyabji, Dastkar)

The common use of anecdotes to describe positive, primarily social impacts shows how informal this component of IA still is for the majority of the organizations. Only UDC described having a database of artisans with information about social impacts of interventions. It is also an effect of another theme mentioned by UDC, RangSutra, Khamir, and Dastkar: complexity. Social impacts were described as very difficult to remove from context and thus, intuition and anecdotal evidence became the most common way of assessing and sometimes simply observing how an intervention affected producers in their social environment.

MK and Kaskom did not ascribe as high an importance to discussions with producers but still used anecdotes frequently to describe impacts when queried about the social effects of their work. RangSutra's engagement with artisans will be further discussed in Section 4.2.2.2.2.

4.2.2.2 Organization Structure and Governance

Another key component of centering the producer involves how each organization structures their own personnel and who drives decision-making within the organization. The following sections describe cross-case trends and unique approaches to structure and governance.

4.2.2.2.1 Structure: murky boundary between organization and producer

Organizational structure is multi-fold in these organizations. Structure refers to the way that the organization hires and manages its own personnel. Conversely, structure refers to how garment designs are produced from the design and visualization stage and what role artisans play in that process. I begin by discussing the former type of structure related to personnel management.

Our communities and our field teams are very much intertwined. Most of our field team is from the community itself. (Prerna Agarwal, UDC)

I would say 90% of the operational team of these value chains come from these communities and are trained over the years to execute these tasks. (Anshul Ojha, Urmul Desert Crafts)

One of the key ingredients in our model is this whole section of people we call craft managers, artisans who are educated but perhaps only primary or secondary school. Some are graduates or those who show leadership and we invest a lot of time in building their capabilities so that they're able to manage their group in the village...For a lot of these women, this is their first job. They learn embroidery but they also learn to be supervisors, flow managers, quality checkers, not dependent on external people for supervision. (Sumita Ghose, Dastkar)

As these quotes describe, large portions of the field team in the organization are hired from villages that they have a long-term relationship with. This hiring practice blurs the line between producer and organization, allowing more organic conversation and resultant changes to intervention strategies. Producers based in a village are more comfortable and therefore more likely to raise issues with field team members who grew up in the same village, ensuring a more rich flow of conversation between organization and producer. Hiring from villages itself is also a demonstration of UDC's goals of capacity building to decrease reliance on UDC and increase producer agency. UDC and RangSutra are highly focused on capacity building in this form. How murky the boundary between organization and producer is in other organizations is less clear as hiring from village communities is not a key focus for them. I now look at how artisans are centered in how designs themselves are produced.

A designer is operating from the local business and collectively working with these women. All these people, they sit together, they visualize their collection. Then the designer or design team works on that collection and the sampling happens with the master artisan. People always have the space to say no or this is not working. At that level itself, this story, or the visualization or the

narrative of the product comes from these artisans, the operational team is just the facilitator. (Anshul Ojha, UDC)

The freedom to experiment, innovate, and create new designs and patterns varies between different weavers and clients whom they work with. Some designers work closely with weavers and let them produce samples based on their skills and interests. Although some designs are specified, weavers have some creative leeway. (Report on Khamir, Kothari et al. (2019))

The quotes above demonstrate a commitment to ensuring artisans retain some form of ownership and agency in the designs that are eventually made. The structure itself preserves this role for artisans by incorporating their feedback and requiring their presence from the beginning stages of design. Playing such an integral role in the design process also leads to artisans experiencing other social impacts like confidence boosts that allow artisans to pursue more prominent roles in the village by running for leadership positions or organizing artisans in other ways. UDC and Khamir reported this centering of artisans as integral to their model. By playing a supportive role, Dastkar also does not control the specific designs artisans create and seeks only to offer design advice when requested. Dastkar otherwise only offers market access and business and brand management advice. MK's design direction is primarily decided by the director and board members depending on the specific product. Some MK artisans have become knowledgeable enough and have begun offering their own design suggestions but capacity building in this form is not prioritized by the organization. It is less obvious where design direction comes from in RangSutra and Kaskom.

4.2.2.2.2 Governance: shareholder model Most of these organizations (besides Kaskom whose ownership model is unclear) have boards or shareholders who direct large-scale decisions on behalf of the organization. This is yet another place that artisans are centered in certain organizations.

We have an advisory group of senior artisans, two or three of the artisans also sit on [Urmul Trust's] board. They are the direction givers, saying this is what we want. (Prerna Agarwal, UDC)

We are a community-owned social enterprise in the sense the artisans who work with us are also part owners in the organization. (Sumita Ghose, Rang-Sutra)

These quotes demonstrate some of the more unique features of the employed governance model. RangSutra is especially known for its shareholder model. Artisans are shareholders in RangSutra, playing a primary role in deciding which projects are taken forward and receiving financial benefits in the form of profit dividends. While UDC is not owned by artisans, artisans play a role in its directing board. Khamir also has a senior artisan on their board. Kaskom, MK, and Dastkar's board structures are either unknown or occupied by external members who are knowledgeable of artisan communities but are not a part of said communities. This shareholder model means RangSutra will sometimes make business decisions that do not produce profit because such decisions ensure that artisans receive a wage. This also means that RangSutra follows a slow growth trajectory but this trajectory also ensures equal value to artisans.

4.2.2.2.3 Themes of decentralization

It's a sectoral engagement. In Kachchh, we have a lot of diversity and various types of craft practices...Each and every traditional community and culture has its own distinct embroidery style. Production is also decentralized. We do not do any sort of production and encourage artisans to continue that practice at their home. (Ghatit Laheru, Khamir)

One of the learnings of Dastkar in the 40 years that we've been running is that each organization and each group of artisans is quite different, and so something which may be valid in a situation or a community may not apply to other people. (Laila Tyabji, Dastkar)

The quotes above demonstrate the complexity of the various artisan groups each organization engages with. This type of complexity means that the same approach cannot be applied universally to every case that the organization encounters. This requirement led many of the organizations to describe their methods as decentralized, as evidenced below.

> *[Our production] is very decentralized. There's all these different centers of production and so you may say it's slightly inefficient...Since our production is very dispersed, we cannot go to every artisan and check their work, so we encourage them to come to centers where craft managers are responsible for about 20 to 30 artisans.* (Sumita Ghose, RangSutra)

> *This is a small institution, not a huge setup because this research focuses on small, decentralized units, not a centralized system.* (Mukesh Lutade, MK)

All organizations mentioned themes of decentralization when queried about how IA occurred structurally but they diverged on their reasoning behind a need for decentralization. UDC, RangSutra, and Dastkar primarily cited prioritizing artisans' desires to remain in the villages they grew up in and found community in. Decentralization came out of necessity because the organizations did not want to coerce artisans into moving into centralized manufacturing facilities. Instead, artisans could choose their own working hours and fit artisanal work around other family responsibilities, tied only to a production target and no regimented schedule.

> *Whatever is happening in fashion has to be decentralized. Cotton which has been cultivated in one particular district and is being taken to another area and being processed in that area will not bring any monetary or social impact back to where the cotton is being cultivated. We are going from cultivation to fabric making within a 30 kilometer radius.* (Swaminathan Vaithilingam, Kaskom)

The quote above demonstrates part of the reasoning behind Khamir, Kaskom, and MK's reasons for decentralization. For these organizations, the choice is more ideological, originating from conceptions of decentralized village development championed by Mahatma Gandhi and his contemporaries. This ideological basis rings especially true for Kaskom and MK who also see decentralization as a way to increase producer resilience and decrease reliance on entities far our of the geographical space that these producers exist in. Khamir focuses on working with "manageable decentralized technologies", on the premise that geographical location and access to centers of production contribute to robustness and resilience of the whole village. Despite divergent reasons, all organizations clearly recognized and embodied the benefits of decentralization.

4.2.3 Role of Social Capital

4.2.3.1 Bridging Social Capital

All organizations ascribed high value to their role as essentially ethical middlemen between artisans and larger brands like FabIndia or IKEA. In this capacity, these organizations primarily offered bridging social capital to producers in rural contexts. RangSutra and Dastkar even suggested that their main contribution to the artisans they interacted with were these connections to marketplaces that producers are typically unaware of. All the organizations also had various forms of exhibitions, fairs, and online marketplaces created for the benefit of producers to find customers interested in paying higher prices associated with these organizations. While these organizations play an integral role in creating and retaining these connections, another trend described by Khamir is rural artisans using social media like WhatsApp, Facebook and Instagram as bridging social capital to customers locally and around the world. Regardless of the method, bridging social capital was a significant benefit described unanimously and often used to drive the organization's business model (i.e. registration fees for exhibition access or revenue directly from selling garments on behalf of the artisans).

4.2.3.2 Community: binding social capital

> *If there is any disturbance in the social fabric, I would say it was a change that was needed.* (Sumita Ghose, RangSutra)

The quote above summarizes the sentiment described by all six organizations. In terms of IA, none of the organizations formally documented any form of community impacts but every organization had anecdotes about the primarily positive effects of improving livelihoods especially for women in villages. UDC, RangSutra, MK, and Dastkar also described villages where their interventions received initial resistance because of the social hierarchy changes required especially with respect to the role of women and caste. UDC and Dastkar recounted how intervention or guidance adoption was slow in some of these villages until a few villagers broke through initial reservations and began new practices of craft or cooperating with the organization. UDC, RangSutra, Khamir, MK, and Dastkar all described little negative impact on community cohesion (binding social capital). Furthermore, those five organizations reported that because often disparate groups

of the village had to work together to meet production demands, casteism declined as members of different castes were forced to work together in capacities they never had before. Women also became more independent, their voices given higher value resulting in more family-oriented decisions like sending children to school more consistently and better financial management toward full family improvement in health and nutrition.

4.2.4 Assumption of Environmental Friendliness

Across the board when queried about environmental impacts, all organizations started by discussing the inherent sustainability in handwoven and handcrafted garments; because the role of external energy-driven machines was greatly reduced, much of the environmental impact associated with typical factory production was already removed. For UDC, RangSutra, Khamir, MK, and Dastkar, priority was given to producer development, environmental impact considered in the aftermath to bolster the organization's brand and marketing strategy. Kaskom was the only organization whose primary motivation aside from farmer advancement was a commitment to nurturing natural cycles and replenishing the environment. As such, while handwoven garments meant low impact, UDC, RangSutra, and Dastkar were not aware of the environmental practices surrounding yarn used in their garments. A complex network of artisans meant that it was often difficult to track which weaver used which yarn supplier and where that yarn supplier purchased their cotton. UDC and RangSutra required and purchased specific types of yarn when fulfilling orders from large customers like IKEA who required Better Cotton certification or other forms of certification. UDC stated that they were working towards incorporating the upstream value chain into their social and environmental interventions. Khamir, Kaskom, and MK paid greater attention to the cultivation of cotton and other natural fibres like sheep wool that was part of their production system. Khamir was most thorough in engaging with a separate entity to do ecological footprint assessments of Kachchh indigenous cotton compared to typical *Bt* cotton whereas MK and Kaskom were environmentally conscious through organic practice rather than formal IA in the aftermath. Khamir, Kaskom, and MK all implied that their attention to environment was also a recognition that a well-nurtured environment lended more resilience to the whole system that villagers depended on for livelihoods that included a mixture of farming and handicraft work.

4.2.5 Barriers to IA

> *[Artisans or the village community] fear holding a pen. They fear data. They fear paper. They fear writing. No matter how much you pay them or what you ask them, it's an unknown thing.* (Prerna Agarwal, UDC)

This quote describes the first barrier to cohesive and consistent IA in these organizations. Even if attempts were made to document specific social or environmental indicators, literacy rates were an immediate obstacle whose resolution required much larger intervention than a single organization may have capacity to administer. This leads to the second barrier to IA: low organizational and funding capacity to support IA. UDC, MK, and Kaskom expressed a desire to more thoroughly assess their own work but MK and Kaskom especially described the struggle to simply survive financially as a reason that more research-oriented approaches were not in place.

5   Discussion

This chapter reviews the impacts and themes drawn out in Section 4 as a result of the framework analysis described in Section 2.5 and discusses their ability to bridge sustainability gaps in development interventions.

5.1   The Role of Impact Assessment

In this dissertation, the original focus on IA was driven by a desire to clarify the impacts that BoP organizations have on the populations they engage with, given the dearth of information in this area. These impacts were important to consider especially in comparison to alternative NGO models focused on poverty alleviation as BoP organizations were often touted as the solution to sustained poverty alleviation through sustained livelihood development (Dembek et al. (2020)). This section discusses how IA occurs in the case studies and compares it to ideals of IA discussed in Section 2.4.

In the most concrete terms, none of the organizations had formal, well-documented, comprehensive IA protocols in place. The only indicators that were paid consistent attention to across the cases were related to producer income and this functioned as the baseline for the organizations. At first glance, the lack of formal IA implies that these organizations are poorly managed as IA is key to continually improving the organization's operations and sustainability impacts (Nobre & da Silva (2021)). Formal IA requires that an organization continually sets goals and targets that are then used to evaluate performance but such procedures require time and personnel resources to implement consistently. Despite not performing formal IA, each of the organizations was still found to adjust to changes in their context. Information about impacts on producers entered organizations' awareness anyways, a phenomenon that can be attributed to these organizations' robust stakeholder engagement practices.

Each organization placed high importance on continual engagement with producers in their network. This engagement was facilitated by factors including hiring local actors as personnel in the organization and co-dependence between the organization and producer leading to more equal power distribution between the two. Long term relationships with producer stakeholders also developed trust between organizations and producers that led to deeper, richer engagement, allowing organizations to understand the intricate mech-

anisms behind an issue that may seem economic or social without further investigation. This type of engagement overlaps with capabilities other than IA emphasized by Nobre & da Silva (2021) like *mutual values creation*, *partnerships*, and *new business models*. These capabilities fall in the category of *BoP Responsible Business Model* rather than *BoP Responsible Management* but the overlap between the two demonstrated by the results contribute evidence to Nobre & da Silva (2021)'s conjecture that these categories of capabilities are interdependent and dynamize each other. While deep dialogue allowed organizations to adjust their processes without formal IA, it remains to be seen whether this type of engagement overlooks other types of impacts because it is so guided by conversations of a specific nature, usually related to production or business development, and is limited by the biases of the stakeholders in conversation. One obvious example of ignored impact is environmental. *The extent to which stakeholder engagement overlaps with and can replace formal IA* in other aspects must be further investigated. This is especially important to consider because organizations of this type and size typically do not have the capacity or incentive to invest in formal IA. Such organizations are not answerable to external funding entities and while IA may help improve their own operations, focusing funding and personnel on robust IA may be seen as a waste of resources that could be focused on other development efforts. Large gaps between established stakeholder engagement practices and formal IA protocols must be established to justify such a use of resources.

While a priority on social value came through in analysis, environmental value does not come across as cohesively. Environmental assessments done were not consistent, demonstrating a continued lack of environmental focus similar to critiques of other BoP organizations (Duke (2016)). Amongst these organizations, environment remains an afterthought. Consequently, the real environmental impact of these organization remains unclear. Future research should include the *true environmental impact of such initiatives and their potential to address broader environmental issues including water stress, soil depletion, carbon emissions linked to global supply chains, and overconsumption.*

5.2   Organizational Structure and Stakeholder Representation

The findings of this dissertation primarily pointed to factors other than IA that contributed to successful interventions within these organizations *despite* a lack of IA. In

these organizations, success was primarily defined as whether producers successfully created and engaged in financially sustainable livelihoods for themselves. Evidence of this success was further solidified by producers' continued engagement with the organization and newfound agency to also work with others. This specific type of success can be attributed to a number of key factors discussed below.

5.2.1 Financial Independence and Institutional Implications

A key component of the organizational model for all of the organizations was financial sustainability: each organization generated its own revenue through productive activities and paid back producers and operational staff with these funds. The model varied with some organizations (UDC, Khamir, and Dastkar) offering mainly supportive services and others (RangSutra, Kaskom, and MK) generating primary revenue through selling garments. This financial independence from external funding sources meant that these organizations avoided issues of power dynamics found often in NGOs with external funding (Zimmer et al. (2020)) as addressed in Section 2.2. RangSutra and Dastkar specifically cited the advantage of being answerable only to themselves. This ensured that they could respond as they felt was appropriate given the context of a situation, rather than take actions to appease other funding bodies who often had little experience with the field. Because other funding bodies were not stakeholders in decision-making, organizations could also focus on and prioritize other stakeholders, namely producers and customers. Because most of these organizations marketed their brand partially by championing their producer-centric approach, organizations also made efforts to remain accountable to their producers, another key gap in NGO work currently (van Zyl et al. (2019)). Their marketing strategy, driven by a desire to be financially independent, consequently pressured organizations to continue prioritizing their impact on artisans and assuring the validity of their producer empowerment claims. A key concern in this loop that was difficult to judge was whether a baseline of financial sustainability sometimes led to negative impacts on producers. Despite a model that centers the producer and markets producer empowerment, the *indirect impacts of ascribing to an economic baseline on producer development* must be further investigated.

Effective marketing and financial independence also gave these organizations a powerful position within the ecosystem of producers. Because organizations were able to pay

producers at wages higher than government mandated rates, a number of the cases became pseudo-regulatory entities in the region they worked in, ensuring producers were paid what was deemed a liveable wage by the organization. This is an example of another capability within *BoP Responsible Business Model*: *sensing and overcoming institutional voids* (Nobre & da Silva (2021)). Organizations were able to fill the void left by the government failing to update and enforce wages factored to account for shifting economic conditions. More flexible than government entities, organizations quickly picked up dissatisfaction with costing rates and resolved such issues as they happened rather than having to wait for external entities to agree on rates of change. While these organizations help producers in the short-term, their pseudo-regulatory practices remove pressure on the government to build more reactive and robust systems of updating and enforcing labour laws, a key concern with foreign aid (Moyo (2009)) that remains a concern for financially independent organizations that fill these voids. Such organizations become another entity for governments to lean on rather than reforming the policy system intended to address issues such as exploitation (Contu & Girei (2014), Zaidi (1999)). In the long term, such organizations may come and go, leaving producers at the whim of the success of just a few organizations. These organizations also do not have the capacity to extend their pseudo-regulatory powers to all of India. Scaling operations is a slow and complex process and contextual differences also mean that one organization's model may not be effective or appropriate in other parts of India. Regulatory roles should be played by government entities to ensure enforcement across the maximum number of producers and offer producers financial resilience independent of what organization they may be associated with. Practically, it is unclear what route must be taken for such regulatory practices to come into being and what timelines may be required for this but further investigation is required to understand *whether BoP organizations slow regulatory progress by removing pressure from government entities to reform their policies.*

Given the powerful position these organizations play in the Indian textile ecosystem, another key concern is whether organizations in this position still center and work towards what producers actually want. With few other organizations in competition with them, realistically, producers have little choice but to work with these organizations. This gives organizations incredible power to shape producer expectations and aspirations. While the organizations claim to center producers, it is difficult to ascertain whether organizations'

understanding of communities' values and desires matched reality. Further investigation requiring community field work is recommended to assess *how well organizations understand the values and desires of the communities and producers they work with.*

5.2.2   Governance Model and Social Value Creation

Another powerful factor in producing successful interventions was the integral role producers played in driving decision-making within organizations. RangSutra's shareholder model was a prime example of this. Because producers in the organizations effectively owned the organization as well, organization-level revenue generation was balanced with individual producer wages, decisions sometimes taken to preserve individual producers at the cost of organization growth. This type of co-decision making and co-creation also in garment production is a key component in social value creation according to Lashitew et al. (2021). In fact, themes of ambidexterity, co-creation, social capital, and ecosystem, key components in Lashitew et al. (2021)'s social value creation framework, all appeared in case study analyses. Organizations were ambidextrous in their ability to adjust to new information and contexts quickly. This was apparent in the emphasis of complexity and diversity throughout Khamir and Dastkar's testimony and also evident in the structures that "organically" took in information from stakeholders and adapted interventions accordingly as they occurred. This shareholder model and the design process that made producers integral to the final product design are both aligned with co-creation. Bridging social capital was also an important contributing factor to continued success. Finally, UDC, Khamir, Kaskom, and MK all considered full ecosystem development as important to producer resilience and sustained livelihood. Even without formal IA, adhering to principles identified in Lashitew et al. (2021) seemed to create successful change for producers involved. This type of model also falls into the *BoP Responsible Business Model* category under *new business models* (Nobre & da Silva (2021)). Overall, all organizations depended on the structure of their business model to intake and represent key stakeholder perspectives rather than IA, placing a larger emphasis on *BoP Responsible Business Model* than *BoP Responsible Management.* While these observed case studies seem to fit Lashitew et al. (2021)'s model, as singular exploratory cases, they cannot be considered as evidence of rigorous research that tests the model's theoretical basis empirically. Further research is required to *confirm the underpinning theoretical basis of the social value creation model.*

6 Conclusion and Recommendations

6.1 Conclusions

It is clear that the TAI has engendered several harms on both environment and people, especially over the past few decades as clothing production and consumption has exploded to match constantly updating fashion trends. The unseen workers powering this supply chain also inhabit the lowest levels of the economic pyramid, often living below the poverty line, exploited with little choice to work elsewhere. Externally funded development interventions over the past 50 years focused on uplifting the poverty-stricken and driven by both local and non-local actors have also proven largely ineffective compared to the sheer quantity of funds given so far (Riddell (2007), Moyo (2009)).

One solution to both TAI and development concerns in the Indian context is financially sustainable textile-focused BoP organizations who focus on uplifting artisans through capacity building and consistent livelihood. In literature, these types of organizations have focused on mutual value creation for both firm and BoP population but early on, these endeavors often resulted in creating products catered to BoP populations that simply extracted more wealth from the already poor rather than real BoP empowerment. Later generations of BoP conceptualization highlighted these extractive issues and shifted focus to poverty alleviation but with a focus primarily on creating solely economic opportunities for the BoP. Most recent reconceptualizations of BoP have highlighted missing social dimensions to poverty alleviation and added nuance to what role BoP organizations can play in poverty alleviation that gives more attention to the system within which the BoP and BoP organizations exist in. Despite more than two decades of work in this area since the conception of the BoP concept, BoP organizations have had varying levels of success in creating value for the organization and the BoP population, and the majority of cases have rarely documented actual impacts of interventions, offering only theoretical reasoning for what the organizations believed created value for their stakeholders. This lack of IA means that the original claim behind the BoP concept of creating value for both firm and producer remains dubious. While a few theoretical IA protocols exist in literature, none exist that address TBL sustainability, often missing components of social impact and ignoring environmental impact entirely.

This dissertation aimed to explore how BoP organizations addressed gaps in current

development organizations through case studies of six BoP organizations working in the Indian textile context (**overarching research question**). The case studies were used to investigate how BoP interventions act towards sustainable outcomes for producers, how these organizations measure the impacts of such actions, and how such measurement is used to justify or adapt an intervention. Within-case analysis based on a comprehensive IA framework developed from literature and cross-case analyses were used to categorically understand IA protocols and other procedures organizations depended on to create sustainable value for their producers (**research sub-question 1**).

Based on these analyses, a number of key themes emerged that clarified how organizations judge their own performance in sustainable outcomes. It was first established that organizations have few concrete IA protocols but instead depend on deep stakeholder engagement to ensure the success of their interventions. Producers were a key stakeholder in most organization's stated purpose and played a profound role in directing changes to interventions, sometimes as shareholders in the business or board members. Organizations depended on this stakeholder engagement in place of IA to drive their interventions. While this anecdotally works for these organizations, the extent to which stakeholder engagement overlaps with and can replace formal IA must be further explored (*future research 1*). Environmental IA was also broadly ignored by most organizations, demonstrating a need to more rigorously evaluate the true environmental impact of these initiatives and their potential to address TAI harms (*future research 2*).

These organizations also offered a number of advantages over aid-dependent development interventions in addressing producer issues (**research sub-question 2**). In these organizations, being financially sustainable reserves the power to make decisions that prioritize producers, ensuring that organizations do not have to bend to external funding pressures. This financial independence also places these organizations in a pseudo-regulatory role in the ecosystems they operate in. Other middlemen in the system must meet at least the wage set by these organizations to employ producers, guaranteeing producers a minimum wage greater than the lacking government mandate. While financial independence retained certain organization freedoms, the indirect impacts of ascribing to an economic baseline of revenue on producers remains unclear, suggesting the need for further investigation (*future research 3*). Furthermore, despite organizations' pseudo-regulatory status offering producers short-term benefits, playing this role may relieve

pressure on government actors to adjust policies leading to slower regulatory progress in the long term, a gap in development interventions that remains unresolved in BoP organizations. The extent to which this may be the case is worth examining to evaluate short-term and long-term implications of organizations such as these (*future research 4*). Finally, although these organizations are just one choice in a larger landscape of textile businesses, the financial advantages they offer mean that they still occupy a powerful role in the ecosystem and become the default option. Organizations may center producer development but the extent to which organizations understand and design for the values and desires of the communities and producers they work with must be further investigated (*future research 5*).

Despite a lack of formal IA, these organizations successfully embodied many themes important to social value creation, namely *ambidexterity*, *co-creation*, *social capital*, and *ecosystem*, demonstrating that these organizations have potential to offer both economic and social benefits to producers. Although these organizations offer further evidence to the validity of Lashitew et al. (2021)'s social value creation model, further research is required to confirm theoretical bases of this model (*future research 6*).

Considering all factors, this exploratory research suggests that these organizations offer potential to address economic and social sustainability gaps in development interventions through centering producers within a financially sustainable system. Environmental sustainability remains a gap. Further research, as mentioned, is suggested.

6.2 Recommendations for Stakeholders

6.2.1 BoP organizations

This research is of most use to textile-focused BoP organizations who focus on uplifting producers in their network. Organizations can use the framework developed in Chapter 2.5 to interrogate their own IA operations and address gaps identified. Furthermore, important structural components identified like stakeholder engagement and governance models that contribute to social value creation can be adopted by these organizations. Early-stage BoP organizations can look to this study to understand how these structural components center the producer and prioritize operations accordingly.

6.2.2 Policy-makers

For policy-makers, this research reveals gaps in labour laws that these BoP organizations fill. Accordingly, policy-makers should work to address these gaps by developing more adaptive labour and wage minimums that are adjusted to inflation rates at more frequent intervals. Relevant enforcement and implementation procedures must also be set up to ensure that middlemen do not use producers' lack of education as a way to continue to exploit them. More effort should be focused on ensuring government scheme information and educational resources reach all rural communities. This access to knowledge will allow producers agency and options to defend themselves against exploitation.

6.2.3 Producers

For producers, this research shows how important agency can be in ensuring value is returned to them in relationships with BoP organizations. Adjusting to change, using capacity building resources they have access to, and showing leadership can lead to exponentiating opportunities for producers who can then transform their own lives and organize others around them to do the same.

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