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Bangladesh and Myanmar: Inclusive Textiles and Clothing: Mapping Inclusive Business Opportunities in the Textile and Clothing Sector in Asia (Cofinanced by the Government of Sweden)

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For Asian Development Bank

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Asian Development Bank

ABBREVIATIONS

ADB	–	Asian Development Bank
BOP	–	base of the pyramid
BRAC	–	Bangladesh Rural Advancement Committee
CHM	–	Classical Handmade Products BD
CSR	–	corporate social responsibility
ETP	–	effluent treatment plant
EU	–	European Union
HHM	–	Handloom Hub Myanmar
IB	–	inclusive business
IBCA	–	Inclusive Business Co-creation Accelerator
IBS	–	Inclusive Business Sweden
ILO	–	International Labour Organization
MFA	–	Multi-Fibre Agreement
NGO	–	nongovernment organization
Project		
InTaCt	–	Project Inclusive Textiles and Clothing
R&D	–	research and development
SDG	–	sustainable development goal
SHG	–	self-help group
SHHARC	–	Self-Help Hub and Resource Centre

NOTE{S}

- (i) In this report, "\$" refers to US dollars unless indicated otherwise.

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EXECUTIVE SUMMARY

Inclusive business (IB) focuses on the creation of business models to provide—at scale—innovative and systemic solutions for the low-income communities—the so-called base of the pyramid (BOP). The aim is to drive inclusive growth by creating jobs and entrepreneurial opportunities that draws the majority of people into the economic and social mainstream, and continuously reduces poverty.

The IB initiative of the Asian Development Bank (ADB) started in 2012, and aims to support the creation of scalable IB partnerships and deals across Asia. In 2015, ADB engaged Inclusive Business Sweden to prepare this sector study on IB models in the value chain of the textile and clothing industry in Asia, focusing on Bangladesh and Myanmar. The study—Project InTaCt (Inclusive Textiles and Clothing)—focused on mapping opportunities for developing IB models across supply chains in Asia as possible new and innovative investment opportunities for leading Swedish and other international and local companies in the sector. While the hope was to engage large Swedish corporations like IKEA and H&M in the development of large-scale IB models, the study was not limited to the opportunities connected to Swedish brands alone, but involved a highly participatory process involving many international actors from business, government, and civil society.

The study used an approach supporting the co-creation of business models among Swedish, Bangladeshi, and Myanmar actors. After an initial desk research phase, the consultant made two visits to both Bangladesh and Myanmar where numerous workshops, field trips, interviews, and meetings were held to get a better understanding of the challenges and opportunities in the sector. Based on the results, a number of opportunities were identified, prioritized, and then developed in close collaboration with multiple actors. A final workshop in Stockholm helped to further develop and engage potential Swedish brands and investors to engage with the prioritized initiatives.

From this process, 11 broad opportunities were identified in Bangladesh and eight in Myanmar. Two opportunities were prioritized in each country based on which were considered to be commercially viable and scalable with great potential for positive impact; and on what actors in Bangladesh, Myanmar, and Sweden were interested to engage in.

In Bangladesh, the two prioritized initiatives were sustainable farmer-to-factory supply chain for jute denim and cluster-based textile recycling ecosystem. In Myanmar, the two prioritized initiatives were handloom hub network and self-help hub and resource center.

These four initiatives have details using the business model canvas, with clear value propositions, high-level business cases, and defined routes to development impact. Admittedly, further detailing and sizing is required to make them fully investment ready.

There is great interest and momentum to move these four initiatives forward. There is also positive energy in establishing innovative and scalable IB models that go beyond the business-as-usual activities of the textile and clothing sector in Bangladesh and Myanmar.

I. BACKGROUND AND RATIONALE OF THE STUDY

A. Making Growth More Inclusive Requires Inclusive Business

1. Inclusive growth is sustained growth that creates jobs, draws the majority of people into the economic and social mainstream, and continuously reduces poverty. For the poor and low-income population, the private sector is the main provider of decent and productive jobs and income opportunities, and of relevant and affordable goods and services. Inclusive business (IB) is the direct contribution of the private sector to make growth more inclusive. For society, more IB solutions mean less poverty and better living standards for the poor.

2. Inclusive business is defined by ADB as a business entity that generates high development impact by (i) improving access to goods and services for the base-of-the-pyramid (BOP) population; and/or (ii) providing income and/or employment opportunities to low-income people as producers, suppliers, distributors, employers, and/or employees. IB approaches integrate poor people into the mainstream economy as (i) consumers, by providing essential goods and services that meaningfully improve people's lives by addressing issues of access, affordability, quality, and choice; (ii) suppliers or distributors, by creating income-earning opportunities for the BOP in their value chains; and (iii) employees, by creating decent jobs that benefit unemployed, underemployed, and low-income workers. An IB must be commercially viable, i.e., it must meet nonsovereign operation standards of viability. An IB or an IB entity can be (i) a stand-alone business entity, or (ii) a business operation of a larger business entity.¹ About 60% of Asia's population comprises the BOP. IB models can be delivered by small and larger companies. Smaller IB transactions (e. g., below \$1 million) are typically done by so-called social enterprises. However, to reduce mass poverty, investments with large social impact are required. Therefore, the most relevant IB models are operated by medium-sized and larger companies.

3. The IB initiative of Asian Development Bank (ADB) started in 2012 and focuses on three major areas: (i) increase the private sector's role in IB deals, (ii) help the government promote a better enabling environment for IB, and (iii) promote knowledge sharing and partnerships around IB. ADB committed funding to eight IB projects in 2017, and two IB projects with committed funding in 2016.² Public sector support for IB include, among others, accreditation and policy alignment (especially in the Philippines), country workshops (India, Myanmar, the Philippines, Sri Lanka, Viet Nam), market scoping studies (Bangladesh, India, People's Republic of China [PRC], Indonesia, Mekong region, Pakistan, Philippines, Sri Lanka, Viet Nam), and the preparation of sovereign loans for IB (Indonesia, Pakistan, Philippines). Knowledge work includes, among others, sector studies (like this report), and the 2nd IB Asia Forum (held on 15–19 February 2016 in Manila), in partnership with the World Bank's International Finance Corporation and the Inter-American Development Bank.

4. ADB supports governments' policies to promote IB in Asia. In the Philippines, ADB supports IB accreditation and policy alignment to prioritize accredited IB (and social enterprise) business models. In the PRC, ADB is supporting two public sector loans with IB components.

B. IB Opportunities for Sweden's Textile Sector in Asia

5. Sweden has a long history of textiles and clothing production—traditionally located around Borås in the country's west, where the headquarters of large companies such as Hemtex, Ellos,

¹ ADB. 2018 *Standard Explanatory Data Indicator*. Manila.

² ADB. 2018. *2017 Development Effectiveness Review*. Manila.

and Gina Tricot are still based. The multinational H&M is the second largest retailer globally, owning approximately 1.3% of a \$1.42 trillion market in 2013. IKEA, the world's largest furniture retailer, sources 35% of its inputs (of which cotton is their second largest input), from Asia and the Pacific. Sweden's textile sector, through the research program Mistra Future Fashion, is now geared toward finding sustainable production processes.³ There is also ongoing development within research and innovations in smart textiles and in identifying recycled materials that can have a lower impact on the environment.

6. For countries like Bangladesh and Cambodia, the textile sector is a major employer and contributes a large share of the export earnings. Swedish companies have strong production linkages in these countries and increasingly in Myanmar. H&M is supplied by manufacturing and processing factories, and by cotton and/or yarn mills (a total of 957 suppliers in Asia, excluding the PRC). Bangladesh supplies a large portion (approximately 42%) while Myanmar supplies only about 1%.⁴ While Bangladesh is an obvious case for the study because of its market size, Myanmar is a good case because of its potential for developing new IB opportunities. Various textile companies, including H&M, have seen the large growth potential in Myanmar and are already building a new textile industry in the country. While leading actors in the textile and apparel sector with interest in developing IB models are scarce, IKEA and H&M have shown initial interest in working with Inclusive Business Sweden (IBS) to develop commercially viable IB models. If market leaders like these adopt such models, it is assumed that competitors may follow quickly, giving Myanmar's low-income people a completely new opportunity for well-paid and decent employment, and good returns on business investments.

7. Sweden's national approach to IB—the Inclusive Business Agenda—was developed in 2014 by IBS. Through this, Sweden's textile and clothing sector could leverage its significant capacity and influence to lead the development of IB models with the BOP. As a result, the textile and clothing sector became one of the six focus sectors with a set a mission—that by 2030, it will have helped develop large-scale IB models in textile and clothing value chains across 10 countries. This could be through cooperatives for raw materials, or in clothing production; or through the provision of health care services to workers, waste-to-textile business models, or elsewhere in the supply chain. From 2015, IBS was funded by VINNOVA to implement the Inclusive Business Co-creation Accelerator (IBCA). The overall vision of IBCA is to have, the Swedish business by 2020—in collaboration with other actors—playing a leading role in addressing the global challenges of poverty. IBCA plans to engage companies in Sweden's textile and clothing industry to take part in this objective.

C. Study Approach

1. ADB and Inclusive Business Sweden

8. ADB and IBS are partners in preparing this sector study on IB models in the value chain of the textile and clothing industry in Asia, focusing on Bangladesh and Myanmar. The study was jointly financed by ADB and IBS with funding from the Government of Sweden (through ADB's IB RETA) and VINNOVA (through IBS's IB co-creation program). The study was implemented by IBS.

³ Mistra Future Fashion (no date).

⁴ H&M (no date).

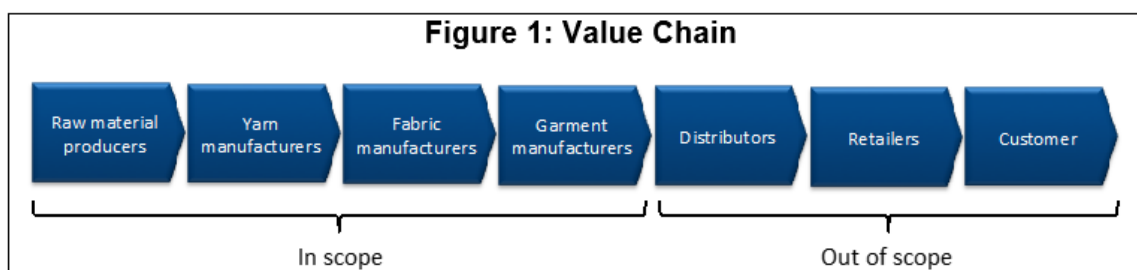
2. Objective

9. **Project InTaCt** involved a study on mapping opportunities for developing IB models across supply chains in Asia—as possible new (and innovative) investment opportunities for leading Swedish and other international and local companies in the sector.

3. Scope and expectations

10. The scope of the study are as follows:

- **Focus.** Mapping of IB opportunities will be its focus. Improving responsible business and/or corporate social responsibility (CSR) practices will be excluded from this study. The distinction is made in the following section of this report.
- **Sector.** The textiles and clothing sector can include opportunities with or without links to Sweden's business.
- **Geographical.** Focus is on Bangladesh and Myanmar, with some references to Cambodia, Indonesia, and Sri Lanka. While the InTaCt project connected with Swedish actors and served as an entry point to potential investor in a broader supply chain in these markets, the focus did remain on local development.
- **Value chain.** Focus is on production—from the production of raw materials up to garment manufacturing, as shown in Figure 1. International distribution, wholesaling, and retailing are excluded from the scope.



- **Deliverables.** An outline of opportunities with high-level cost–benefit analysis, business cases, and proposals developed for selected opportunities are identified as deliverables. Detailed analyses, business cases, and implementation plans are excluded from the scope. The desired outcome is to have companies investing in a small number of high-potential initiatives.

D. Focus on Inclusive Business

11. While IB is defined as “a private sector approach to providing goods, services, and livelihoods on a commercially viable basis, either at scale or scalable, to people at the base of the pyramid by making them part of the value chain of companies’ core business as suppliers, distributors, retailers, or customers,”⁵ it can be a little unclear how this definition implies to the textile and clothing sector. To some extent, the mainstream textile and clothing sector employs many of the BOP as producers in cotton production and manufacturing, but we would not always consider this to be a very inclusive approach. Indeed, there is no clear definition of IB in this sector. However, the Ethical Fashion Programme attempted to define IB as models that “develop a form of global partnership to strengthen the international competitiveness of microenterprises

⁵ World Bank / IFC (2012)

from the developing world in order to enable them to position in high-value business segments and thus to trade their way out of poverty.”⁶

12. We also need to make a clear distinction between IB and responsible business. While responsible business, often referred to as CSR, focuses on "actions that appear to further some social good, beyond the interests of the firm and that which is required by law,"⁷ IB takes a different approach by making poverty reduction the main objective of a business model.⁸ This is particularly relevant for the textile and clothing industry, as we are not including purely the improvement of responsible business practices (working conditions, living wages, etc.) for factory workers within the scope of this project.

13. As such, some of the key criteria we focus on for IB in the textiles and clothing industry are outlined below. The following criteria guide the scope of this initiative:

- Making poverty reduction the main objective of the business model;
- Establishing long-term trade partnerships with microenterprises;
- Co-creating win-win business models with the BOP;
- Creating shared value where extra value is generated for both the business and the community;
- Enabling business development in low-income communities that are not exploitative in nature;
- Providing broader engagement and services within communities;
- Providing new opportunities for entrepreneurship and employment, where many jobs created pay significantly above (>20%) the going market rate;
- Identifying what is good for the people and the planet; and
- Offering complementary and/or addition to business-as-usual activities.

E. Methodology

1. Key questions

14. The key questions addressed in this study include the following:

- What opportunities are available for developing IB models within the textile and clothing sector in Bangladesh and Myanmar?
- Which of these opportunities show the greatest potential for commercial viability and scalability?
- Are there potentials for investment in these opportunities especially those from Swedish and international actors?
- How many jobs can be created and what is the income effect of those jobs for the poor and low-income community?

2. Desk study

15. The study consisted mainly of background research on the textile industry in key Asian countries. The research included, but not limited to, a value chain analysis; identifying the IB models in the textile industry and best practices; and exploring the gender impact, job creation, labor impact, and other effects. The role of multinational companies such as IKEA and H&M was also taken into account.

⁶ International Trade Centre (2013).

⁷ McWilliams and Siegel (2001).

⁸ Adapted from Bauer (2014).

3. Innovation workshops

16. Innovation workshops with key actors in each country were held to develop innovative ideas on IB models and engage local actors in the process. This promoted good participation and shared understanding among actors. Workshops with companies were also beneficial since these made sure they are engaged and understood the process. Two rounds of workshops were undertaken. The first one was a smaller workshop designed to identify specific opportunities for IB models and provide some initial insight into the textile sector. The second one built on the findings of the first workshop, and through different participants, this further defined the opportunities.

17. Toward the end of the study, a workshop was held in Stockholm, Sweden where we went into more detail on some of the identified opportunities with potential Swedish partners and investors. This was followed by another workshop at the Inclusive Business Forum in October 2016.

4. Interviews

18. Stakeholder consultation in the form of discussions on opportunities for possible IB projects with project beneficiaries and partners is very important. Semi-structured interviews were held with all types of stakeholders, with an open and flexible approach to discussions.

5. Business development

19. Once opportunities have been identified, we used a criteria-based approach to identify which ones have the greatest potential. These opportunities were further developed into business cases and proposals in collaboration with those that have shown an interest.

II. OVERVIEW OF THE TEXTILE INDUSTRY IN ASIA

A. Evolution of a Global Industry

20. The globalization of the textile and garment industry is not a new phenomenon. In terms of export industries, apparel is actually one of the oldest ones. It has acted as the “starter” industry in several export-oriented countries, particularly in Asia.⁹ Since the 1980s, the industry started to move large parts of its production to Southeast Asia, which by then had already established the protectionist Multi-Fibre Arrangement (MFA) in 1974. The MFA regulated trade in the industry by imposing quotas on textiles and garments imported by developed countries from developing ones. The idea was that it would be a temporary measure designed to allow developed countries to adjust to the imports from developing countries, but the agreement did not expire until 2005. Quotas were initially not imposed for all countries; emerging countries like Bangladesh were exempt until 1986 and, thus, experienced a big increase in the industry.¹⁰ Moreover, the market share guarantee devised by the MFA made other developing countries also benefit as employment opportunities increased. However, the quotas also lead to complacency and a lack of competitiveness and effectiveness; in some instances, they contributed to corruption since quotas were sometimes allocated to companies with political power, or sold to the highest

⁹ Gereffi (2002).

¹⁰ Robertson (1997).

bidder.¹¹ In addition, entrepreneurs in countries restricted by quotas found ways to exploit the quota system, establishing factories in countries with low levels of quota utilization. For example, Korean companies established factories in Bangladesh and the indigenization of this sector due to local entrepreneurs allowed it to survive even after the removal of the quota system.¹²

21. In 1995, with the establishment of the Agreement on Textiles and Clothing, it was decided that the textile trade should be included under the jurisdiction of the World Trade Organization. This led to the gradual removal of the MFA, but were in many cases replaced by tariffs. It was predicted that the removal of the quotas would lead to many of the smaller Asian countries losing significant market share, with only big economies like the PRC and India coping with the change. However, this did not happen as many countries—including Bangladesh, Cambodia, and Pakistan—actually increased their garment exports (in both value and volume) to the United States (US). One explanation for this is the process of cost-driven relocation, as production constantly moves from countries with rising wages to countries with cheaper labor costs. This is especially true for the garment industry, which is more labor-intensive than the textile sector. Since the end of the MFA, buyers have also been keen to avoid overdependence on the PRC in the global value chain, benefiting smaller countries.¹³

22. During the last few decades, many Asian countries have leveraged the established labor-intensive garment industry to move into more technologically advanced and capital-intensive export sectors like electronics. Countries like Bangladesh never made this transition, lacking the incentive. The PRC, with its scale and effectiveness in production, is still the biggest exporter in the garment and textile industry, followed by Bangladesh and Viet Nam. Viet Nam entered the World Trade Organization in 2007 and has since proved to be a significant competitor for Bangladesh.¹⁴

23. Today, Asia accounts for more than half of the world's exports of garments and nearly half of the world's exports of textiles. Thus, many Asian countries are heavily dependent on the textile and garment sector for export earnings. The 2008 recession, therefore, had a severe impact on the textile and garment industry, affecting suppliers both in terms of declining total purchases from major markets, due to a decline in consumer demand, and in terms of downward price pressure. This in turn led to massive unemployment and social unrest across the industry's supply chain, with factories shutting down and displaced workers forced to find new employment. To some extent, the industry is still recovering from the impact of the global economic crisis.

24. Many Asian countries, both emerging and less developed ones, have used the textile and garment industry as a “springboard” to start developing and get integrated into the world economy. In terms of growth and development, the short-term impact of the textile and garment industry includes the creation of jobs especially for women, income, and foreign currency receipts from exports. How the industry has affected human development is largely dependent on the number and type of employment opportunities that are created, and on who has access to these jobs. How the opportunities contribute to factors like reduced poverty and improved well-being are also important in assessing the development impact of the garment sector.¹⁵

25. In the long term, the industry can provide an opportunity for the country to achieve sustained development with poverty reduction, assuming that the appropriate policies and

¹¹ The Asia Foundation (2012).

¹² Pickles and Smith (2016).

¹³ Keane and te Velde (2008).

¹⁴ Adhikari and Yamamoto (2008).

¹⁵ Footnote 15.

institutions are in place and that more employment and income for the poor can be created through productive value chains. In instances where the production country is able to use its labor cost advantage, there are opportunities for further development—in the form of export diversification and expansion of manufactured exports opportunities. There are also dynamic effects of knowledge spillovers, especially where there are sufficient linkages between the textile and garment sector and local textile suppliers. Moreover, barriers to entry are low as start-up investment costs are low, which in combination with low capital intensity means it can adjust quite quickly to changing market conditions. The expansion of the industry can provide a base for building capital for more technologically demanding activities in other industries. As the sector grows, the export revenues can be used to help finance imports of more advanced technologies (Keane and te Velde 2008).

B. Employment and Wages

26. Outsourcing the production of textiles and garments to developing countries obviously relies on the fact that wages are much lower in those countries compared to developed markets. The important question is whether wages paid to textile and garment producers in developing countries are different from those in other industries, and whether or not workers would be paid a formal wage without the presence of the textile and clothing industry.

27. International comparisons suggest that wages in the ready-made garments sector in Bangladesh are among the lowest in the world. However, the wages women are able to earn in the garment industry are generally higher than in alternative forms of employment, such as agricultural employment or domestic services.¹⁶ In developing countries, the informal economy is usually significant in size, hence, the textile industry can provide formal employment opportunities, especially for women. It may also be important to distinguish between the textile industry and the garment industry as wages in the textile industry tend to be higher than in the garment or clothing industry. This is because textile production is more capital intensive and requires more highly skilled workers.

28. Efforts to increase wages for workers in the textile and garment industry may sometimes leave workers worse off. Local subcontracted firms may shift production to other areas, and multinational firms may similarly reconsider their investment and sourcing strategies and move production to another country. The danger of this is a race to the bottom, where production costs are cut even lower. The possible loss of employment and productivity from an increase in wages can then lead to a decline in welfare in society. In the implementation of international labor standards, developing countries, in general, have rejected the use of these in trade agreements. This is because of fears that standards will be abused for protectionist reasons (Keane and te Velde 2008).

29. A benchmark analysis of employment and earnings in Bangladesh, Myanmar, Indonesia, Viet Nam, Sri Lanka, and Cambodia is presented in Table 1.

¹⁶ Kabeer and Simeen (2004).

Table 1: Employment and Earnings in the Textile and Garment Sector in Selected Asian Countries

	Percent employed in the textile industry (average)	Bangladesh	Myanmar	Indonesia	Viet Nam	Sri Lanka	Cambodia
Population (million people)		151.6	51.6	254.4	90.7	20.4	14.8
Participation rate	72%	70.8%	78.6%	67.7%	77.5%	55.0%	82.5%
Million people		107.3	40.6	172.2	70.3	11.2	12.2
Employed in textile and garment							
Million people		3.6	3.4	4.9	2	0.3	0.6
Percent in labor force	4%	3.4%	8.4%	2.8%	2.8%	2.7%	4.9%
Income							
Poverty Incidence (percent of population)							
Very poor (\$1.9 per capita per day)		18.5	n/a	8.3	3.1	1.9	2.2
Poor (\$3.1)		56.8	n/a	36.4	12	14.6	21.6
Vulnerable poor (\$4.6)		80.5	n/a	60.4	28.5	38.6	52.6
Low income (\$6.1)		89.6	n/a	74.5	45.6	57.6	72.3
Income							
Official minimum wage (\$ per month)							
All sectors		\$19	\$73	\$82-\$232	\$108-\$182	\$71	none
Garment industry		\$71	\$92	\$92	\$100	\$66	\$128
Average income of bottom 40% (USD per household per month)		\$42	n/a	\$60	\$114	\$103	\$65
Average income of a laborer in the garment sector (per month)		\$68	\$83	\$90	\$88	\$66	\$128
Average income of a laborer in the garment sector (per day)		\$2.3	\$2.8	\$3.0	\$2.9	\$2.2	\$4.3
Estimated percent of garment workers being very poor (<\$1.9)		10%	10%	5%	5%	30%	5%
Estimated percent of garment workers being very poor (<\$3.1)		70%	60%	50%	50%	80%	40%
Estimated percent of garment workers being low income (<\$6.1)		90%	90%	80%	80%	95%	60%
GDP/capita (USD, PPP of 2012, 2014)		\$3,137	\$5,217	\$10,613	\$5,629	\$10,416	\$3,306

GDP = gross domestic product, PPP = purchasing power parity.

Sources:

- (i) Poverty and income distribution data are from the World Bank PovCalNet (accessed 5 October 2016),
- (ii) Minimum wage data are from the International Labour Organization (ILO).
- (iii) GDP/capita and employment and population data are from the ADB Key Indicators.
- (iv) Huynh (2015).
- (v) Viet Nam Trade Promotion Agency.
- (vi) People's Republic of China National Bureau of Statistics and Ministry of Human Resources and Social Security (2014).
- (vii) World Bank. Distribution data. <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD> (accessed 11 October 2016).
- (viii) Gardner and Burnley (2015).
- (ix) WageIndicator Foundation. Database compilation from WageIndicator. (accessed 11 October 2016). Poverty segment is a % of garment workers based on high-level estimates, and based on minimum wage and average incomes.

C. Sector Profiles in Selected Countries

1. Bangladesh

30. Bangladesh hosts the region's most established textiles and clothing industries, and is one of two focus countries of this study. As of 2015, the textile and garment industry of Bangladesh accounts for around 80% of the country's total exports. Overall, the industry has contributed significantly to economic growth and export earnings in the country, and to poverty reduction. The industry has also represented the first formal mass employment opportunity for women,¹⁷ a sector that today employs around 4 million people, of which approximately 80% are women. Many more are engaged in the sector who are informally engaged or self-employed, where the poor work as subcontractors to the formal industry. However, the 4 million people that are formally employed in this sector only represent approximately 4% of the labor force in Bangladesh. Hence, while this sector is strong in Bangladesh, it does not address the country's significant underemployment problem.

¹⁷ ILO and ADB (2016).

31. The majority of workers in the textile and garment industry in Bangladesh are women originating from poor, landless households. Although low, the wages earned by workers in the textile and garment industry are usually higher than in other forms of employment, leaving them with an income with which they can support themselves and one other adult at a level above the poverty line. That many workers use their income to send remittances to the countryside suggests that it is being used to support their families, indicating a broader development impact (Kabeer and Simeen 2004).

32. However, the industry has been affected by not only the global financial recession, but also by accidents and attacks. The collapse of the Rana Plaza factory in 2013 killed over 1,100 workers—an unprecedented accident due to the high number of victims. Factory fires in 2012 and 2013 also claimed lives. Bangladesh has also experienced an increase in terrorist attacks, the latest targeting foreigners at a coffee shop, killing 20 people in July 2016.¹⁸ It is obviously too early to predict any long-term effect of these incidents on the textile and garment industry, but foreign businesses are already limiting travels to the country. Moreover, there is ongoing and increasing competition from some countries.

2. Myanmar

33. The second focus country of this study is Myanmar—where the textile and clothing sector is still in the early stages of development, but growing rapidly. Here, the International Labour Organization (ILO) is implementing the Decent Work Framework to support the development of Myanmar's garment sector with a range of strategies and interventions for economic and employment growth. Currently, most of the manufacturers in Myanmar are operating on a cut, make, and package production system—where producers are only responsible for the pure production of the garments, and not involved in the design and/or input sourcing processes. Therefore, they do not get paid for the full value of the garments. The ILO is interested in helping Myanmar's garment industry capture a larger part of the global value chain, the priority being to strengthen the country's garment sector input value chains.¹⁹ If domestic capacity in these areas can be strengthened, the garment sector could shift to a free (or freight) on board basis for pricing, where international buyers pay Myanmar's garment factories for the full value of the completed garments as they are loaded “on board” shipping vehicles. This would position Myanmar in a stronger negotiating position to capture more margins for the country, thus, increasing opportunities for factories to provide decent employment to workers.

34. Myanmar has made moves toward democratization, which has led to the repeal of European and American export sanctions on the country. This has had immediate effects on the textile and clothing sector, which is now experiencing new levels of growth—from 260,000 workers in 2014 to an estimated 600,000 in 2017.²⁰ The Myanmar Garment Manufacturers Association reports that new garment factories open at unprecedented rates, and the number of workers in the industry is forecast to increase rapidly over the coming years. The association's 10-year strategy seeks to grow the industry in the next 10 years from a \$912 million in 2012 to an \$8 billion–\$10 billion industry employing up to 1 million–1.5 million workers by 2024.²¹

35. International brands have become increasingly interested in Myanmar with its low-wage workforce. Other countries such as Bangladesh, Cambodia, the PRC, and Viet Nam are more

¹⁸ Chapman (2016).

¹⁹ ILO (2012).

²⁰ ILO (2015a).

²¹ Myanmar Garment Manufacturers Association (2016).

advanced in the production of garments, however, there are opportunities for Myanmar to grow in the industry, as some of the other countries are seen as “controversial” such as Bangladesh; or in Viet Nam, Cambodia, and the PRC where it had have become increasingly expensive to produce garments due to rising wages (ILO 2015).

3. Cambodia

36. Like its neighboring countries, Cambodia experienced a rapid growth in the textile and clothing sector over the last few decades. Cambodia’s textile and clothing sector was partly focused on footwear, a section growing more rapidly than that of garments. However, the success came at a cost. Minimum wages were low and while increases were announced, laws regulating union registration were simultaneously been put in place.²² The sector was also affected by strikes and protests, sometimes ending in violence. The textile and clothing industry remains the largest manufacturing industry and the largest foreign exchange earner in the country, currently engaging around 600,000 people.²³ Exports also kept on growing, and the number of factories.

4. Indonesia

37. Indonesia is the world’s fourth most populated country and has been an attractive market for international apparel producers for decades. The textile and apparel industry is one of the country’s largest industry sectors, employing close to 5 million people and the government aims to grow that share over the next few years. However, recent competition from neighboring countries has brought on a slowdown of Indonesia’s apparel industry, further enhanced by rising labor costs, with recent increases in minimum wages. Labor costs are higher in regions surrounding the capital Jakarta, however, and some manufacturers have relocated to other areas to keep wages down.²⁴

38. Moreover, Indonesia has not, in contrast to several other Southeast Asian nations, entered into trade agreements with the US or the European Union (EU) at special tariff rates, which has also affected the sector negatively.

5. Sri Lanka

39. During the 1960s, the textile industry of Sri Lanka was small and catered only to an internal market. Heavily protected, the industry remained modest until 1977 when the economy was liberalized and manufacturers were able to reach foreign markets. During this time, the industry was transformed from manufacturing textiles to producing ready-made garments, and the sector continued to grow during the 1980s and 1990s. It surpassed all other industry sectors by 1986 to comprise the largest export share; and in 1992, the overseeing authority—the Board of Investors—invited manufacturers to expand into rural areas of the country through an attractive incentive package. This ensured the continued growth and helped develop areas where employment was needed.²⁵

40. Today, the apparel industry is one of the largest in Sri Lanka, and the industry sector with the highest number of employees. The industry is aptly termed “apparel” industry as apparel manufacturers comprise around 90% of the sector as a whole. The vast majority of manufacturers

²² Ford (2015).

²³ ILO (2015b).

²⁴ Emerging Markets Direct (2015).

²⁵ Chelina Capital Corporation (2013).

serve the export market, primarily the US. At present, the apparel industry accounts for around 40% of total exports of Sri Lanka.²⁶

6. Viet Nam

41. Viet Nam is another country where the textile and clothing industry has been growing rapidly over the last few years. Expectations that the industry would surpass the \$20 million mark by 2020 have already been met and the sector keeps growing every year,²⁷ with textile and clothing now the largest export sector.²⁸ The rapid growth of the industry can be compared to that of Myanmar, a similar country to Viet Nam in terms of population size, democratization processes, and the opening up of their economies gradually and initiating apparel exports from the early 1990s.²⁹ However, since then, the textile and clothing sector of Viet Nam has gone from strength to strength while that of Myanmar's is still, as previously noted, in its early stages of development.

42. Viet Nam is one of the countries included in the Trans-Pacific Partnership, the trade deal among 12 Pacific Rim countries, which is aimed to be ratified in 2018. With this in place, the textile and clothing sector of Viet Nam is predicted to grow even more, with exports increasing particularly to the other Trans-Pacific Partnership member countries.

D. Gender Impact of the Textile and Clothing Industry

43. The textile and clothing industry has been found to contribute significantly to the empowerment of women in the form of formal employment. Job creation in the sector has been especially strong for women in the poor countries that previously had little, if any, income opportunities in the formal sector. Being employed in the export-oriented industry turned out to be better than working in the domestic economy, or being unemployed. The associated autonomy empowers and there was an improvement in gender equity, contributing to human development. It is also common to employ unskilled workers, thus opening up the opportunity for entering the industry without qualifications (Gereffi 2002).

44. Although women have been drawn into the workforce and can earn an income, women are mainly employed at the low-skill end of production. Women have a smaller chance of being promoted to higher skilled positions; they are often not trained to use new technologies, and have less access to nonmonetary benefits, such as health care. Equipped with better skills, men still earn higher wages than women and around half of the female workers are employed on a temporary or subcontracted basis, while the majority of men occupy permanent positions. This makes women more vulnerable as it makes their income less stable and limits their access to certain social benefits. The income earned by women in the garment industry, often under quite exploitative conditions, may also be controlled by other members of the household, which limits the economic power of the female worker (McWilliams and Siegel 2001). Human development outcomes, especially from a gender perspective, do not solely depend on total income in a household, but also how that income is distributed and utilized within the household. In terms of improving gender equity in employment, policies not only need to be directed at the labor rights of workers, but also to related reproductive rights of women workers on things like childcare and other social issues.³⁰

²⁶ Footnote 26.

²⁷ AmCham Vietnam (2016).

²⁸ Textile World (2012).

²⁹ Fukushini and Yamagata (2014).

³⁰ Barrientos et al. (2004).

III. PRELIMINARY HYPOTHESES

A. Early-Stage Activities

45. The initial work of Inclusive Business Sweden (IBS) with the textile and clothing sector began with a roundtable session held in Gothenburg in October 2014. Since then, IBS has worked with the sector to establish a textile and clothing alliance that is working toward this aim: “By 2030, enable the development of large-scale inclusive business models in textile and clothing value chains across 10 countries.”

46. It was recognized that the textile and clothing supply chain consists of a complicated string of actors where supplies are often sourced from different countries or regions, thus, roundtable participants agreed to put particular stress on inclusiveness to develop viable IB models. Since whole communities are often affected by the establishment and presence of an industry, there is much opportunity to make this industry beneficial to all through the use of IB models. Moreover, since the industry’s supply chain is complex, this also means that there are multiple IB options within the sectors, such as in water and sanitation, health care, fiber production, and access to energy, to name a few.

Figure 1: Inclusive Business Forum, Outputs for Textile and Clothing, 2015

Needs	Empowering workers in supply chain	Inclusive fiber production	Inclusive garment and textile production	Health care for workers	Textile waste management and recycling	Energy and water inputs
Current > Initiatives > Solutions > Actors > Collaborators	Better Work QuizRR BSI Unions	Jutelab Int'l Juteborg BCI	Village mode; local cooperative Handicraft cooperatives Nongovernment organizations	HER Doorstep clinics BSCI FWF WaterAid People	Europe (MFF, Soex) Redesign local	BCI SIWI
High potential > Initiatives > Ideas > Actors > Collaborators	Education: <ul style="list-style-type: none"> • R&D • Design • Entrepreneurship • Co-owning 	Educate after Swedish role model, for example: Sodra Skogsagama	Semi-industrial (handicraft/ industrial production) <i>As a social business model that is possible to replicate.</i> <i>Microcredits from factory?</i>		Recycling new technology “Rent” – sufficient patent used in relevant industries in the West; for instance, cellulose technology	Energy recycling Incineration Alternative crop fibers

Source: Inclusive Business Forum, Outputs for Textile and Clothing, 2015

47. As part of the IBCA program, the Inclusive Business Forum was held in Stockholm in May 2015, attended by around 170 people. The sector-based workshops included one on textiles and clothing. The workshop discussed the issues on what, how, and who in co-creating IB with the BOP, and several interesting ideas that were considered for this study, as outlined in Figure 2. Among these ideas include (i) facilitating technology transfer to developing countries, especially within waste-to-textiles; (ii) creating spaces for the use of alternative crop fibers; and (iii) outsourcing to semi-industrial units targeting women in BOP communities. Outputs from the workshop also mention the importance of replicable business models in waste-to-textiles, between factories and between companies, and the sheer magnitude of opportunities as viable business prospects, as opposed to CSR initiatives or aid projects.

48. Subsequently, IBS held deeper discussions with representatives from several Swedish textile and clothing companies—including H&M, IKEA, Juteborg, QuizRR, and Mistra Future Fashions. While the starting point of this study was connecting with and through Sweden-based organizations, we used this connection as an entry point to a broader value chain and actor network within the local markets. Project InTaCt explored IB opportunities in both with and without links to Swedish companies. The work and discussions carried out prior to Project InTaCt provided some hypotheses on the types of IB opportunities that may be developed.

B. Existing Literature and Inclusive Business Cases

49. To date, there are very few in-depth studies, if any, focusing on IB in the textile and clothing industry. This study, therefore, bases its research findings on IB as an instrument to reduce poverty in the more general sense, while narrowing its scope to the textile and clothing industry via activities and initiatives by businesses present in this sector in Asia.

50. To date, global textile and clothing businesses sourcing from Southeast Asia are predominantly into activities relating to responsible business. Browsing their websites, one finds that companies often refer to these activities under topics such as “Our responsibility,” “Environmental policy,” “Social responsibility,” or similar terms. IB models seem to have yet to enter the agenda of some companies, but there are some examples of large-scale IB models in the textile and clothing industry. We have drawn on some of these examples to develop our hypotheses, including from the following:

- *Better Cotton Initiative* promotes resource-efficient farming solutions to cotton farmers while building and improving the capacity of producer organizations, thus, improving the overall sustainability of cotton production.³¹
- *IKEA Next Generation* collaborates with artisans in small-scale producer groups that could not usually meet the company's regular demands of supply due to their limited resources and small numbers, but can produce limited edition collections for IKEA stores around the world.³²
- *International Trade Centre's Ethical Fashion Initiative* connects marginalized artisans from developing countries to international fashion houses, largely operating in Haiti and several African countries.³³
- *SNV Working with Women Programme* works with 10 factories and selected service providers of Sexual and Reproductive Health and Rights in Bangladesh to pilot and test IB models for the distribution of health care services to workers.³⁴

³¹ Better Cotton Initiative. www.bettercotton.org.

³² IKEA Next Generation. <http://ikea.in/next-generation.html>.

³³ Ethical Fashion Initiative. <http://ethicalfashioninitiative.org/>.

³⁴ SNV (2014).

- *Thread*—which produces responsible fabric “from ground to a good”—recycles 100% post-consumer PET plastics collected in Haiti and Honduras to produce polyester fabric and clothing.³⁵
- *The Jaipur Rugs Foundation* is a field-based organization working with over 40,000 artisans at the grassroots level, promoting social enterprise at the individual level to support artisans from being mere wage earners to owning their own businesses.³⁶
- *HERproject* is a global initiative aiming to empower women through their workplace, especially within international supply chains, and among other things, implement workplace-based programs on health and microfinance.³⁷

C. Potential Opportunities

51. As Bangladesh has already a strong textile and garment sector, the focus was on building complementary business models based on IB principles. This differs from Myanmar, where the focus was more on supporting an emerging inclusive textile and clothing sector.

52. Against this backdrop, we had initially identified a number of interesting opportunities within the textile and clothing supply chain that could provide incentives for the development of IB models in Myanmar and Bangladesh. Some can be leveraged to support existing value chains by making them more productive while creating more jobs and resulting in better incomes for workers while others seek to complement or even compete with traditional value chains through more IB models, which empower the poor to overcome poverty.

1. Cooperatives

53. Cooperatives can be reasonably common in the textile and clothing sector, but often at a small scale. Finding ways to structure, support, and scale cooperatives—and link them with international supply chains—could be a good way to hasten the establishment of viable microenterprises.

2. Home production

54. This can be done, for example, by contracting rural women to loom textiles by hand. Basing production in their homes, women would be given a chance to contribute to the family income while simultaneously being able to care for their families. In 2005, IKEA implemented their Next Generation project in India where over 2,000 women were contracted to embroider cushion covers, while simultaneously taking part in an educational program (IKEA Next Generation).

3. Waste-to-textile

55. IKEA has expressed an interest in exploring new ways to handle waste-to-textiles, from a supply chain and sustainability perspective. Here, the social enterprise department of the company could act as enablers to assess any testable solutions. IB models can be developed for both the collection and/or processing of this waste. Turning waste into textiles is also one of the many ideas that were “unearthed” at the textiles workshop of the Inclusive Business Forum 2015, and one that is becoming increasingly relevant. During the last decade, for instance, global

³⁵ Thread. <http://www.threadinternational.com/>.

³⁶ Jaipur Rugs Foundation. <http://www.jaipurrugs.org/>.

³⁷ HERproject. <https://herproject.org/>.

workshop predominantly focused on establishing the supporting frameworks, such as cooperatives for hand-loomed entrepreneurs, platforms for education, on shared experiences, and knowledge building—for factory workers, the management, and other stakeholders. Other opportunities discussed were possibilities of research and development on waste yarn recycling, the making of polyester from recycled materials, and the establishment of savings groups for factory workers.

60. From the workshops in both countries, there emerged a sense that collaboration and scalability is important if the industry should develop sustainably; and that projects should take an approach that considers as imperative both the profit and the needs of workers.

B. Second Round of Workshops (March–April 2016)

61. Based on a prioritization and evaluation of the opportunities identified in the first research trip, and a discussion with key stakeholders, a shortlist of high-potential opportunities was drawn up as basis for the second round of workshops. For the second round, five half-day workshops were carried out in Bangladesh and Myanmar, which focused on developing these IB opportunities further, and defining the business models that could make them sustainable.



62. Workshops in Myanmar had about 30 participants and focused on (i) linking factories and communities for mutual benefit, and (ii) forming hand-loomed cooperatives and networks.

63. Workshops in Bangladesh had over 35 participants and focused on (i) community energy and water solutions linked to factories, (ii) textile waste recycling and reuse, and (iii) reinventing the jute industry.

64. While the workshops focused on these themes, additional opportunities were also identified during the workshops. A summary of the main opportunities identified, and an outline of the ones that will be developed further are included in this report.

C. Field and Factory Visits and Interviews

65. In addition to the workshops, the research trips involved field studies, factory visits, and interviews in both Bangladesh and Myanmar. Field studies focused on visits to factories, communities, and homes to understand the context and the real needs and challenges of factory workers and their families. Factory visits were made to numerous factories from large-scale producers to small handloom operations. Interviews were held in both countries with a number of factory workers and managers, and with other stakeholders in the industry.



66. Through all these activities, the researchers gained a greater understanding of the context and challenges in and around the industry. One major insight is that while factory conditions ranged from good to poor, it is often the living conditions, not the working conditions that are the major challenges. Sometimes working in factories is a favorable alternative to other less

comfortable and reliable livelihoods, and while it is recognized that efforts should continue to be made to improve working conditions for all workers along the supply chain, external opportunities and challenges should also be addressed within the context of the broader industry and community. While factories or buyers may not see a business opportunity in this, it does present an opportunity for third-party businesses to come in to meet these needs.

D. Second IB Asia Forum in Manila

67. The first research trip was concluded with a visit to the 2nd Inclusive Business Asia Forum, hosted in Manila. With more than 400 participants from business, academia, finance, government, and civil society sectors, the discussions held were both inspirational and encouraging. It was especially productive to take part in talks about the importance of collaboration and co-creation. To realize the promotion, proliferation, and scaling of IB, in Asia and in other parts of the world, we need to work collaboratively and cross-sectionally—not only in networks and business associations, but also with development banks, nongovernment organizations (NGOs), corporations, and the academia. Allowing for internal innovation and intra-preneurship is vital within corporations wishing to explore IB models, but if the project remains a project, it risks being suffocated by the core business. An internal IB project, thus, needs to be integrated into the core business to not disappear completely. Developing IB models this way has the added benefit that corporations have the ability to cover some of the project's costs (and/or losses) and, from an investor's point of view, can offer credibility. Moreover, large challenges require large investments and an ability to scale—something corporations are able to provide and do. Project InTaCt recognizes this in its description through the involvement of IKEA and other global brands, taking into consideration that corporations often need improved access to technical assistance rather than just finance.

68. Discussions also included the United Nation's Sustainable Development Goals (SDGs) and how IB could be the driver for their realization. The SDGs represent a chance for the world to collaboratively work toward a common goal (or 17 common goals). For this to happen, businesses need to align their core activities to help reach the SDG targets—something that could be done using IB models, and which could be integrated in the InTaCt projects. Moreover, institutions such as governments and investment bodies need to build on the potential of IB models, and to develop policy thereafter. If the governments of Bangladesh and Myanmar would work toward this, in collaboration with businesses and other organizations active in the industry, immense headway could be made toward reaching some of the goals (no. 8—Decent work and economic growth, no. 11—Sustainable cities and communities, and no. 12—Responsible consumption and production, to name a few).

69. It is our view that IB models in the textile and clothing industry can go a long way to addressing SDG no. 8—decent work and economic growth. These business models can be focused on working toward these three targets:

- 8.3—Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity, and innovation; and encourage the formalization and growth of micro-, small and medium-sized enterprises, including access to financial services;
- 8.4—Improve progressively, through 2030, global resource efficiency in consumption and production and endeavor to decouple economic growth from environmental degradation; and
- 8.5—By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

70. Networks and business associations can provide an ecosystem where IBs can develop and grow; an enabling environment on the ground, but also as a catalyst between businesses, creating a mind-sharing space for shared experiences, such as best practice and replicable examples. This is true for large and small IBs alike, and relates directly to workshop outputs from Myanmar, where networks and cooperatives were high on the wish list.

71. Discussions at this forum made it clear that from a gender perspective, IB can serve as a good entry point to tackle issues related to gender. Women are disproportionately poor—being responsible for unpaid household chores, have less access to health and education, and have limited control over resources. Through IB models, however, women can implicitly benefit through a focus on women's issues, and explicitly through the tailoring of business models to target women's needs. There are several constraints, however, such as multiple commitments for women, gender-based expectations, a lack of rights and agency, and a lack of skills and education. These can be addressed through IB models creating support infrastructure, working with local partners (co-creation and collaboration), engaging with husbands and families, reaching out to women directly, and investing in women's skills. With the large majority of the textile and clothing workforce made up of women right across Asia, IB models in the industry that can help to provide jobs, empower women, and improve their incomes and living conditions can go a long way toward meeting equality goals.

E. Stockholm Innovation Workshop

72. The workshop held in Stockholm on 7 September 2016 involved representatives from Sweden's textile businesses, potential investors, and other relevant actors with a will and the ability to join forces toward a more sustainable textile industry in Southeast Asia. Out of the four prioritized opportunities presented, there was an interest and working group for the following three:

- sustainable farmer-to-factory supply chain for jute denim,
- the textile recycling ecosystem, and
- the self-help hub and resource center.

73. In addition to interest, input was provided to these initiatives to further develop them. This input has been incorporated into the concepts outlined later in this document.

74. On the jute denim initiative, participants were interested to learn if both the properties are an array of new uses of jute beyond traditional uses. Sweden's retailers like H&M and Lindex were identified as potential customers of the final jute denim garments. There were also discussions about the potential of extending the initiative to India, another jute-producing nation.

75. The textile recycling ecosystem work group focused on some of the challenges that could be faced in the recycling environment in Bangladesh, with German-based textile recycling expert I:Co providing input. Their feedback confirmed that post-consumer waste models are likely to be more complicated due to restrictive regulations, and that the solution should better focus on factory floor waste as a starting point. Alternative recycling processes were also discussed, such as waste to yarn or waste to viscose. These alternatives will need to be considered further in the next stage.

76. The self-help hub and resource center was seen as an innovative way of supporting the empowerment of factory workers in developing markets. While it was believed that this initiative

would be of value, it was agreed that this should be driven from within the country itself rather than imposed on by others. If this is the case, Sida could be interested in providing support.

77. Unfortunately, there seemed to be not much interest from the Swedish side on the fourth prioritized opportunity in Myanmar, which is the Handloom Hub, but there is definitely more interest in the Bangladesh market at this point. However, the terrorist attacks in July 2016 in Bangladesh have made many actors hesitant to pursue these opportunities and to travel to that country at this point in time. However, for the three initiatives, IBS will continue to pursue the collaboration between the Swedish and the Bangladeshi and Myanmar actors through the Inclusive Business Co-creation Accelerator program.

V. IDENTIFIED INCLUSIVE BUSINESS OPPORTUNITIES

78. Throughout the Project InTaCt process, a number of IB opportunities were identified, and then prioritized based on two main criteria:

- The interest of actors in Bangladesh, Myanmar, and Sweden to engage in the development and possible implementation of the initiative; and
- The extent to which the initiative worked as a commercially viable IB model with significant and scalable impact in the community.

79. As a result, four high-potential opportunities were identified and developed in greater detail. A few more initiatives were also identified that could also be explored further in the next few months. The opportunities identified are outlined in Table 2.

Table 2: High-Potential Opportunities

Prioritization	Bangladesh	Myanmar
High-potential opportunities (detailed further in this report)	<ul style="list-style-type: none"> • Jute denim—creation of a sustainable farmer-to-factory supply chain for jute denim • Textile recycling ecosystem creation 	<ul style="list-style-type: none"> • Handloom hub network • Self-help hub and resource center
Second-tier opportunities (warrant further exploration)	<ul style="list-style-type: none"> • Collaboration with social entrepreneurs and artisans in small-scale producer groups for limited edition collections, e.g., IKEA Next Generation • Decentralized networks of “slow fashion” production • Solar center providing factory–community energy solutions to factories, workers, and the community 	<ul style="list-style-type: none"> • Better Cotton in Myanmar—enable the introduction of Better Cotton Initiative and to enable smallholder farmers • Sustainable textile communities—build new highly sustainable communities that are integrated around textile and clothing production in greenfield sites
Other opportunities identified	<ul style="list-style-type: none"> • Wastewater purification to clean drinking water, sanitation and/or agriculture/aquaculture projects • Sludge purification and reuse—e.g., to produce bricks for housing or synthetic textiles 	<ul style="list-style-type: none"> • Creating a “Made in Myanmar” line of highly sustainable and/or inclusive clothing • Grow factory capacity by enabling the subcontracting of home-based production

	<ul style="list-style-type: none"> • Community housing solutions for factory workers • Other alternative fiber development—e.g., bamboo • Centralized waste-to-energy facilities and business models in clustered factories • Expansion of Fair Price Shop concept offering fair-price products and services for workers 	<ul style="list-style-type: none"> • Textile recycling programs—incorporating an IB model for waste collection, hubs, sorting and recycling and/or upcycling • Identifying technologies and business models from other more mature textile and clothing markets, and applying a leapfrog approach in an emerging Myanmar market
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Source: High potential opportunities identified through InTaCt project work.

A. High Potential Opportunities in Bangladesh

1. Farmer-to-factory supply chain for jute denim

a. Background and overview

80. The “jute denim” initiative—the creation of a sustainable farmer-to-factory supply chain for jute denim—aims to address ecological, economic, and social challenges of the textile and clothing sector. A global consciousness has already developed against the use of artificial fiber and synthetic products, which are starting to be replaced by environmentally friendly alternatives.

81. Jute, known as the golden fiber, is regarded by some as the most sustainable natural fiber in the world. It is 100% biodegradable and its products can be easily disposed of or burned without causing environmental hazards. A hectare of jute plants consumes 15 tons of carbon dioxide and releases 11 tons of oxygen during a 100-day cycle, while cultivating in crop rotations allows for food production and enriches soil fertility.³⁹

(Photo by Else-Marie Malmek, Juteborg AB)



82. Bangladesh and India are known to be the biggest suppliers of jute in the world due to their favorable climates and tacit knowledge of growing high-quality jute. The contribution of the jute sector to the economy of Bangladesh is enormous, with an annual output of approximately 1 million tons over the last decade. However, Bangladesh exports nearly 40% as raw fiber, and about 50% as manufactured items (FAO, 2016).

83. On the other hand, Bangladesh will be the number one sourcing hot spot for the ready-made garment industry over the next 5 years.⁴⁰ The vast number of skilled labor force, and government and international support are the main reasons that will establish Bangladesh as the preferred sourcing destination for world buyers.

84. Furthermore, the global denim market for jeans alone is expected to reach \$56 billion by 2018.⁴¹ At the same time, there is a growing concern about the sustainability of cotton production, the main component of denim, due to heavy water and pesticide use.⁴² Hence, this is the ideal

³⁹ FAO (2016).

⁴⁰ McKinsey & Co. (2011).

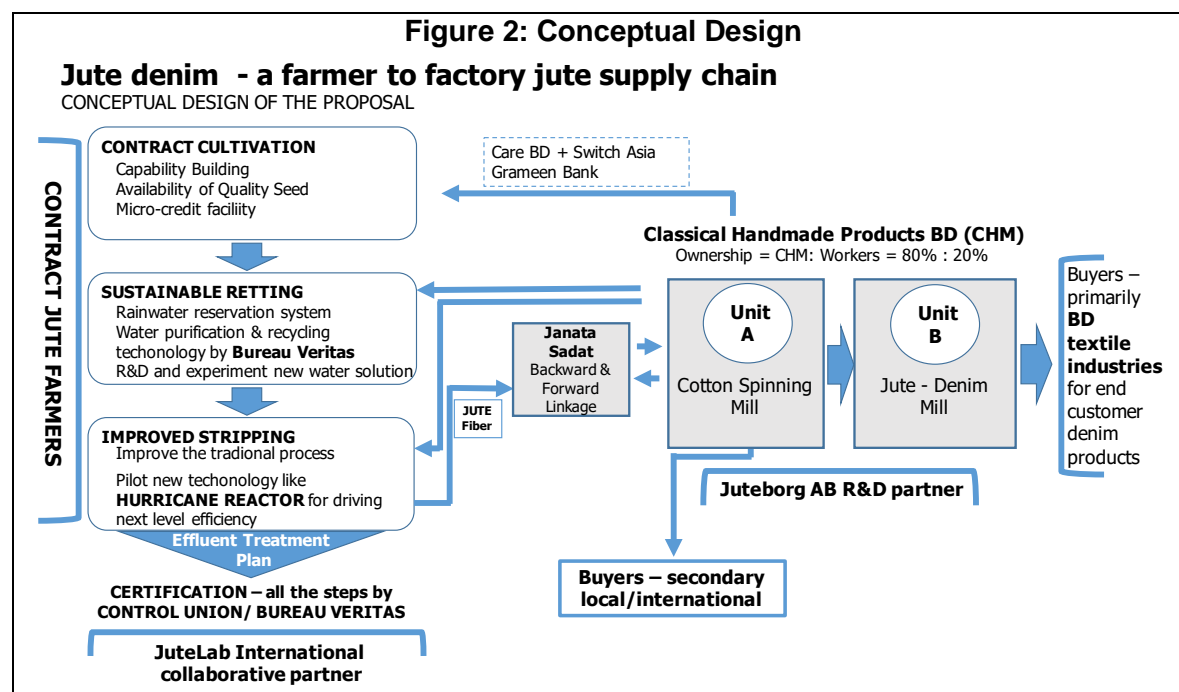
⁴¹ Global Industry Analysts, Inc. (2017).

⁴² Kooistra and Termorshuizen (2006).

opportunity to bring in the groundbreaking transformation in this sector by bringing synergies between a sustainable farmer-to-factory supply chain for jute and the textile industry. This initiative seeks to produce the world's most environmental friendly jute denim products while improving the living standard of the BOP in Bangladesh by making them financially empowered.

85. This initiative aims to produce primarily jute denim for the Bangladesh textile industries, which will then make jute denim finished products for global buyers.⁴³ This initiative will also bring in the synergies in the entire value chain by (i) building the capabilities of the contract jute farmers; and (ii) giving technological and improved solutions for nonhazardous retting and stripping process of the fiber, in collaboration with other actors. This proposed model will also help in the production of high-quality jute fiber by ensuring the right price for the farmers. The ownership of the production units will be divided as 80:20 ratios, where 20% will be kept by the workers as “workers’ dividend.” Overall, there will be a genuine possibility of economically empowering the BOP population in Bangladesh by implementing this model.

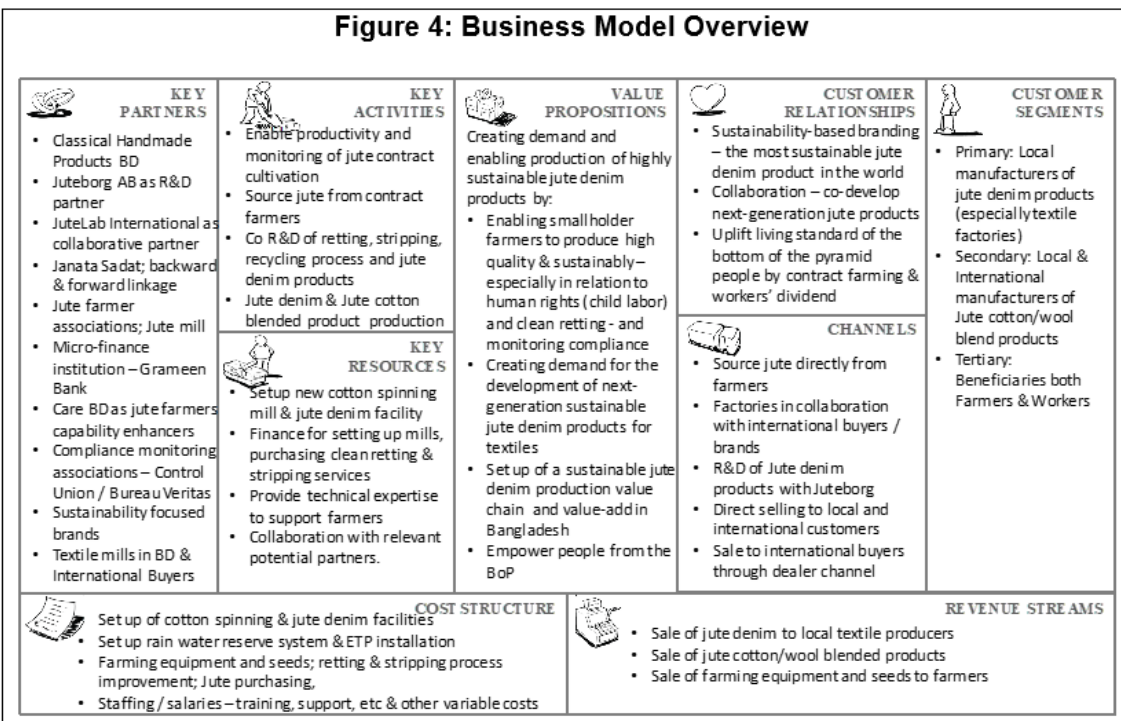
86. A conceptual design and business model overview for this initiative are presented in Figures 3 and 4.⁴⁴



Source: Developed with Juteborg based on outputs from the InTaCt workshop

⁴³ This initiative has been established in close collaboration with JuteLab International, Juteborg AB, and Classical Handmade Products Bangladesh, the custodian for this initiative.

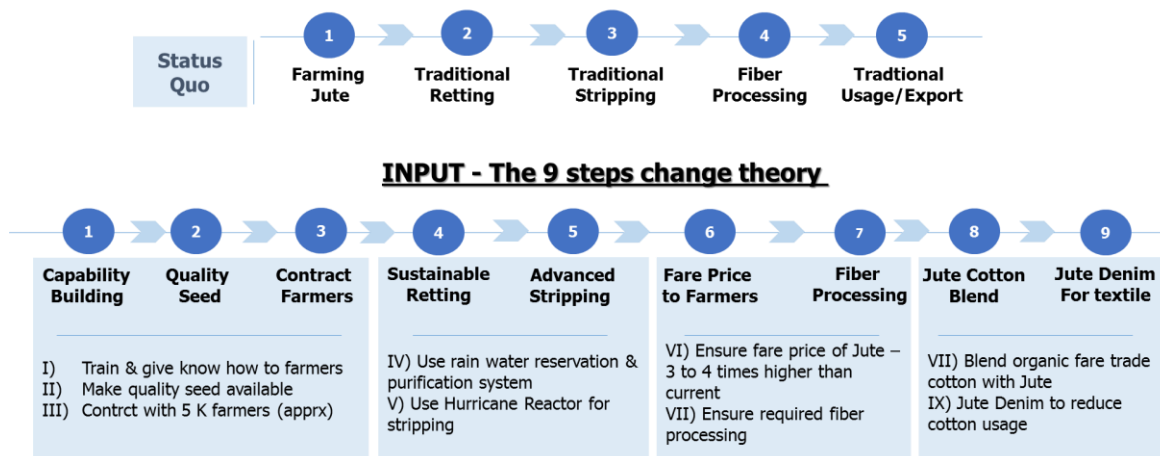
⁴⁴ See footnote 44.

Figure 4: Business Model Overview

Source: Developed with Juteborg based on outputs from the InTaCt workshop

b. Value proposition

87. The value proposition seeks to work toward a more sustainable value chain for the production of jute denim—from farmer to factory—as illustrated in the change theory in Figure 5.

Figure 3: Jute Denim Change Theory

Source: Developed with Juteborg based on outputs from the InTaCt workshop

88. The proposition is to build the business model surrounding two production units, which include a jute fiber processing unit and a jute denim unit. These two production units will create demand and enable the production of highly sustainable jute denim products through the following:

i. Enable smallholder farmers to produce sustainably—especially in relation to living incomes, human rights, and a clean production process.⁴⁵

- Establish direct contract farming agreement with the jute farmers and help them build their capabilities through training and by providing better-quality seeds for higher-quality yields. This could be done in cooperation with Care Bangladesh, the nongovernment organization (NGO) that is already involved in such projects supported by Switch Asia, and financed by the EU.⁴⁶
- Source the required amount of raw jute directly from them; giving the right price would also financially empower them.
- Enable the provision of financial support through microcredit facility to the poor farmers.
- Explore potential water purification solutions to make the retting process more environment friendly with no contamination in the water.
- Explore possibilities for an improved stripping process, including testing of a “Hurricane Reactor”—a sophisticated technology to upgrade the stripping process and ensure an efficient way of stripping the fiber from the stem.
- Enable an evaluation and certification process to ensure compliance in meeting the crucial aspects like implementing fair trade, protecting human rights, no child labor, proper retting and stripping process, and others.
- The ownership structure of the facilities will be in this ratio: 80:20 or owner: worker. This suggests that workers will have part ownership (20%) of the facilities and they will have an annual dividend.

ii. Create a demand for the development of next-generation denim products for textiles.

- High-quality raw jute will be sourced directly from the contract farmers. In the process, the quality and sustainability aspects are strictly maintained and monitored.
- After the primary processing of the raw jute in the cotton-spinning mill, the jute denim would be produced in one of the facilities.
- Research work on jute denim will be performed in collaboration with relevant researchers and industry experts.
- The focus on research and development (R&D) will help in creating quality jute denim, which will play the pivotal role in generating demand.
- Extensive R&D will also be conducted based on the requirements given by probable buyers for jute denim products.

iii. Establish a sustainable jute denim production value chain and add value to Bangladesh. Every part of the value chain will be taken care of through a carefully crafted sustainable plan. For example, the rainwater reserve system will be introduced to preserve water for the retting process. This will significantly lower the water wastage. At the end of the stripping process, the effluent treatment plant (ETP) will be set up for proper recycling of the used water. Thus, the entire value chain becomes sustainable in every aspect.

iv. Set up a jute milling facility to meet such demands and add value, as follows:

⁴⁵ The creation of a sustainable farmer-to-factory supply chain for jute denim will take most of these measures in close collaboration with partners, such as Juteborg International, Juteborg AB, Care Bangladesh, Grameen Bank, and Control Union, among others. Refer to the Partners section for more details. Page 28.

⁴⁶ Care Bangladesh/Switch Asia (2014).

- Two different units of mills will be set up in Bangladesh by Classical Hand Made Products BD (CHM), which will be the key custodian of the mills.
- Unit A will be the cotton-spinning mill that will create base material for jute denim.
- Janata Sadat will handle the backward and forward linkages by processing raw jute and making it ready to be used in Unit A.
- Some of the jute processing machines will also be installed there to ensure the correct processing of raw jute. Unit A will produce jute cotton blend, jute wool blend, and flax, which are also key products besides jute denim.
- Unit B will undertake the further processing of the processed jute cotton blend to produce jute denim products for the prospective buyers.
- Products from both units will be sold to prospective buyers and will be the sources of revenues.

c. Customer segments and channels

89. The primary customers will be the local manufacturers of jute denim products, with particular focus on Bangladeshi textile and clothing factories. The garment industry of Bangladesh relied on imports to meet 60% of its denim demand, and this demand is increasing quickly.⁴⁷ The production outputs of both units are considered saleable to these prospective buyers. Suppliers to Swedish brands H&M and Lindex were identified as possible customers.⁴⁸

90. The secondary customer segment will be the local and international buyers of products from Unit A—the jute cotton blend, jute wool blend, flax, and others. IKEA has been identified as a potential customer, especially if a diversified and highly sustainable jute sourcing facility could be established.⁴⁹

91. The final quasi-customer and beneficiary will be the farmers and workers in the jute industry. The aim is to treat these workers as customers by helping them to meet their needs in producing and supplying jute and in generating a sustainable income.

92. Especially in the early stages, it will be important to work collaboratively with both domestic and local factories, and among international customers, buyers, and brands to sell the benefits of jute to buyers. It will also be important to ensure that buyer requirements are closely met according to functionality, comfort, quality, and sustainability requirements. This work is already underway with a number of Swedish brands.⁵⁰ The processed jute cotton blend and jute denim products will then be sold to the local and international customers using direct selling. The dealers channel will also be used to reach the international buyers.

d. Key activities

93. The key activities of the business model would be the following:

- Enable productivity and monitoring of smaller-scale farmers—in terms of providing seed, improving productivity, helping with capacity building, providing microfinance, and enabling sustainability—in collaboration with partners such as Care Bangladesh, Grameen Bank, and Control Union.
- Source jute from contract farmers at a fair price.

⁴⁷ *The Daily Star* (2016).

⁴⁸ Source: Project InTaCt workshop held in Stockholm, Sweden, 7 September 2016.

⁴⁹ See reports on Project InTaCt workshops held in Dhaka, April 2016.

⁵⁰ See also the report on Project InTaCt workshop held in Stockholm, Sweden on 7 September 2016.

- Collaborate with other development partners to develop technological solutions for retting and stripping process, such as a process to preserve rainwater, wastewater recycling through ETP, etc.
- Raw jute and jute denim processing for sale to customers.
- Ongoing R&D of jute denim products with Juteborg AB—to add value to it and make it more contemporary. Juteborg AB will provide this R&D support in collaboration with relevant stakeholders.

e. Key resources

94. The main resource required will be the jute processing and jute denim facilities, which will require a significant investment. Jute processing will require modifications to a cotton spinning mill. A separate but connected jute denim mill will also be required.

95. In addition, technologies for sustainable retting and stripping processes will need to be identified and financed. This will include technologies such as water tanks, and purification solutions and/or the hurricane reactor. However, these options need to be explored further before deciding on the best approach.

96. Other resources will also be required to ensure a sustainable supply of jute, including access to the farmers, access to seeds, and services from partner organizations to enable the sustainable production of jute. Fair trade organic cotton will also be sourced to create the jute cotton blend denim.

97. Finally, significant human resources will be required for the facility, with plans to expand the staff to 160 within 5 years. It will be important to have a ready network of potential customers to sell the processed jute denim products.

f. Key partners

98. Led by Juteborg AB and Classical Handmade Products BD (CHM), a number of partners are being and will be engaged for the setting up of this ambitious initiative, including the following:

- CHM will be the key custodian of the facilities in Bangladesh. With a specialization in jute production, CHM has been working on the development of next-generation and jute-textile and jute-denim products. CHM had a turnover of approximately \$2.3 million in 2015, and a gross profit margin of 35%.
- Jute Lab International—serves to collaborate with different actors for bringing effective innovative solutions and also to ensure that the right process is in place. JuteLab International will act as a collaborative partner in capability building and technology upgrading using its strong network.
- Juteborg AB—serves as an R&D partner for conducting research on jute denim products.
- Janata Sadat—is the largest manufacturer and exporter of jute products in the private sector in Bangladesh.⁵¹ A strong partnership will be established with Janata Sadat for raw jute processing support through a backward and forward linkage system. Backward linkage consists of coloring, bleaching, softening, improving lusters, improving uniformity, making shorter fiber, spreading jute fiber, etc. On the other hand,

⁵¹ Janata Jute Mills Ltd. *The Jute Story*. <http://www.janata-sadat-jute.com>.

forward linkage consists of continuous yarn/fabric coloring, fabric hand feel improvement, fabric construction and design improvement, and different kinds of input development to be able to diversify the jute products.

- Jute farmer associations—their involvement will ensure a healthy relationship and successful negotiation in implementing contract cultivation.
- Care Bangladesh—will build on and extend the work of capability building with jute farmers (Care Bangladesh/Switch Asia 2014).
- Jute mills—are needed to provide a healthy business relationship with the experienced jute mills like Janata Sadat, especially during the modification stage of the spinning mill.
- A microfinance institution, such as Grameen Bank, will be needed to provide farmers with financial support during their capability-building phase, and also to acquire quality seeds.
- Compliance monitoring associations—Collaboration with compliance monitoring associations, such as Control Union or Bureau Veritas, will also enhance the credibility and right monitoring of the issues like fair trade, child labor, and protection of other human right aspects, along with sustainable jute processing.

g. Revenue streams

99. The primary revenue stream would be through the sale of jute denim and jute cotton/wool blend to the local buyers. The targets will be to make sales of 1 million meters per year of jute denim and 260,000 kilogram per year of jute blend to buyers by year 5, resulting in revenues of \$8.5 million.

100. The sale of farming equipment and seeds to farmers can be another revenue source, but these will be set at a low price so that farmers could afford them.

h. Cost structure

101. A significant capital expenditure of \$4 million–\$6 million will be required to set up the modified cotton and jute denim facilities, and another capital expenditure of \$1 million–\$3 million to set up other technologies associated with the sustainable production of jute, including solar panels, clean retting, and stripping technologies. This can be flexible depending on the ultimate objectives of the project and the level of sustainability desired.

102. Variable costs related to operating the mills will be predominantly staffing costs, including management and workers.

103. On farming, certification costs for managing and improving the sustainability of the farming process are also significant.

104. Finally, purchasing the raw jute for the production is expected to represent around 30% of the sales revenue.

i. **Cost–benefit analysis**

Table 3: Cost–Benefit Analysis

Costs	Benefits
<ul style="list-style-type: none"> • Staffing and facility • Set up jute milling facility • Set up of rainwater reservation system, ETP, etc. • Costs of sourcing jute • Logistic costs—owned or purchased services • Establishment and purchase of clean retting equipment • Increasing costs and requirements associated with compliance and monitoring • Cost of research and development work related with jute denim • Relevant cost elements for initiating public relations and marketing initiative • Cost involving the certification process by different industry watchdogs. 	<ul style="list-style-type: none"> • Sale of jute to buyers—at volume • Creation of high-demand jute industry globally • Address sustainability challenges in the supply chain—especially those associated with child labor and retting • Jute value-add processing in Bangladesh • Jute farmers benefit from improved capability buildings and payments • Environmental benefits of jute as an alternative to cotton—potential carbon credits • Increasing jute harvesting opportunities —3 times a year • Positively impacts part of the bottom of the pyramid population • Lower wastage of water during the retting process. • Recycle of wastewater enabling efficient usage.

ETP = effluent treatment plant

Source: Developed with Juteborg based on outputs from the InTaCt workshop

j. **High-level business case and investment approach**

105. A high-level business case⁵² has been developed based on key assumptions as outlined in Table 4.

Table 4: Jute Denim Business Case

Net present value, 5 years, 10% discount rate (Year 1 not applied)			\$4–\$5 million
Profitability	Year 1	Year 5	Total 5 years
Revenues	\$2.9 million	\$8.5 million	\$32 million
Capex	\$6–\$8 million	–	\$6–\$8 million
Opex	\$1.8 million	\$5.0 million	\$18.5 million
Gross profit	–\$6.6 million	\$3.5 million	\$6.3 million
Key Drivers and/or Assumptions	Year 1	Year 5	Total 5 years
Sales volumes: Jute denim (meters)	360,000	1 million	4 million
Sales volume: Jute cotton blend (kg)	90,000	260,000	1 million
Staffing	60 FTE	160 FTE	

⁵² Please note that this business case is very high level and needs to be refined further. For the purposes of this study, the business case has been developed to check commercial viability and estimate a ballpark valuation only.

Cost of goods sold (purchase and transport of raw jute)	\$0.9 million	\$2.5 million	\$9.7 million
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Capex = capital expenditure, FTE= full time equivalent, kg = kilogram, opex = operational expenditure.

Note: Business case details and assumptions are outlined in Appendix 2.

Source: Developed with Juteborg based on outputs from the InTaCt workshop

106. The investment approach is to secure a start-up capital from the following sources:
- Classical Handmade Products (Tauhid Bin Abdus Salam)—as the carrier of the initiative;
 - Janata Sadat Jutemills (Mahmudul Huq) as acting partners, also investing;
 - Development banks and other investors through their IB programs;
 - The Government of Sweden, potentially through Sida or Swedfund;
 - The Government of Bangladesh (Juteborg has opened discussions with the European Minister of Foreign Affairs to Bangladesh and planning a meeting with the Prime Minister in their next trip to Dhaka); and
 - Private investors that are interested to cofinance the project (discussions are undergoing with Getco Industries and Esquire Group).

107. Furthermore, Juteborg has opened discussions with IKEA, and its major supplier in Bangladesh—Zaber & Zubair Fabrics Limited—to explore possibilities for a collaboration and potential investment.

108. In the current structure, an initial \$9 million investment would be required. While funding commitments are still being negotiated, the following funding structure has been proposed:

- CHM, the key custodian of the facilities in Bangladesh, is ready to bring in 8% of the total investment requirement on top of the \$1.8 million in equity of its current facilities.
- Private funding from multiple players in Bangladesh is expected to be 15%, where each of them could benefit from the processed fiber in terms of developing other applications for their own branches.
- Of the funding requirement, 15% is targeted to come from Sweden—possibly through Sida or Swedfund—as a part of supporting environmental change through reducing cotton usage in denim with jute while helping to reduce poverty in Bangladesh.
- Some 15% will come from the Government of Bangladesh since the country will enjoy the economic benefit by directly creating employment opportunities for 5,000 farmers and 160 workers. Not only that, this pilot initiative could also possibly revive other functional state-owned jute facilities.
- A development bank could potentially bring in 47% of the investment requirement of this initiative. This would be a great opportunity to economically help Bangladesh by reviving the jute industry with probable opportunity of replicating the infrastructure of the said industry.

k. Routes to impact

109. Several major positive development impacts have been identified and these are presented in Table 5.⁵³

⁵³ This is based on ADB's ex-ante impact assessment tool.

Table 5: Major Positive Development Impacts

Routes to Impact	Type	Unmet Need Addressed
Supply chain—more reliable market for goods and services produced by the poor	The poor as producer	Bangladesh is one the world's largest jute producer but production has decreased in recent years. Jute is often grown on small and medium-sized family farms vulnerable to changes in jute prices in the global market. Access to a farmer-to-factory supply chain for jute denim would enable the stabilization of jute prices and, hence, earnings for smallholder farmers; and ensuring access to world markets.
Supply chain—technical support for low-income producers	The poor as producer	Producers would gain access to technical assistance from national and international jute actors.
Increased employment opportunities	The poor as laborer	As the jute industry of Bangladesh has been heavily affected by recent drops in jute prices over the last few decades, unemployment among jute workers is rife. Implementing Jute Denim Initiative, and then scaling the initiative, would ensure employment.
Wider systemic impacts	The Jute Denim Initiative can create demand and enable the production of highly sustainable jute products by helping smallholder farmers to produce sustainably, ensuring compliance to human rights (e.g., child labor), clean retting, and to monitoring. The initiative will also create a demand for the development of next-generation jute products (textile and non-textile), thus, ensuring the potential for scaling-up and replicating the business model. Customer segments include local manufacturers of jute products (especially textile factories) and jute farmers.	
Impact targets (Year 5)	<ul style="list-style-type: none"> • Source \$2.5 million of raw jute providing livelihoods for 5,000 farmers and their families, providing four times the current average income of a jute farmer.^a • Manufacturing jobs to 160 staff within the facility • Lead the transition to a higher value being placed on jute production putting an upwards pressure on the price and value of raw jute 	

^a Estimate is by Classical Handmade Products BD.

Source: Developed with Juteborg based on outputs from the InTaCt workshop

110. This initiative seeks to boost the economy of Bangladesh by creating employment opportunities, building capability, and reviving the jute industry, which could be replicated on a bigger scale. This project will create sustainable and fair trade assured materials and jute denim finished products for a more sustainable world.

I. Proposed next steps

111. The following are the proposed next steps:

- CHM and Juteborg AB to continue discussions with interested parties in Bangladesh and Sweden and to confirm their more specific interest in investments in jute denim.

- Jute Lab International, in collaboration with its partners, to continue to develop a detailed business plan and refine the business case and investment requirements. They will also further develop price setting and monitoring mechanisms required to understand practical challenges for this opportunity going forward.
- Juteborg AB to hold discussions with IKEA, and its major supplier, Zaber and Zubair, to discuss possibilities for collaboration and a potential co-investment.
- Juteborg AB to lead the discussion with investors on a potential co-investment.

2. Textile recycling ecosystem

a. Background and overview

112. While Bangladesh has a strong garment manufacturing industry, it relies very heavily on imported cotton to supply this industry. In fact, Bangladesh is the second largest importer of cotton in the world, having imported \$4.5 billion worth of cotton in 2015.⁵⁴

113. At the same time, textile waste from local production is often not used effectively, and often exported to foreign markets rather than used locally. For example, there is great potential for better recycling and reusing of *jhoot*, the local word for leftover scraps of fabric, to create jobs in the local market. *Jhoot* is now often exported to India and the PRC for recycling to cotton and yarn, and then reimported to Bangladesh. The Bangladesh textile and clothing sector produced over 350,000 tons of by-products and exported garment waste products worth \$31 million in 2013. Importers can often spend Tk80 per pound for cotton, which is made from *jhoot* worth Tk10. Recycling facilities are limited in Bangladesh, as the country has only eight big factories spinning cotton yarn from textile waste products and much of the recycling is into low-value products, such as rags and mattress fillings.⁵⁵

114. Textile waste is generated during the textile manufacturing and/or dyeing process and during cut-and-sew operations for making apparels. Initiated by the poor people over the years, wastes have been recycled for day-to-day use in low-income communities in Bangladesh.⁵⁶

115. While some 150,000 people are currently employed in the informal sector, particularly in the collection and selling of textile waste, there are some major issues in how they are engaged. Firstly, the *jhoot* business is often controlled by local political leaders and gangsters, and is characterized by high levels of criminality and corruption. Waste materials are often collected by these people, often forcibly, and then sold to local traders at a higher price. As a result, both factory owners and traders have been asking to formalize the sector to decriminalize the trade, reduce risks, and attract investment in the recycling sector (Ovi 2014). Furthermore, workers in the informal sector generate very low incomes, approximately \$24 a month.⁵⁷

116. Participants at the Project InTaCt workshop in Bangladesh in March 2015 made a rough estimate of the textile industry wastes at around 10% throughout the manufacturing process, and agreed that this provides a high potential for growth and employment. Among the workshop's objective was for Bangladesh to increase production by 10% with the same material inputs. Whether this ambitious aim is realistic remains to be seen, but it does demonstrate the potential in this area.

⁵⁴ International Trade Centre (2016).

⁵⁵ Ovi (2014).

⁵⁶ Correspondence with Mohammed Zahidullah, head of Sustainability, DBL Group, in 2016.

⁵⁷ ADB (2010).

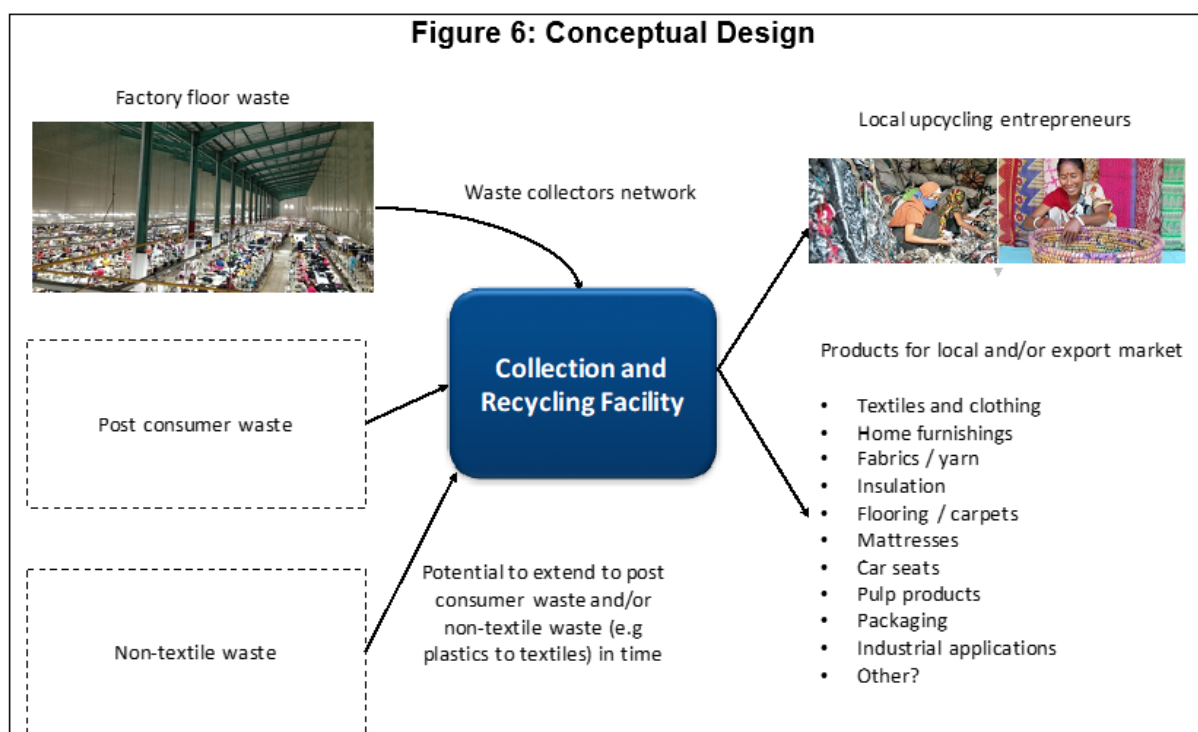
117. To address some of these challenges and increase opportunities for sector growth, it is proposed that a Textile Recycling Ecosystem facility is established. This will redirect waste materials away from the export market toward domestic production; and to decriminalize, improve efficiencies, increase the value, and promote work opportunities for the textile recycling sector.

118. This proposal aims to move beyond internal factory initiatives and ineffective recycling of waste—from low-value products into a more effective and strategic ecosystem of waste handling and recycling. This will have three main elements:

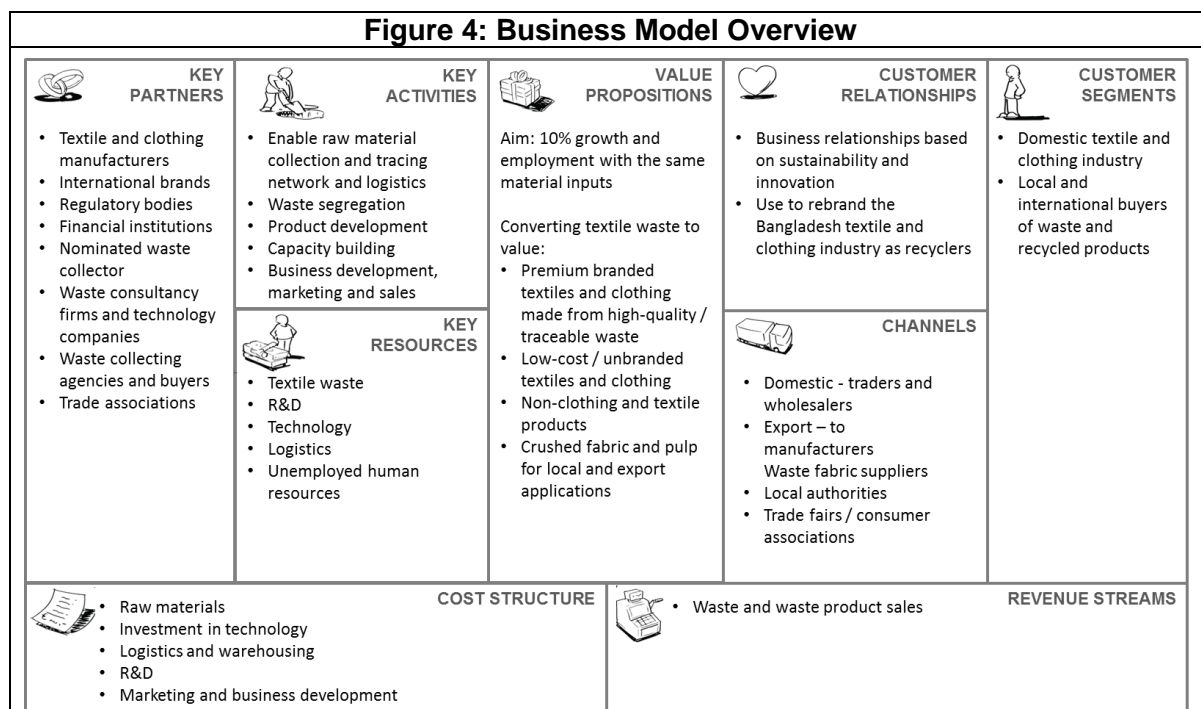
- The organization of a network of collectors to collect traceable waste from factory floors and other sources within Bangladesh.
- A hub and/or facility that can (i) sort the waste into different forms, (ii) recycle some of the waste by spinning cotton yarn from the waste for domestic use, and (iii) distribute and/or sell the remainder of the waste for upcycling.
- A network of entrepreneurs and processing centers that can upcycle the waste for domestic use and for export.

119. It is worth noting that while factory floor waste was considered to have the highest immediate potential by Bangladesh workshop participants, other forms of recycling, such as plastics-to-waste, has also generated interest and needs to be further explored.

120. A conceptual design and business model overview for this initiative are outlined in Figures 6 and 7.



Source: Based on InTaCt research and workshop outputs.



Source: Based on InTaCt research and workshop outputs.

b. Value proposition

121. The value proposition for the textile recycling ecosystem is to increase the value of existing textile waste beyond producing low-value products or exporting raw waste to substantially increase growth, employment, and small-scale business opportunities with the same material inputs.

122. The aim is to sort and convert different types of factory floor waste into different product categories, as follows:

- premium branded textiles and clothing made from high-quality and/or traceable waste,
- low-cost and/or unbranded textiles and clothing from low-quality waste,
- non-clothing and textile products,
- crushed fabric and pulp for local and export applications, and
- blended yarn (coarse yarn, neppy yarn, and inject yarns) for making textiles.

123. It should be noted that there is further potential to expanding this initiative into post-consumer textile waste and/or non-textile waste. However, at this point, customs fees and restrictions make it nonviable to import post-consumer waste from other countries. Technologies and the required investments would need to be studied further to explore the viability of a non-textile waste recycling facility. As a result, it was decided that it makes most sense to start with those easily available factory floor waste.

124. While a process by stages would be required to establish this initiative, the broader objective is to create a recycling ecosystem that engages multiple brands, suppliers, collectors, and entrepreneurs.

c. Customer segments and channels

125. The customer segment that will be top priority is the domestic textile and clothing industry as these are able to use the recycled or raw waste in their production. This includes both medium to large factories, which could reuse recycled products in their manufacturing process, or be reused by their network of entrepreneurs who could work with specific upcycling applications. For the latter, it is suggested that such entrepreneurs take an NGO or a microfinance institution as partners, which can support and finance these small-scale businesses.

126. The secondary customers include local and international buyers of the recycled products. For example, IKEA has been sourcing recycled rugs and floor coverings from the manufacturer Karupannya, which is based in Rangpur in northern Bangladesh. Today, Karupannya has 5,000 workers producing carpets for export to the EU, US, and Asia and more than 1,000 people producing rugs for this company from their homes for the local market.⁵⁸ IKEA has expressed its intent of working further with these community-based recycling initiatives.

127. To connect to these customers, the initiative will need to work with several channels, including traders, wholesalers, and local authorities. It will be important to get local buy-in to manage the anticipated challenges of changing the status quo of the existing waste industry. For the international market, it will be important to get buy-in from buyers and brands, and to engage with trade fairs and consumer associations.

128. In the local market, the initiative will seek to sell products to socially aware retailers, such as Bangladesh Rural Advancement Committee's (BRAC) Aarong retail chain, which seeks to empower artisans to rise above poverty.⁵⁹

d. Key activities

129. The main activities of the business model will include the following:

- Recruit factories into the ecosystem—starting with credible factories that are interested in building a more efficient and valuable recycling network in Bangladesh.
- Enable waste material collection through a network supported by tracing and logistics mechanisms. Waste collectors should also be able to sell the waste directly, if appropriate, or sell the waste to the facility at an agreed and fair rate.
- Waste segregation—sorting of waste into different categories, either for recycling in the facility or used to supply customers.
- Internal recycling of waste—at this point, it is unclear as to what type of recycling will be done within the facility. This needs to be explored further based on the waste material inputs and technology available.
- Sell and supply textile waste, and build the capacity of a network of upcycling entrepreneurs, in partnership with an NGO, or potentially with IKEA's Next Generation program.
- Establish a technology platform to manage the waste and upcycling network.
- Undertake business development, marketing, and sales to factories and buyers.

e. Key resources

130. Key resources required will include the following:

⁵⁸ Rahman (2015).

⁵⁹ Aarong. <http://www.aarong.com/about-aarong/>.

- A central recycling and sorting facility ideally located within a cluster of textile factories. In addition to sorting facilities, this facility should be able to process some predominant forms of textile waste for on-sale.
- Access to large volumes of textile waste from the factories.
- Technology platforms that support tracing, logistics, sorting, and network activities.
- Significant human resources will be required to collect and process the waste in the facility.

f. Key partners

131. At this early stage, a number of key partners are already keen to pioneer this initiative. They include the following:

- IKEA—which will pursue this initiative as part of its broader sustainability strategy of recycling 80% of the waste materials from its operations by 2020.⁶⁰ Other Swedish buyers, such as H&M, Lindex, and KappAhl, have also expressed an interest in this initiative.
- Zaber and Zubair (see photo, factory works in facility, photo: Mike Debelak)—the largest textile supplier to IKEA in Bangladesh, and the largest subsidiary of the Noman Group—a conglomerate with over \$1 billion in revenues.⁶¹
- Karupannya—a major supplier to IKEA, manufactures and exports rugs from Bangladesh, supplying about 90% to IKEA. Karupannya produces these rugs using about 1,000 tons per year of waste fabric from Zaber and Zubair, which produces for IKEA. IKEA, Karupannya, and Zaber and Zubair have worked together to secure the traceability of the textile waste in the production of these rugs.⁶²
- DBL Group—a diversified business entity, which has vertically integrated textile and apparel manufacturing facilities, has also been collaborating closely on the development of this initiative. Other suppliers such as Unilliance, Noman Terry Towel Mills Ltd., A-TeX, Classical Handmade Products, and Qualitex industries, among others, have expressed an interest to remain involved.
- Mistra Future Fashions has been working with Swedish brands and actors to support the development of a circular supply chain, and is working to develop technological solutions that can be relevant.
- BRAC, the Bangladesh-based development organization, has expressed interest in engaging in this initiative, with the potential to sell final products through the Aarong retail network.



132. At the Inclusive Business Forum held on 20 October 2016, representatives from IKEA, H&M, and BRAC confirmed their interest to explore this further. While no formal commitments have been made, Project InTaCt will continue to pursue this after the study.

133. In addition to this, the initiative should engage with other partners such as

- regulatory bodies;

⁶⁰ IKEA (2012).

⁶¹ Noman Group (2016).

⁶² From an email communication with Shafiquel Alam Selim dated 8th August 2016. Selim is Managing Director of Karupannya.

- financial institutions;
- waste collectors, consultancy firms, and technology companies; and
- trade associations.

134. It has been suggested that the initiative form a dedicated Recycled Product Manufacturers Association.

g. Revenue streams

135. The main revenue source comes from the sale of recycled textiles to the manufacturing industry in Bangladesh, or the sale of raw waste materials to upcycling entrepreneurs. The aim will be to generate a markup of 50% on the raw cost of the waste—assumed in the business case to have an export value.

h. Cost structure

136. The main capital expenditure will be for the purchase and upgrading of a central recycling and sorting facility that is geographically located within a cluster of textile factories. The main operational cost will be in purchasing the waste from the collector's network. There will also be variable costs associated with staffing the facility, and an investment in the development of the right technology platform and marketing approach for the business.

i. Cost–benefit analysis

Table 6: Cost–Benefit Analysis

Costs	Benefits
<ul style="list-style-type: none"> • Logistics, collection, and traceability—and technologies to support the above • Collection facility, equipment, and staffing • Capacity building for entrepreneurs • Potential competition and/or cannibalization of the existing industry 	<ul style="list-style-type: none"> • Creating more revenue, growth, and jobs without additional material inputs • Environmental footprint reduction • Enable small-scale inclusive business models • Waste collection • Waste recycling and/or upcycling

Source: Based on research and workshop outputs from InTaCt

j. High-level business case and investment approach

137. A high-level business case⁶³ has been developed based on key assumptions as outlined in Table 7.

Table 7: Textile Recycling Ecosystem Business Case

Net present value, 5 years, 10% discount rate (Year 1 not applied)			\$3–\$4 million
Profitability	Year 1	Year 5	Total 5 years
Revenues	\$0 million	\$15 million	\$35 million
CAPEX (could vary considerably based on capability)	\$3 million	–	\$3 million
OPEX	\$0.3 million	\$11 million	\$25 million

⁶³ Please note that this business case is considered at a very high level and needs to be refined further. For the purposes of this study, the business case has been developed to check commercial viability and estimate a ballpark valuation only.

Gross Profit	–\$3 million	\$4 million	\$6 million
Key Drivers and/or Assumptions	Year 1	Year 5	Total 5 years
Sourcing input and/or waste collected (aim is to recycle and upcycle up to a third of textile waste currently exported, i.e., \$30 million)	\$0 million	\$10 million	\$23 million
Mark-up on recycled and/or upcycled waste	50%	50%	
Staffing	10 FTE	100 FTE	

CAPEX = capital expenditure, FTE = full time equivalent, OPEX = operational expenditure.

Note: Business case details and assumptions are outlined in Appendix 2.

Source: Based on research and workshop outputs from InTaCt, and follow up discussions with participants.

138. It should be noted that this business case, and the expected impact, is based on a conservative view of getting a proportion of the textile waste that is currently exported into more value-adding activities. As estimates of textile industry wastes are around 10% through the manufacturing process, the potential of this business case is expected to be significantly greater if a significant ecosystem of buyers, suppliers, collectors, and entrepreneurs can be created.

139. The investment approach is to secure start-up capital from the following sources:

- Continue discussions with Zaber and Zubair and one of the first steps would be to explore the investment required to upgrade one of its spinning mills to recycle textile waste as a potential component of this solution.
- Engage with IKEA as a supporting partner and potential investor.
- Reconnect with H&M and the DBL Group—a diversified business entity with \$320 million in turnover in 2015⁶⁴—as potential co-financers and/or venture partners.
- Engage with development banks and other investors through their IB programs.
- Engage with the Government of Sweden, potentially through Swedfund.

k. Routes to impact

Table 8: Major Positive Development Impacts

Routes to Impact	Type	Unmet Need Addressed
Job-related opportunities—increased employment opportunities	The poor as producer	A textile recycling ecosystem would open up for entrepreneurs and local recycling businesses to innovate around recycling textiles and/or other materials. This is a setting where textile waste is a major problem, both originating from industry and consumers. Textiles can be turned not only into new textiles and clothing but also as part of home furnishing, fabrics and yarn, insulation, flooring, etc.
Job-related opportunities—opportunities for skills development, training	The poor as laborer	A textile recycling center could also handle the transformation of plastics into textiles, which will enhance job skills of laborers, and ensure a better quality of the environment.

⁶⁴ DBL Group (2016).

Quality of environment—reduction in pollution	The poor as producer	Textile waste is often dumped in landfills and left to pollute and eventually rot; if taken care of, it could be used as raw material instead.
Wider systemic impacts	The product development opportunities that stems from the recycling of textile waste are seemingly endless—from new clothes and fabrics to car seats and packaging materials. Waste recycling also opens up opportunities for entrepreneurs engaged in waste segregation, wholesaling, technical solutions, logistics, and design. Business relationships within the ecosystem should be based on sustainability and innovation, and creating opportunities for scaling up. The ecosystem could be used to rebrand the Bangladeshi textile and clothing industry as recyclers; promoting environmental sustainability, and increasing entrepreneurial and employment opportunities for and among the BOP.	
Impact targets (Year 5)	<ul style="list-style-type: none"> • Source \$10 million of textile waste, providing \$5 million in income^a to 5,800 waste collectors and their families, and an income of \$860 per collector per annum—three times the current average income of an informal worker.^b • Sell \$3 million of textile waste to 1,500 upcycling entrepreneurs, and enable them to earn an income of \$1,000 per annum based on a 50% markup on the cost of the waste product. • Employ 100 staff (minimum) in the core facility. • Create a systemic change that places a greater value on textile waste for recycling and upcycling in the domestic industry. 	

^a This assumes that collectors will sell their waste at two times the price paid to factories from which the waste is procured.

^b ADB (2010).

Source: Based on research and workshop outputs from InTaCt

I. Proposed next steps

140. A few different directions can be taken before continuing to the investment stage. As a result, a few areas need to be clarified and decided upon, as follows:

- Consider whether the proposed model will be pursued, or come up with a more simplified version of this business model, acting as a coordinator in organizing waste collectors and upcycling entrepreneurs—enabling the capability for upcycling.
- Confirm that the preferred recycling to be performed in the facility will be recycling of textiles into yarn—or alternatively, another form of recycling can be considered and agreed upon.
- Confirm whether the facility will be built, or acquired and upgraded. Identify preferred site and evaluate the capital expenditure and capacity.
- Decide whether the main focus and impact will be on the collection side and/or upcycling side. The business model assumes that it will work with both, but either the supply or demand side could also be the main focus.

141. The broader objective is to create a recycling ecosystem that engages multiple brands, suppliers, collectors, and entrepreneurs. However, in the short term, it is proposed that we

commence with those that have expressed an interest in taking this forward—and these are IKEA, H&M, Zaber and Zubair, DBL Group, Karupannya, and BRAC.

142. Once these steps have been taken and a more specific approach confirmed, a more specific business plan and business case can be developed to work toward the investment.

B. High-Potential Opportunities in Myanmar

1. Handloom Hub

a. Background and overview

143. Myanmar's handloomed fabrics are a neglected national treasure. Unfortunately, the social benefits of a handloom livelihood and the profits of producing these unique fabrics are decreasing quickly. Similar to that of India where the number of handloom weavers is declining,⁶⁵ Myanmar is also experiencing a decline in the sector with the handicraft not being passed on to the new generation.

144. Handloom Hub Myanmar (HHM) is a newly formed organization that aims to advance a sustainable and inclusive handloom industry in Myanmar by responsibly maximizing profits for producers and material suppliers. The HHM conceptual model has been developed in close collaboration with Dr. Helen Gunthorpe from BusinessKind—a nonprofit organization that establishes social businesses in poor and neglected Myanmar communities. Dr. Gunthorpe has established a working group in Myanmar to develop further this model. This proposal presents the social benefits of supporting a Myanmar handloom industry, defines the reasons for its decline, and outlines realistic solutions that compel social impact investors to support the initial funding of HHM.

145. The following presents three main reasons why small handloom operations are losing profits:⁶⁶

- i. Producers are in remote areas; disconnected to each other, suppliers, and market; and are losing profits to middle person connectors**
 - Poor communication facilities—phone and internet
 - No access to skills training—marketing and basic business
 - High transport costs in obtaining supplies and in the shipping of products
 - No access to financing
- ii. Products are of low quality and quantity, producers are losing the opportunity to value up their product**
 - Inability to finance high-quality materials
 - Production is driven by what materials they can afford and what they know how to make
 - Faulty production equipment
 - Poor inventory storage—damage of products and materials from mold, rodents, and fading from exposure to the sun
 - No access to handloom skills training

⁶⁵ Government of India, Ministry of Textiles (2015).

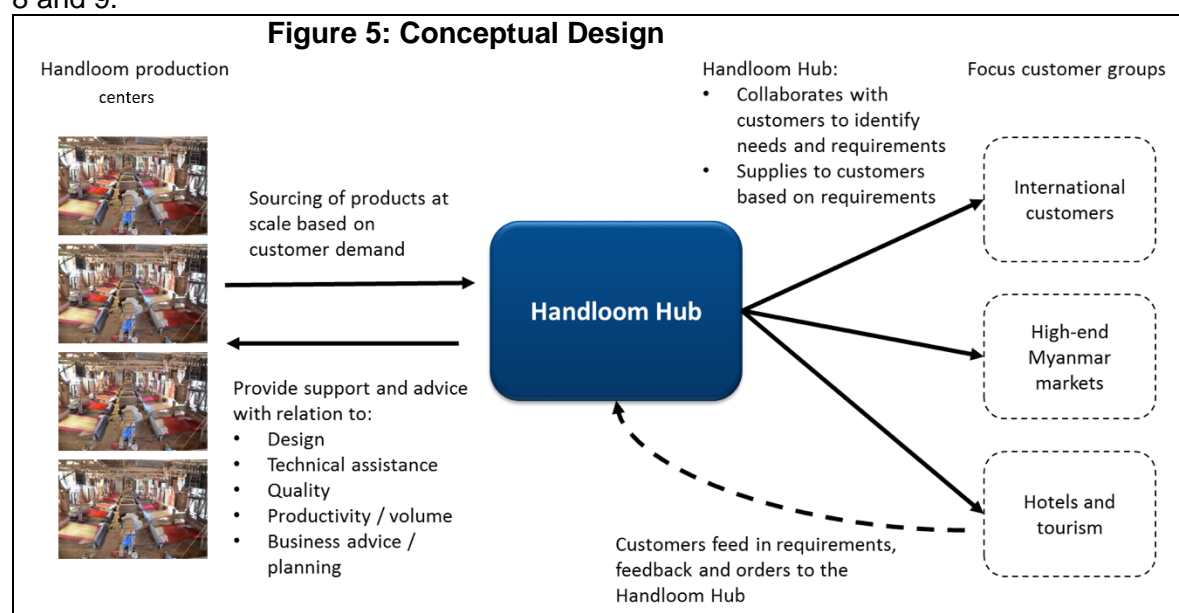
⁶⁶ Gunthorpe (2016).

iii. **Competition with large, uncooperative handloom factories (those with > 100 looms), and decreasing potential market share**

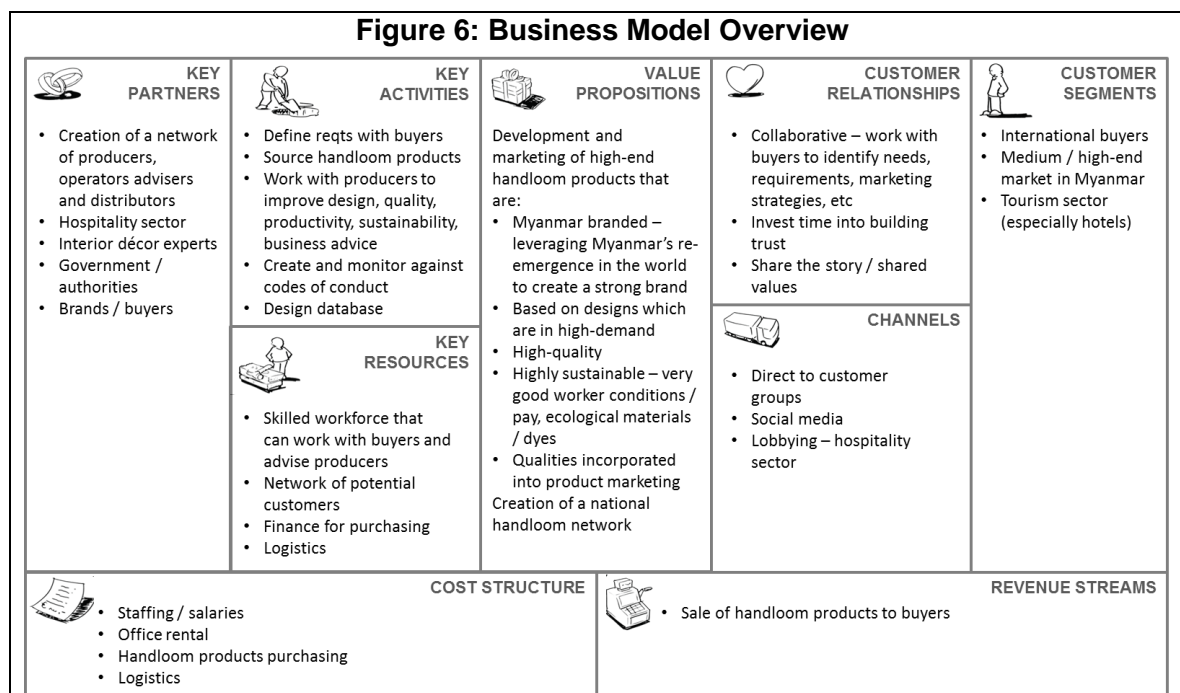
- Small producers have a disjointed production process—spinners, dyers, warp and were weavers—not working together

146. As a result of these challenges, the sector needs to engage productively in the value chain of international companies. HHM will open these three roadblocks, allowing small producers higher profit margins on their products. HHM's purpose is to implement business strategies that support a robust handloom industry in Myanmar. It will do this by being the connector between producers, suppliers, and customers with a primary focus on increasing the profitability of handloom products. Initially, HHM will be modeled as a social business with a neutral or for-profit operation. Other business sectors in Myanmar have used a “hub” model to successfully improve the producer's access to markets. HHM will be the first champion the Myanmar handloom textile industry.

147. A conceptual design and business model overview for this initiative are outlined in Figures 8 and 9.



Source: InTaCt research and workshop outputs.

Figure 6: Business Model Overview

Source: InTaCt research and workshop outputs.

b. Value proposition

148. Most small handloom operations are located in remote, underserved communities. Their products are connected to buyers by profit-taking middlemen who do not ramp up the product value. Production of handloom products rarely has a demand-driven market resulting in waste of materials and low profit margins. HHM will scale up the value of these neglected treasures, and increase the profits for the producers and suppliers by streamlining producer, supplier, and buyer transactions. The key advantage that HHM brings to its buyers is having the broadest selection of the highest quality handloom products that are designed for their demands, delivered on time, and having an end-service commitment.

149. The hub's priority is to allow producers to maximize their resources to what they do best—making and delivering a steady, on-time supply of high-quality products. The hub's job is to improve the value of the products by maximizing all other activities required to gain the highest profit margin on sales. The key activity will be connecting customer needs with producers' high-quality products. The realized profits will be used by the hub to achieve funding independence and for profit-sharing among the producers and suppliers.

c. Customer segments and channels

150. On the demand side, key customers include the bulk or individual buyers of handloomed textiles or ready-made products from handloom textiles. These international and national markets will have different demands and profiles. HHM's first priority is to meet the specific market demand for color, design, fiber blend, and products.

151. In the international market, the main customers will be bulk textile buyers who make products from handloom textiles, bulk buyers of handloom products, and individual buyers. Direct

sales will focus on fashion and interior designers, and on large-city clothing, home décor, and gift boutiques.

152. In Myanmar, online sales will target (i) bulk textile buyers who make products from handloom textiles (these buyers could be members); (ii) bulk buyers of handloom products, such as high-quality handicraft shops, hotels, tourist sites, spas, restaurants, etc.; and (iii) individual buyers from high-quality clothing boutiques, longyi shops, and markets. Interior designers and fashion designers will be engaged to help reach a broader market.

153. In the local market, the high-end longyi market in Myanmar is undervalued. Since Aung San Suu Kyi's release from house arrest, many women are wearing longyis again.⁶⁷ Many Myanmar working women want to wear traditional longyi fabrics designed into professional office attire.

154. HHM will reach its customer base through a combination of online promotions and direct sales.

d. Key activities

155. Key activities have been defined for the short and longer term. Within the first 1–2 years, HHM will work to establish itself, and a market, through the following activities:

- Establish HHM's administration.
- Implement its own code of conduct—for itself and its members—to be used for branding HHM.
- Identify highly skilled producers and high-quality material vendors that are already operating and motivated to become members.
- Identify and capture international and national market customers that value high-quality handloom textiles and products.
- Identify competition and quickly add advantage to HHM products over that of the competition.
- Connect products directly with market customer demands.
- Design and maintain an active website and social media for online sales.
- Negotiate for the highest competitive price of products with buyers.
- Connect highly skilled producers with high-quality material and equipment vendors.
- Negotiate for the lowest price of the highest quality materials and equipment with supply vendors.
- Ensure a stable, on-time supply of high-quality market-driven products for buyers.
- Establish and maintain a trade license and facilitate the transport of materials and products.

156. By the end of this period, the aim is to have HHM operating effectively with at least 10 small handloom operations as members, who are realizing at least a 10% increase in profits because of increased market-driven product sales.

157. Over 2–5 years, the priority will be to expand the customer base, increase membership to new producers and supply vendors, and implement supportive services for members. Some of the activities during this period will include the following:

⁶⁷ Gray (2016).

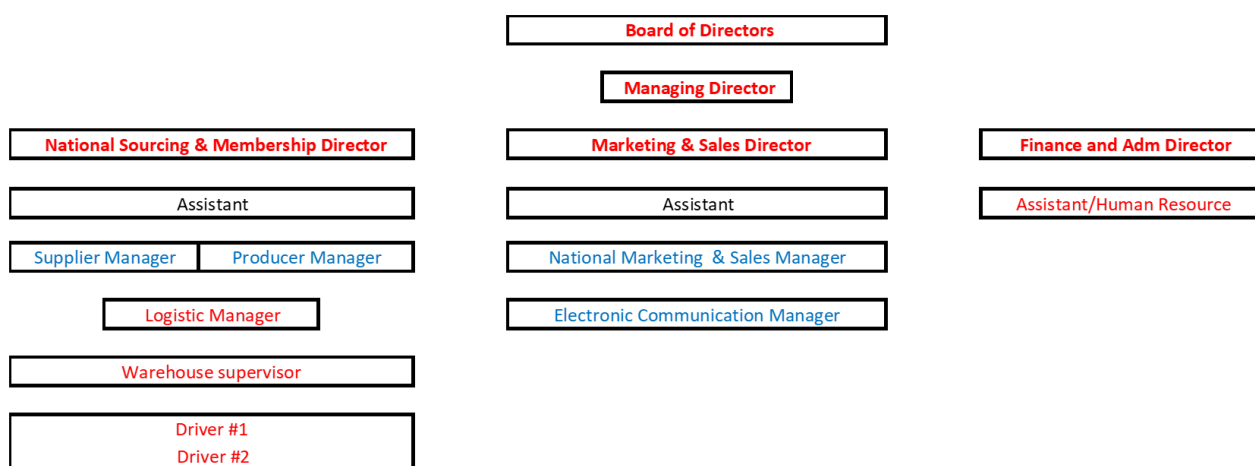
- Identify producers and vendors who are not already established but motivated to be members.
- Maintain loyal customers by adding advantage to products and services.
- Expand and broaden market targets by adding new product lines.
- Work with suppliers on improving design, quality, and sustainability characteristics.
- Develop and implement a skills training program—on financial, basic business, and digital literacy.
- Develop and implement a technical skills training program—loom set, color blending, and loom repair.
- Identify high- and low-profitability products, and loss leader products.
- Increase the production of highly profitable products to meet increasing demand.
- Drop products with low profitability, if not loss leaders.
- Continue to negotiate for the best prices from buyers and vendors.
- Add services that help members become sustainable and inclusive small businesses.

158. The aim after 5 years is to have a steadily increasing sales and profitability, along with increasing hub membership, leading to ongoing financial sustainability. HHM will be branded as Myanmar's inclusive high-quality handloom business. Profit-sharing will continue to be practiced among members.

e. Key resources

159. The main resources needed are staffing, made up of a talented and motivated team with a passion for handloom textiles, and with a strong administrative and logistical support. The initial organizational chart for the setup is illustrated in Figure 10:

Figure 10: Organizational Chart



Source: Gunthorpe (2016)

160. In addition to staffing and associated overheads, a sufficient office space and warehouse will be required.

161. At the early stages, an initial start-up funding will be required for salaries, rent, initial materials, and products.

f. Key partners

162. The HHM conceptual model was developed in close collaboration with Dr. Helen Gunthorpe from BusinessKind—a nonprofit organization that established a number of social businesses in poor neglected Myanmar communities. Dr Gunthorpe established a working group in Myanmar to develop this model further, and to champion the initiative after the study.

163. In addition, a number of other actors have expressed interest in this initiative through the Project InTaCt process. These include the HamsaHub, Amarakhit, Yoyamay Ethnographic Textiles Gallery, Kind Stitch, Pyoe Pin, and Synergia Consulting. The DaNa Facility—a newly established program funded by the Department for International Development in the United Kingdom—has shown interest in potentially investing in this initiative. The specific collaboration and roles are yet to be defined.

164. On the supply side, HHM will engage with hub members as quasi-customers—to include individual producers, cooperative producers, and material suppliers. Members will receive a percentage profit from the sales, as defined by the HHM's bylaws. These producers, suppliers, and hub members are key partners. They are contracted with HHM to produce the highest quality market-driven handloom textiles and products. The first members will be selected because they are already producing high-quality products and only need support to connect with buyers. Once the hub is established and profits are realized, membership will be opened to any producer who is motivated and able to maintain high- quality, on-time product production.

165. Customer groups, such as the national hospitality sector, and international and national home and fashion designers, are key partners that must ramp up the value to their individual customers. They must be able to effectively communicate what their projected buyers want in terms of color, fiber, and design.

166. An international shipping agency will be an important partner to ensure that products are transported safely and on time.

g. Revenue streams

167. The main source of income will be generated from the sale of handloom products to the various customer groups identified, earning an estimated 60% markup on the cost of goods sold. HHM will contract with producers, suppliers, and buyers in ways that work best to reduce risk and improve profits. Contract arrangements will be negotiated with buyers and suppliers as full-service contracts or through producer-to-buyer contracts.

168. Target sales revenues are \$600,000 after 2 years and \$3 million after 5 years.

h. Cost structure

169. Salaries are 60% of the initial budget with the aim of attracting the most experienced marketing director. The item with the highest budget is the product cost, which is expected to generate an average cost of \$15 per product.

170. For the full-service contract, HHM will set a price with buyers before producing the products. Producers will operate as cut–make–package. HHM will provide them with high-quality materials to produce products that have already been ordered by buyers. HHM will set a price with producers before the products are manufactured. For producer-to-buyer contracts, producers source their own materials (suppliers must meet the HHM code of conduct) and only use HHM to connect with buyers. HHM buys products on consignment from producers. HHM profits are distributed, first, to lower HHM operating costs, and then back to producers and suppliers.

171. The aim will be to establish a profit base early before any expansion and keep non-essential operating costs as low as possible.

172. HHM will need funding and investment for operational costs of about \$3 million for the first 3 years.

i. Cost–benefit analysis

Table 9: Cost–Benefit Analysis

Costs	Benefits
<ul style="list-style-type: none"> Staffing and facility for handloom hub Costs of sourcing handloom products to be put up for sale Logistic costs—purchased services 	<ul style="list-style-type: none"> Sale of handloom products to buyers—at volume Higher profit margins when sold in premium markets Handloom production centers benefit from improved productivity and increased demand and sales Handloom workers benefit from improved working conditions and pay

Source: Workshop outputs

j. High-level business case and investment approach

173. A high-level business case⁶⁸ has been developed based on key assumptions as outlined in Table 10.

Table 10: Handloom Hub Myanmar Business Case

Net present value, 5 years, 10% discount rate (Year 1 not applied)			\$1–\$2 million
Profitability	Year 1	Year 5	Total 5 years
Revenues	\$0.3 million	\$3.8 million	\$8.8 million
OPEX	\$0.7 million	\$2.3 million	\$6.7 million
Gross profit	–\$0.4 million	\$1.5 million	\$2.1 million
Key drivers/Assumptions	Year 1	Year 5	Total 5 years
Costs of goods sold	\$0.2 million	\$1.5 million	\$3.6 million
Markup on product sales	60%	60%	

FTE = full-time equivalent, OPEX = operational expenditure.

⁶⁸ Please note that this business case is at very high level and needs to be further refined. For the purposes of this study, the business case has been developed to check commercial viability and only to estimate a ballpark value.

Note: Business case details and assumptions are outlined in Appendix 2.
Source: Collaboration with workshop participants and Gunthorpe.

174. The scale and approach of HHM at this early stage lean more toward sourcing of grants and impact investing. For the next step, we will continue discussions with the DaNa Facility and the Swiss Agency for Development and Cooperation in Myanmar.

k. Routes to impact

Table 11: Major Positive Development Impacts

Routes to Impact	Type	Unmet Need Addressed
Product or service—product or service reducing vulnerability	The poor as supplier	In Myanmar, hand-loomed products have a long tradition and are considered something to be proud of. However, production is scattered across the country and mostly takes place in a home setting. Producers lack access to markets and they use designs that are not always in demand, thus, making handloom an unreliable source of income. With a handloom hub, producers could have greater market access and can be advised on new designs adapted to customer demand, thus, ensure higher incomes.
Job-related opportunities—increased employment opportunities	The poor as supplier	Producers linked to the hub will see any increase in demand for their products, thus, will be able to grow their business and create employment opportunities. This can also help increase job opportunities by just working from small towns outside the cities, thus, helping to address migration challenges.
Job-related opportunities—opportunities for skills development, and training	The poor as supplier	Greater access to design processes will increase producers' knowledge and make them open to skills development.
Gender—improved opportunities for women as laborer/producer	The poor as supplier	Handloomers are often women. By creating a space in which producers can learn, sell, and develop new products, this will benefit women at a greater level. Women generating incomes from safe, home-based production facilities also produce societal benefits.
Wider systemic impacts	Myanmar's tradition of handloom is widespread across the country but suffers from a lack of market access. A handloom hub designed to be the center of a national handloom network will bring producers together, creating opportunities for skills development, and greater access to current and new markets. The handloom hub will leverage Myanmar's reemergence into the world to create a strong brand—a brand based on designs that are in high demand. Sustainability will be ensured through fair working conditions and pay, and the use of organic materials and dye. Women make up a large majority of handloom producers. Through the hub, their skills and income will be greatly improved.	

Impact targets (Year 5)	<ul style="list-style-type: none"> To have 870 handloom weavers earning double the minimum wage— i.e., \$5.80 per day—for producing premium products that cater to an international marketplace.
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Source: Collaboration with workshop participants and Gunthorpe.

I. Next steps

175. The next steps will be for BusinessKind to search for potential donors and/or impact investors to invest in this initiative. A partner from Synergia Consulting has been engaged to map these investment possibilities. They will reconnect with the DaNa Facility, which plans to have a call opening in November 2017. Once a few potential investors are identified, the facility will engage with other potential investors.

2. Self-Help Hub and Resource Center

a. Background and overview

176. The concept of self-help groups (SHGs) has long been established as a way of helping small communities raise themselves out of poverty. SHGs are small, voluntary associations of people, from the same socioeconomic background, who come together for the purpose of solving their common problems through self-help and mutual help. SHGs are often village-based groups, formed and supported usually by NGOs or government agencies, which help to develop their access to financial services, and to wider development programs. SHGs enable women to grow their savings and access credit, and act as community platforms from which women become active in village affairs.⁶⁹ SHGs have also proven to be highly scalable business models, with about 8–9 million SHGs supporting tens of millions of people in India alone.⁷⁰

177. While SHGs are often village-based, we believe there is great potential to make these work in factory settings in a financially sustainable manner. Project InTaCt workshops held in February and March 2016 identified the need for a “resource center” in factories that could help meet the needs of the staff working there. Many needs were identified, including the following:⁷¹

- Savings plan, microfinance, and micro-insurance;
- Educational programs;
- Health care advice, products and services;
- Community and home needs;
- Guest house needs and/or pooled services; and
- Home production facilities.

Worker residence in Myanmar
(Photo by Mike Debelak, Inclusive Business Sweden)



178. In some cases, these needs are met by the factories, but not always in a quality way. For example, some factories provide workers with housing and food at a cost. However, some of these lodgings are of very poor quality, with workers living 4–5 in a room with a poor state of hygiene, as shown in the photos.

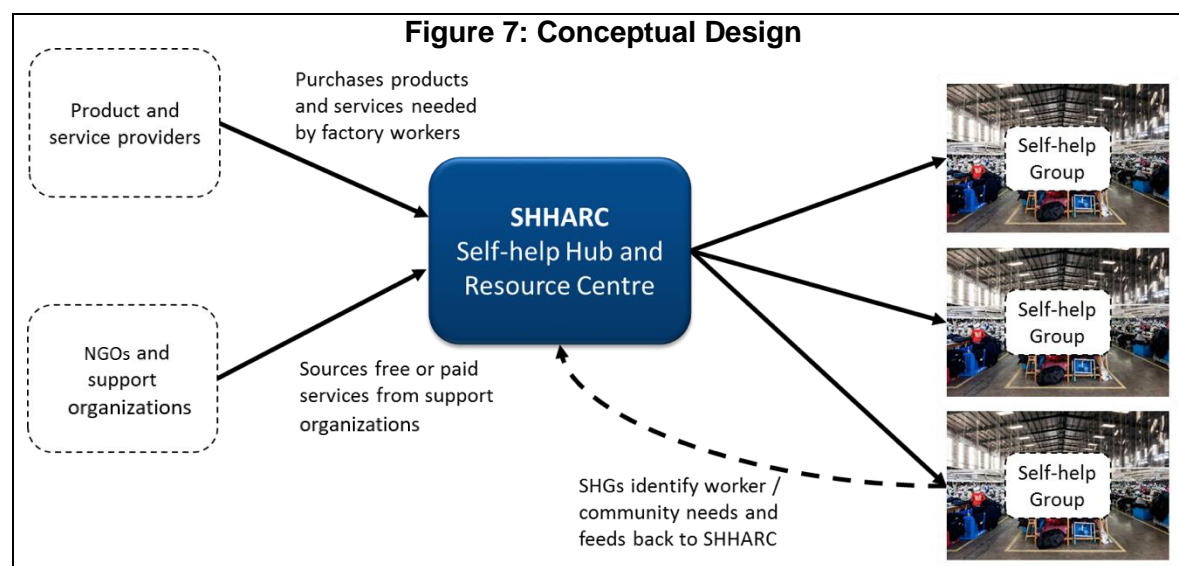
⁶⁹ Care, Catholic Relief Services, USAID, and GTZ (2006).

⁷⁰ Kande (2015).

⁷¹ Based from Project InTaCt workshop documents and interviews with workers.

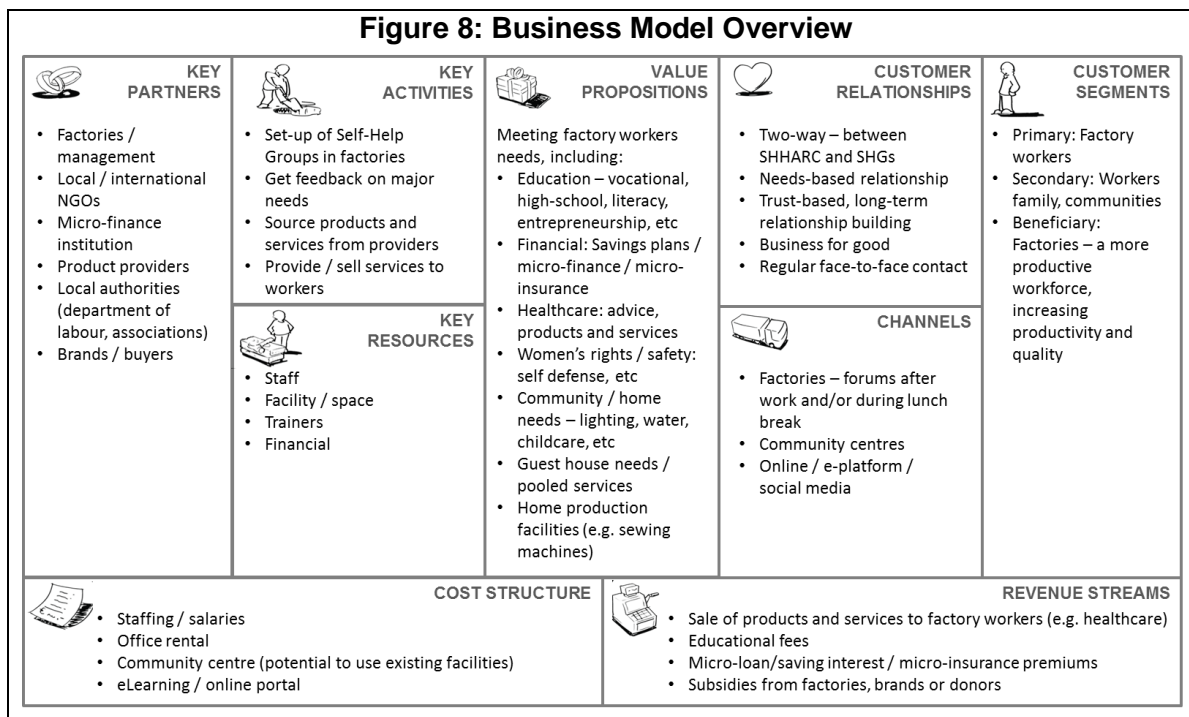
179. This initiative, named Self-Help Hub and Resource Centre (SHHARC), seeks to meet the needs of factory workers using an SHG model. This is done by both (i) helping to establish SHGs within factories, and (ii) providing and selling products and services to factory workers through the SHGs. The SHHARC initiative could be a highly scalable and cost-effective means of meeting workers' needs in a quickly growing industry. SHHARC will be a stand-alone business that will have factories and factory workers as its customer base.

180. A conceptual design and business model overview for this initiative are outlined in Figures 10 and 11.



SHGs = self-help groups, SHHARC = Self-Help Hub and Resource Centre.

Source: Based on InTaCt research and workshop outputs.

Figure 8: Business Model Overview

Source: Based on InTaCt research and workshop outputs.

b. Value proposition

181. While NGOs, unions, and government organizations work to improve the rights and worker conditions in Myanmar, fewer organizations are focused on meeting the broader needs and aspirations of workers. The core value proposition is to meet worker needs, particularly in the following areas:

- Education—vocational, high school, literacy, entrepreneurship, etc.
- Financial—savings plan, microfinance, micro-insurance
- Health care—advice, products, and services
- Women's rights and safety—self-defense, etc.
- Community and home needs—lighting, water, child care, etc.
- Guest house needs and/or pooled services
- Tech solutions—mobile phones and subscriptions, SMS services, apps
- Home production facilities—sewing machines, etc.

182. The SHG model allows for needs to be identified and met in a highly efficient fashion.

c. Customer segments and channels

183. The primary customer segment is factory workers in the textile and clothing industry across Myanmar. At the first stage, the focus of SHHARC will be on factory workers in Yangon, as 250 of the 300 garment factories engaged in the production of for-export products are based in Yangon.⁷² Of these workers, 90% are young women, many of whom are from remote regions and have come to Yangon to find work.⁷³ As such, they lack much of the products, services, and

⁷²SMART Myanmar (2015).

⁷³ Myanmar Garment Manufacturers Association. www.myanmargarments.org.

support structures that they have in their home towns, and face challenges with health, security, and a lack of access to education, among other needs (SMART Myanmar 2015).

184. The secondary customer segment is the factories, which can benefit from a healthier, happier, and more productive workforce. Educational and health care services should be particularly beneficial. There may also be potential to selling and distributing other products and services directly to factories for additional income.

185. The process will be to first approach these factories, make the management agree to be part of the SHHARC network, and to collaborate to establish an SHHARC hub. There were suggestions to work with and through the unions, but some concerns have been raised if factory managements will be open to this.

186. Once established, SHHARC can connect with SHGs and the workers through after work forums or during lunch breaks, either at the factory or in community centers. Additional online channels, including an e-platform and/or social media, could also be used to reach out to the network.

d. Key activities

187. The main activities of SHHARC will be the following:

- Engage with factory managements that are interested in participating in the program.
- Set up SHGs in factories. This involves recruiting appropriate workers to be the SHG representatives and training them on the program.
- Get feedback on their major needs through regular meetings, workshops, and other online or offline forums.
- Source products and services from providers. Products and services can be donated by NGOs or businesses, or purchased from businesses.
- Provide or sell services to workers through the SHGs, through an ordering and delivery system.

e. Key resources

188. The main resources needed for this initiative are staff, including the following:

- Management, communications, administration, and financial staff to run the hub.
- SHG coordinators to recruit factories into the program, set up the SHGs, and sell and deliver products and services through the SHGs.
- Sourcing staff to source products and services from multiple sources.

189. While the staff is the main resource, it should be quite variable to be able to grow with the business. Initially, only a few staff will be needed to start the business, with the main growth in sales staff as more factories are recruited.

190. In addition, a core office and storage facility will be needed in Yangon.

f. Key partners

191. SHHARC will need to work closely with a number of actors to meet the various needs of factory workers. As a starting point, it will make sense to work closely with the Myanmar Garment Manufacturers Association as a strategic partner, which can provide connections with factories and enable a positive introduction. It will also be valuable to connect with local authorities in the

sector, such as the Department of Labor, and potentially, with unions, though this will need to be explored further. It will also be worthwhile to connect with brands or buyers whose advocacy of the initiative may initially help to influence the factories to be open to the SHHARC initiative.

192. With QuizRR—which provides technology solutions that enable decent working conditions and safe workplaces for employees in global supply chains—the initiative will need to put forward the concept of developing technology solutions to enable worker engagement and empowerment as part of the self-help hub offering. Swedish International Development Cooperation Agency (Sida) has also expressed interest in supporting such an initiative.

193. On the supply side, SHHARC will need to connect with local and international NGOs, microfinance and/or micro-insurance institutions, and other product and service providers for the sourcing of products to be distributed and sold to factory workers.

g. Revenue streams

194. Revenue will be mainly generated through the sale of products and services to factory workers through the SHGs. This could include, among others, the sale of basic-need products (health care, lighting, water, etc.), education fees, microloan and/or savings interest, micro-insurance premiums, accommodation rental, mobile phones and associated services, and other products and services.

195. SHHARC could also generate income from selling relevant services directly to factories, such as training services. There is also the possibility of generating additional subsidies from donors and/or brands where SHHARC can help to meet some of their goals.

h. Cost structure

196. The majority of costs are personnel costs—management, communications, administration, and financial staff to run the hub, as well as SHG coordinators and sourcing staff. This makes the cost structure highly variable and flexible to grow with the demand.

197. The other major costs include the products purchased for on-sale (cost of goods sold). However, the purchasing team should make efforts to source donated products and services and/or buy at discounted rates to minimize this cost.

198. Other costs include rental of a physical office and storage area, the setting up and maintenance of an online site, and marketing costs.

i. Cost–benefit analysis

Table 12: Cost–Benefit Analysis

Costs	Benefits
<ul style="list-style-type: none"> • Low initial resourcing costs in terms of staffing—which will increase as services to additional factories will expand • Setting up and maintenance of facilities—offices and online site • Training functions and trainers 	<ul style="list-style-type: none"> • Potential to meet a broad range of factory workers' needs in an effective way • Business model viable through the sale of products and services

<ul style="list-style-type: none"> Day-to-day costs are limited as SHGs can take an active (voluntary) role 	<ul style="list-style-type: none"> Factory workers provide a large potential customer base with similar needs Factories benefit from a happier and more productive workforce Open up other opportunities for employment and entrepreneurship
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SHGs = self-help groups.

Source: Based on InTaCt research and workshop outputs.

j. High-level business case and investment approach

199. A high-level business case⁷⁴ has been developed based on key assumptions as outlined in Table 13.

Table 13: Self-Help Hub and Resource Centre Business Case

Net present value, 5 years, 10% discount rate (Year 1 not applied)			\$2–\$3 million
Profitability	Year 1	Year 5	Total 5 years
Revenues	\$0.2 million	\$8.5 million	\$17.0 million
OPEX	\$0.4 million	\$6.0 million	\$12.8 million
Gross profit	–\$0.2 million	\$2.5 million	\$4.1 million
Key drivers/Assumptions	Year 1	Year 5	Total 5 years
Percentage of workers engaged through SHGs	1%—2,600	20%—150,000	
Percentage of spending of wages through SHHARC	5%—\$57 PA	5%—\$57 PA	
Staffing (15 in core team and 1 SHG coordinator/2,000 customers)	16 FTE	89 FTE	

FTE = full-time equivalent, pa = per annum, SHGs = self-help groups, SHHARC = Self-Help Hub and Resource Centre.

Note: Business case details and assumptions are outlined in Appendix 2.

Source Based on InTaCt research and workshop outputs.

200. With no significant capital expenditure required, and a core team of just 10–20 staff, total expected cost of the operation has been estimated at approximately \$400,000 in year 1. It is proposed that a start-up investment of approximately \$500,000 is raised to meet working capital requirements.

201. It is recommended that this be initially set up as a pilot project with a combination of impact investment and pilot funding coming from either donors or buyers. Project InTaCt will reconnect with H&M to explore possibilities for them to potentially support the funding of a pilot project in Myanmar.

⁷⁴ Please note that this is a very high level business case and needs to be further refined. For the purposes of this study, the business case has been developed to check commercial viability and estimate a ballpark value only.

k. Routes to impact

Table 14: Major Positive Development Impacts

Routes to Impact	Type	Unmet Need addressed
Job-related opportunities—improved labor conditions	The poor as laborer	The textile and clothing industry in Southeast Asia has been regularly criticized for unacceptable working conditions—with low pay, poor housing, and scarce access to services, such as health care and financial facilities. The SHHARC will address these and other aspects of the current working conditions to meet factory workers' needs.
Gender—improved opportunities for women as laborer and/or producer	The poor as laborer	A great majority of factory workers are women, and addressing their needs (such as maternity care, safe housing, child care, and women's safety) would greatly enhance their position and welfare conditions.
Wider systemic impacts	The establishment of a SHHARC within the realms of any cluster of textile and clothing factories will meet workers' needs right where the workers work and live. This enhances the chance to make real impact. Addressing such needs (educational and/or vocational, financial, health care, community, etc.) will greatly improve working conditions and will, in the long term, contribute to an increase in productivity. For replicability, there is a need to train workers to set up their own hubs in other factory clusters, which will promote support to an informal pro-poor network, albeit in a formal setting.	
Impact targets (Year 5)	<ul style="list-style-type: none"> • Meet the basic needs of 150,000 garment workers by Year 5 	

SHHARC = Self-Help Hub and Resource Centre.

Source: Based on InTaCt research and workshop outputs.

I. Next steps

202. To establish SHHARC, it is recommended that an entrepreneur that is willing to champion and own the initiative be engaged, and take it forward as a stand-alone business. It is then suggested that SHHARC be established as a pilot project in the first year, working with a selected number of factories and suppliers to prove the concept and business case.

203. Investment for the first year will be raised from a combination of impact investors, donors, and/or buyers. We will reconnect with H&M to explore if it is interested in investing in the pilot project, focusing on their supplier factories.

204. Before moving forward, the fully developed SHHARC concept will be shared with the Myanmar Garment Manufacturers Association, Pyoe Pin, BSR HER Project, and KT Care Foundation to explore options for ownership and for the establishment of the business model.

VI. INSIGHTS AND CONCLUSIONS

205. In terms of sustainability, the textile and clothing sector in Asia is currently focused on the more traditional corporate social responsibility (CSR) measures. This means that CSR is focused on worker conditions and human rights, and on environmental measures addressing water, chemical, and energy use. These measures are extremely important, but they remain focused on improving the sustainability of the traditional industry through measures that may not always directly drive economic value creation.

206. Project InTaCt sought to take the industry beyond typical CSR measures by identifying IB models that challenge the status quo, and making these scalable to become financially sustainable and with a clear business case. This was not always easy as there was a strong tendency for actors to suggest the more traditional CSR measures. However, with some persistence, a number of opportunities with high potential were identified in Bangladesh and Myanmar.

207. Another challenge found through this process was identifying the logical owners of these opportunities. While brands typically make demands to their suppliers through codes of conduct and other mechanisms, the IB opportunities identified often required the development of new business models, and it was often unclear whether this should sit with the brand, supplier, or a third party.

208. Despite some of these challenges, 11 broad opportunities were identified in Bangladesh and a further eight in Myanmar. As the two countries are at different stages of development of the sector, they also differed in their focus when identifying these initiatives. Bangladesh focused on creating additional value for the sector and in addressing certain environmental concerns, while Myanmar focused on meeting its needs and in addressing the gaps in an emerging sector.

209. In each country, two opportunities were prioritized based on (i) those considered to be commercially viable and scalable, and with a great potential for positive impact; and (ii) those that had taken the interest of actors in Bangladesh and Myanmar and where they plan to engage in.

210. In Bangladesh, the two initiatives prioritized were (i) a sustainable farmer-to-factory supply chain for jute denim, and (ii) a cluster-based textile recycling ecosystem.

211. In Myanmar, the two initiatives prioritized were (i) a handloom hub network, and (ii) a self-help hub and resource center.

212. While further detailing and sizing is required, we have made a quick assessment of these four opportunities in Table 15.⁷⁵

Table 15: Inclusive Business Quick Assessment					
Dimension	Criteria	Jute	Recycling	Handloom	SHHARC
Market and value chain	Future prospect of the market	H	H	M	M
	Product stability (risk)	H	H	L	M

⁷⁵ It must be noted that this is a very rough assessment based on the insights obtained from the study.

	Value chain integration	H	H	M	H
Financial—company		M	H	Unknown	L
Financial—new business		H	H	M	M
Social impact	Reach	M	H	L	H
	Depth	M	M	H	L
	System/relevance	H	H	L	M
Innovation	Business	H	H	M	M
	Social	H	H	M	M
	Environment	H	H	L	L
Overall		M/H	M/H	L/M	L/M
Recommendation		Proceed	Refine and Proceed	Grant fund / pilot	Pilot
H = high potential, M = medium potential, L = low potential (relative assessment).					

SHHARC = Self-Help Hub and Resource Centre.

Source: Researcher high-level assessment of developed opportunities.

213. Based on this assessment and overall potential, it is recommended that the two opportunities in Bangladesh—the Jute Denim and the Textile Recycling Ecosystem—be detailed further toward making a fully functional investment and implementation plan. In Myanmar, the handloom hub will seek initial donor financing, and the SHHARC requires a pilot project to further test its potential.

214. It is recommended that potential investors must undertake the following:

- Meet with IKEA, Zaber and Zubair, and Karupannya (and potentially H&M, BRAC, and others) in Bangladesh to discuss the development of the textile recycling ecosystem.
- Meet with Juteborg, Classical Handmade Products, and Janata Sadat in Bangladesh to discuss the jute denim opportunity.
- Provide advice and connectors for the handloom hub and SHHARC initiatives.

215. Finally, it is worth considering the even greater potential of the 19 IB opportunities identified across these two markets. While this study could not detail them all, these opportunities do represent a starting point for developing additional innovative and IB models in the sector. The hope is that many more of these opportunities are picked up by brands, suppliers, entrepreneurs, and NGOs and these are transformed into sustainable and scalable IB models right across the Asian textile and clothing industry.



Workers in factory in Myanmar. Photo by Mike Debelak.

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APPENDIXES

Appendix 1: List of Participating Organizations

These are the organizations in Bangladesh, Myanmar, and Sweden that the project engaged with in its various activities:

Project InTaCt's Participating organizations

Sweden/Europe	Bangladesh	Myanmar
<ul style="list-style-type: none"> • IKEA • H&M • Lindex • KappAhl • Juteborg • JuteLab International • H&M Foundation • Mistra Future Fashions • Decent Bangla • QuizRR • Axfoundation • Sida • Swedish Agency for Economic and Regional Growth • SwitchAsia • Impact Invest Scandinavia • I:Collect • Tyg till Tyg 	<ul style="list-style-type: none"> • IKEA Supply Ag • Zaber & Zabir • DBL Group • Classical Handmade Products/Rugs BD • Bangladesh Garment Manufacturers and Exporters Association • Karupannya • Nordic Chamber of Commerce and Industry in Bangladesh • BRAC • A-TEX • New Wave Group • UL Bangladesh • Noman Terry Towel Mills Limited • Unilliance • Alltex BD • Vision BD • Qualitex Industries • BD Handloom • SNV Bangladesh • Tarango • Asia Foundation • Esquire Group • VSO • Jutemart • Heed Bangladesh • Bangladesh Atomic Energy Commission • ADB 	<ul style="list-style-type: none"> • Pyoe Pin/British Council • BusinessKind • Myanmar Garment Manufacturers Association • Ministry of Industry • Ministry of Labour, Immigration and Population • Business Innovation Facility Myanmar • HamsaHub Consulting • SMART Myanmar • Control Union • Synergia Group • CUSO International • Myanmar Centre for Responsible Business • Thone Pan Hla Workers Association • Turquoise Mountain • European Union • UNIDO • UNDP • 88 Generation • No.3 Heavy Industries Enterprise • Yoyamay Ethnographic Textile Gallery • Action Labour Rights • East Growth Factory • Shwe Zin Ei Garment Factory • Myanmar Unique Garments • Success Creator Garment Factory • BSR–HER project • Action Aid • Htike Htike Co., Ltd.

		<ul style="list-style-type: none"> • HTM Garment • DaNa Facility • Sunflower Group Social Enterprise • Flame Tree Myanmar
<p>BRAC = Bangladesh Rural Advancement Committee, BSR = business for social responsibility. Source: Author Note: This list reflects organizations that participated in the workshops, whose representatives were interviewed, participated in field study visits, and/or were involved in the development of the initiatives.</p>		

*

APPENDIX 2: Business Case Calculations

A. Creation of a Sustainable Farmer-to-Factory Supply Chain for Jute Denim

This business case represents a high-level ballpark estimate of the value of this initiative.

SALES VOLUMES	Unit Price/Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Total	Assumptions made
Sales volumes Jute Denim (meters)		360,000	790,000	371,200	958,320	1,054,152	4,035,672	Half-year worth of production in Year 1 while building facility. Then 10%.
Sales volume Jute cotton/wool blend (kg)		90,000	198,000	217,800	239,580	263,538	1,008,918	Half-year worth of production in year 1 while building facility. Then 10%.
INCOME								
Sales revenue from Jute Denim	\$6	\$2,160,000	\$4,752,000	\$5,227,200	\$5,749,920	\$6,324,912	\$24,214,032	Year on year growth has been projected; Based on the indigo color.
Sales revenue from jute cotton/wool blend	\$8	\$720,000	\$1,584,000	\$1,742,400	\$1,196,640	\$2,108,304	\$8,071,344	Year on year group has been projected.
Other revenues		\$15,000	\$15,750	\$16,538	\$18,191	\$20,010	\$85,489	Year on year group has been projected.
TOTAL INCOME		\$2,895,000	\$6,351,750	\$6,986,138	\$7,684,751	\$8,453,226	\$32,370,865	
FIXED COST (CAPEX)								
Set up cost of Jute Denim & cotton Spinning facility; building construction		\$4,307,500	\$504,000	\$554,400	\$609,840	\$670,824	\$4,307,500	Tentative set up cost and cost of construction.
Upgrading cost of cotton spinning mill		\$690,000					\$690,000	Upgrading of existing cotton spill mill

*

SALES VOLUMES	Unit Price/Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Total	Assumptions made
ETP & new machine installation, installation of solar power stripping mechanism		\$2,160,000					\$2,160,000	Water purification system, recycling, stopping process, solar panels
TOTAL		\$7,157,500	\$0	\$0	\$0	\$0	\$7,157,500	
OPERATING COSTS (OPEX)								
Staffing numbers/FTE		60	120	132	145	160	617	10% year on year growth to match production growth.
Staffing costs	\$4,200	\$252,000	\$504,000	\$554,400	\$609,840	\$670,824	\$2,591,064	\$350 per month mix of workers and management.
Office/factory rental and utilities	\$120,000	\$120,000	\$132,000	\$145,200	\$159,220	\$182,603	\$739,023	All sorts of utilities and rental cost.
Cost of goods sold	30%	\$854,000	\$1,900,800	\$2,090,880	\$2,299,968	\$2,529,965	\$9,685,613	Estimate cost of purchasing jute.
Marketing/ comms	\$180,000	\$180,000	\$216,000	\$259,200	\$324,000	\$421,200	\$1,400,400	
Certification cost, consultation & support service, etc.	\$360,000	\$180,000	\$432,000	\$496,800	\$611,064	\$769,941	\$2,489,805	Certification costs for farmers.
Tours and travels		\$240,000	\$264,000	\$290,400	\$319,440	\$351,384		5 persons per year, 20 travels include accommodation, food, etc.
Other	\$12,000	\$12,000	\$14,400	\$16,560	\$20,369	\$26,479	\$89,808	
TOTAL		\$1,848,000	\$3,463,200	\$3,853,440	\$4,343,901	\$4,952,396	\$18,460,937	
TOTAL COSTS		\$9,005,500	\$3,463,200	\$3,853,440	\$4,343,901		\$25,618,437	
GROSS PROFIT		\$6,110,500	\$2,888,550	\$3,132,698	\$3,340,850		\$6,752,428	

kg = kilogram, FTE = full time equivalent.

Source: Developed with Juteborg based on outputs from the InTaCT workshop

B. Cluster-Based Textile Recycling Ecosystem Creation

This business case represents a high-level ballpark estimate of the value of this initiative.

SALES VOLUMES	Unit price/cost	Year 1	Year 2	Year 3	Year 4	Year 5	Total	Assumption made
INCOME								
Sales revenue		\$0	\$3,000,000	\$6,000,000	\$10,500,000	\$15,000,000	\$34,500,000	50% markup on waste.
TOTAL REVENUE		\$0	\$3,000,000	\$6,000,000	\$10,500,000	\$15,000,000	\$34,500,000	
FIXED COSTS (CAPEX)								
Purchase / building of facility		\$2,000,000					\$2,000,000	Rough purchase price for facility in Gazipur.Bikroy.com.
Upgrading of facility		\$1,000,000					\$1,000,000	Set-up cost estimate.
Other capex								
TOTAL		\$3,000,000	\$0	\$0	\$0	\$0	\$3,000,000	
OPERATING COSTS (OPEX)								
Staffing numbers / FTE		10	25	50	75	100	260	
Staffing costs	\$4 200	\$4,200	\$105,000	\$210,000	\$315,000	\$420,000	\$1,092,000	\$350 per month, mix of workers.
Office/factory rental utilities		\$21,000	\$52,500	\$105,000	\$157,500	\$210,000	\$546,000	50% of salaries
Cost of goods sold		\$0	\$2,000,000	\$4,000,000	\$7,000,000	\$10,000,000	\$23,000,000	Garment waste exporters \$30m in 2013. Aim to recycle/upcycle a third of this waste by Year 5.
Marketing / comms		\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000	
Purchased services		\$100,000	\$50,000	\$50,000	\$50,000	\$50,000	\$300,000	Technology platform.
Other							\$0	

SALES VOLUMES	Unit price/cost	Year 1	Year 2	Year 3	Year 4	Year 5	Total	Assumption made
TOTAL		\$263,000	\$2,307,500	\$4,465,000	\$7,622,500	\$10,780,000	\$25,438,000	
TOTAL COSTS		\$3,263,000	\$2,307,500	\$4,465,000	\$7,622,500	\$10,780,000	\$28,438,000	
GROSS PROFIT		\$3,263,000	\$692,500	\$1,535,000	\$2,877,500	\$4,220,000	\$6,062,000	
NET PRESENT VALUE	\$3,679,366							
							Discount rate	10%

kg = kilogram, FTE = full time equivalent.

Source: Based on research and workshop outputs from InTaCt, and follow-up discussions with participants.

C. Handloom Hub Network

This business case represents a high-level ballpark estimate of the value of this initiative.

		Year 1	Year 2	Year 3	Year 4	Year 5	Total
OPERATING COST (OPEX)							
Salaries							
Managing Director		\$70,000	\$70,000	\$70,000	\$75,000	\$75,000	\$360,000
National Sourcing & Membership Director		\$60,000	\$60,000	\$60,000	\$65,000	\$65,000	\$310,000
Assistant		\$15,000	\$15,000	\$15,000	\$18,000	\$18,000	\$81,000
Supply Manager		\$0	\$0	\$0	\$18,000	\$18,000	\$36,000
Producer Manager		\$0	\$0	\$0	\$18,000	\$18,000	\$36,000
Logistics Manager		\$15,000	\$15,000	\$15,000	\$18,000	\$18,000	\$81,000
Warehouse supervisor		\$6,000	\$6,000	\$6,000	\$8,000	\$8,000	\$34,000
Driver 1		\$3 500	\$3 500	\$3 500	\$4 000	\$4 000	\$18 500
Driver 2		\$0	\$0	\$0	\$3 500	\$3 500	\$7 000
Marketing & Sales Director		\$70,000	\$70,000	\$70,000	\$75,000	\$75,000	\$360,000
Assistant		\$15,000	\$15,000	\$15,000	\$18,000	\$18,000	\$81,000
National Marketing Manager		\$50,000	\$50,000	\$50,000	\$55,000	\$55,000	\$260,000
International Marketing Manager		\$0	\$0	\$0	\$0	\$60,000	\$60,000
Electronic Communication Manager		\$40,000	\$40,000	\$40,000	\$44,000	\$44,000	\$208,000
Finance and Admin Director						\$45,000	\$45,000
Assistant		\$15,000	\$15,000	\$15,000	\$22,000	\$22,000	\$89,000
Skills training and supportive service Manager					\$20,000	\$20,000	\$40,000
Contractual							
Rent-office	1,500 per month	\$18,000	\$18,000	\$18,000	\$20,000	\$20,000	\$94,000
Rent-warehouse	500 per month	\$6,000	\$6,000	\$6,000	\$7,000	\$7,000	\$32,000

Car and truck	350 per month x 2 (includes fuel)	\$8,400	\$8,400	\$8,400	\$9,000	\$9,000	\$43,200
Travel							
National		\$10,000	\$15,000	\$15,000	\$15,000	\$15,000	\$70,000
International		\$20,000	\$30,000	\$30,000	\$30,000	\$30,000	\$140,000
Communication							
Internet, Phones, Computers		\$10,000	\$10,000	\$10,000	\$12,000	\$12,000	\$54,000
Other Admin Costs - utilities, supplies		\$30,000	\$30,000	\$30,000	\$33,000	\$33,000	\$156,000
1-year tranche of products - average cost \$15 per product		\$150,000	\$300,000	\$600,000	\$1,000,000	\$1,500,000	\$3,550,000
Transportation cost of supplies and finished products							
International		\$50,000	\$75,000	\$85,000	\$85,000	\$85,000	\$380,000
National - outside Yangon		\$10,000	\$15,000	\$15,000	\$15,000	\$15,000	\$70,000
TOTAL COSTS		\$671,900	\$866,900	\$1,176,900	\$1,687,500	\$2,292,500	\$6,695,700
TOTAL REVENUE - 60% mark up of products		\$30,000	\$750,000	\$1,500,000	\$2,500,000	\$3,750,000	\$8,800,000
GROSS PROFIT		\$371,900	\$116,900	\$323,100	\$812,500	\$1,457,500	\$2,104,300
NET PRESENT VALUE	\$1,394,787					Discount rate	10%

Source: Collaboration with workshop participants and Gunthorpe.

D. Self-Help Hub and Resource Center

This business case represents a high-level ballpark estimate of the value of this initiative.

Sales Volumes	Unit price/ cost	Year 1	Year 2	Year 3	Year 4	Year 5	Total	Assumption made
Garment sector workers		260,000	338,000	439,400	571,220	742,586		Number of workers involved in the industry was forecasted to grow from the 260,000 currently employed to 600,000 in the next three years (National Export Strategy, Myanmar Ministry of Commerce and International Trade Center, 2014).
% workers engaged through SHGs		1%	5%	10%	15%	20%		Target 20% of workers by Year 5.
Worker engaged		2,600	16,900	43,940	856,683	148,517		
Average wage pa	1,140							\$95 per month is lower end average of the \$95-\$125 range given for factory workers. Source: Smart Myanmar, 2015: Responsible Sourcing in a Frontier Market.
% spending of wages through SHHARC	5%							
Spend	57							
INCOME								
Sales revenue	\$57	\$148,200	\$953,300	\$2,504,580	\$4,883,931	\$8,465,480	\$16,965,491	
TOTAL INCOME		\$148,200	\$953,300	\$2,504,580	\$4,883,931	\$8,465,480	\$16,965,491	
OPERATING COSTS (OPEX)								

Staffing numbers / FTE		16	23	37	58	89		15 in core team. Then aim will be to have 1 salesperson per 2 thousand customers (through SHGS).
Staffing costs	\$15,000	\$244,500	\$351,750	\$554,550	\$867,623	\$1,338,879	\$3,357,302	Above 15,000 MMK - specialised provider grade. Source: Total Compensation in Myanmar: Trends and Highlights, March 30, 2015
Overheads	20%	\$48,900	\$70,350	\$110,910	\$173,525	\$267,776	\$671,450	20% of salaries
Cost of goods sold (as a % of revenues)	50%	\$74,100	\$481,650	\$1,252,290	\$2,441,966	\$4,232,740	\$8,482,746	As a percentage of sales revenue. Assume some freebies through NGOs, volunteers, subsidies.
Marketing / comms (as a % of staffing)	10%	\$24,450	\$35,175	\$55,455	\$86,762	\$133,888	\$335,730	10% of salaries.
TOTAL		\$391,950	\$938,925	\$1,973,205	\$3,569,875	\$5,973,283	\$12,847,238	
TOTAL EXPENSES		\$391,950	\$938,925	\$1,973,205	\$3,569,875	\$5,973,283	\$12,847,238	
GROSS PROFIT		\$243,750	\$24,375	\$531,375	\$1,314,056	\$2,492,198	\$4,118,254	

kg = kilogram, FTE = full time equivalent, SHGs = self-help groups.

Sources:

- (i) Based on InTaCresearch and workshop outputs
- (ii) National Export Strategy, Myanmar Ministry of Commerce and International Trade Center, 2014.
- (iii) Smart Myanmar, 2015: Responsible Sourcing in a Frontier Market.
- (iv) Total Compensation in Myanmar: Trends and Highlights, March 30, 2015.