



# InTaCt

## Inclusive Textiles and Clothing

Mapping Inclusive Business Opportunities in the Textile and Clothing Sector in Asia



November 2016  
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## 1 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 through the creation of jobs and entrepreneurial opportunities that draws the majority of people into the economic and social mainstream, and continuously reduces poverty.

The Asian Development Bank's (ADB) inclusive business initiative started in 2012, and aims to support the creation of scalable partnerships and deals for inclusive business across Asia. In 2015, the 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 – named Project InTaCt (Inclusive Textiles and Clothing) – focussed on mapping opportunities for developing inclusive business 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 corporates like IKEA and H&M in the development of large-scale inclusive business models, the study was not limited to the opportunities connected to Swedish brands alone, but involved a highly participatory process involving many actors internationally from business, government and civil society.

The study was implemented with an approach supporting co-creation of business models between Swedish, Bangladeshi and Myanmar actors. After an initial desk research phase, the consultant made two visits to both Bangladesh and Myanmar in which they held numerous workshops, field trips, interviews and meetings in order to get a better understanding of the challenges and opportunities in the sector. Based on this, a number of opportunities were identified, prioritised 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 prioritised initiatives.

From this process, 11 broad opportunities were identified in Bangladesh and a further 8 in Myanmar. Within each of the two countries, two opportunities were prioritised based which were considered to be commercially viable and scalable with a great potential for positive impact, and that actors in Bangladesh, Myanmar and Sweden were interested in engaging with.

In Bangladesh, the two initiatives prioritised included a:

- Sustainable farmer-to-factory supply chain for jute denim
- Cluster-based textile recycling ecosystem

In Myanmar, the two initiatives prioritised were a:

- Handloom hub network
- Self-help hub and resource centre

These four initiatives have been further detailed using the business model canvas, with clear value propositions as well as 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 take these 4 initiatives forward. Furthermore, there is a positive energy in establishing innovative and scalable inclusive business

models that go beyond the business as usual activities of the textile and clothing sector in Bangladesh and Myanmar.



## 2 Background and Rationale

### 2.1 Making growth more inclusive requires inclusive business

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 inclusive business solutions mean less poverty and better living standards for the poor.

**Inclusive Business** is defined by ADB as commercially viable companies whose core business model is to provide – in scale – innovative and systemic solutions for the poor—the so-called Base of the Pyramid (BoP). About 60% of Asia’s population form the BoP. IB models can be delivered by small and larger companies. Smaller IB transactions (say below \$1 million) are typically done by so-called social enterprises. However, to reduce mass poverty, investments with large social impact are required. Therefore, most relevant IB models are operated by medium-sized and larger companies.

**ADB’s IB initiative** started in 2012 and focuses on three major areas: 1) increase the private sector in IB deals; 2) help the government promote a better enabling environment for IB, and (3) promote knowledge sharing and partnerships around IB. Between 2013 and 2016, ADB’s private sector department made 15 IB investments worth \$520 million<sup>1</sup>. Public sector support for IB include, among others accreditation and policy alignment (esp. in the Philippines), country workshops (India, Myanmar, Philippines, Sri Lanka, Viet Nam), market scoping studies (Bangladesh, India, People’s Republic of China, Indonesia, 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 work assignment), and second IB Asia Forum (held on 15-19 February 2016 in Manila), in partnership with the World Bank’s International Finance Corporation (IFC) and the Inter-American Development Bank (IAD).

**ADB supports Governments’** policies to promote IB in Asia. For example, in the Philippines it supports IB accreditation and policy alignment to prioritize accredited IB (and social enterprise) business models. In the People’s Republic of China, ADB is supporting two public sector loans with IB components. In Indonesia, IB was considered to be part of a program loan for private sector investment support to create decent jobs and relevant services for the poor.<sup>2</sup>

### 2.2 Inclusive Business opportunities for the Swedish textile sector in Asia

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 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 the Asia Pacific. The Swedish textile sector, through the research program Mistra Future Fashion, is now predominantly geared towards finding

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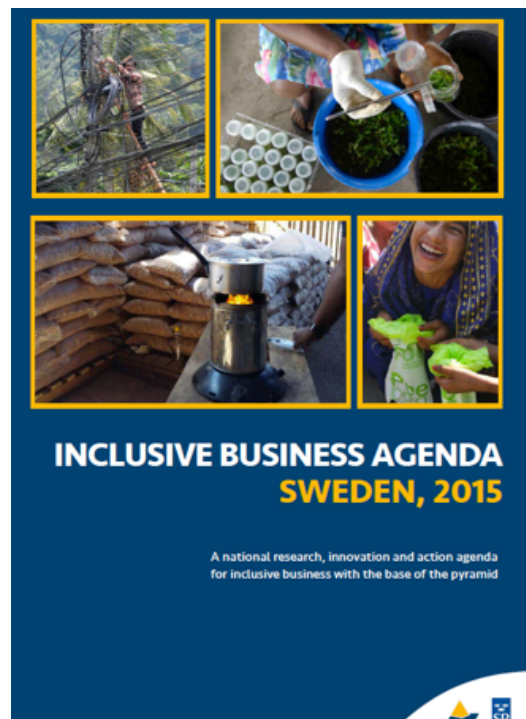
<sup>1</sup> Bauer, Armin. ADB. 2016

<sup>2</sup> ADB’s IB initiative. <http://www.inclusivebusinesshub.org/page/inclusive-business-in-the-asian-development-bank-adb>

sustainable production processes.<sup>3</sup> There is also ongoing development within research and innovations in smart textiles and identifying recycled materials that can have a lower impact on the environment.

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 from manufacturing and processing factories as well as cotton/yarn mills (957 total suppliers in Asia excluding PR China). From this, Bangladesh makes up a large portion (approximately 42%) while Myanmar makes up only about 1%.<sup>4</sup> 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, indicated a 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 showed initial interest in working with IBS to develop commercially viable IB models. If market leaders like these adopt such models it is assumed that competitors may also follow quickly, giving Myanmar low-income people a completely new opportunity for well-paid and decent employment, and business new return expectations.

**Inclusive Business Sweden (IBS)** recently developed a Swedish national approach to inclusive business through the development of the Inclusive Business Agenda. Through this, it was identified that the Swedish textile and clothing sector could leverage its significant capacity and influence to lead the development of inclusive business models with the BoP. As a result, the textile and clothing sector was highlighted as one of six focus sectors, and has set a mission that by 2030, it will help to enable the development of large-scale inclusive business models in textile and clothing value chains across 10 countries. This could, for example, be through co-operatives for raw materials or in clothing production, through the provision of healthcare services to workers, waste-to-textile business models, or elsewhere in the supply chain. More recently, IBS was funded by VINNOVA to implement the Inclusive Business Co-creation Accelerator (IBCA). The IBCA has set an overall vision that by 2020, Swedish business in collaboration with other actors, plays a leading role in addressing the global challenges of poverty - and here, we are engaging companies in the Swedish textile and clothing industry to take part.



<sup>3</sup> Mistra Future Fashion. <http://mistrafuturefasion.com>

<sup>4</sup> H&M, Our Supplier Factory List: <http://sustainability.hm.com/en/sustainability/downloads-resources/resources/supplier-list.html>



### 3 Study Approach

#### 3.1 ADB and Inclusive Business Sweden

ADB and Inclusive Business Sweden (IBS) has partnered 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 has been jointly financed by ADB and IBS with funding from the Swedish Government (through ADB's IB RETA) and VINNOVA (IBS's inclusive business co-creation programme). The study has been implemented by IBS.

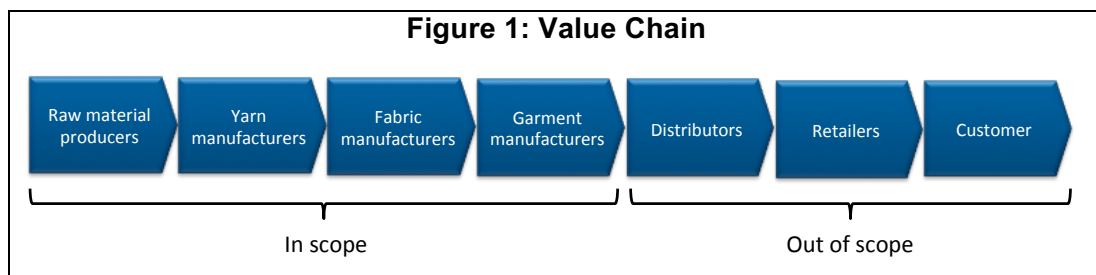
#### 3.2 Objective

**Project InTaCt** has involved a study mapping opportunities for developing inclusive business 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.

#### 3.3 Scope and Expectations

The scope of the study is defined as such:

- Focus: On mapping inclusive business opportunities. Improving responsible business / 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 Swedish business.
- Geographical: Focus on Bangladesh and Myanmar, with some references to Cambodia, Indonesia, and Sri Lanka. While InTaCt connected with Swedish actors as an entry point to and potential investor in a broader supply chain in these markets, the focus did remain on local development.
- Value chain: Focus on production – from the production of raw materials up to garment manufacturing as shown below. International distribution, wholesaling and retailing is excluded from the scope.



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

### 3.4 Focus on Inclusive Business

While inclusive business 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”,<sup>5</sup> 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 inclusive business in this sector. However, the Ethical Fashion Programme has made an attempt to define inclusive business as models that “develop a form of global partnership to strengthen the international competitiveness of microenterprises 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”.<sup>6</sup>

We also need to make a clear distinction between inclusive business and responsible business. While responsible business, often also referred to as corporate social responsibility (CSR), focuses on “actions that appear to further some social good, beyond the interests of the firm and that which is required by law”,<sup>7</sup> inclusive business takes a different approach by making poverty reduction the main objective of business model.<sup>8</sup> 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.

As such, some of the key criteria we focus on for inclusive business in the textiles and clothing industry:

- Making poverty reduction the main objective of the business model
- Establishing long-term trade partnerships with micro-enterprises
- Co-creating win-win business models with the BoP
- Shared value creation where extra value is generated for both the business and in the community
- Enabling business development in low-income communities that are not exploitative in nature
- Broader engagement and services within communities
- Provide new opportunities for entrepreneurship and employment, where many jobs are created that pay significantly above (>20%) over the going market rate
- Good for people and planet
- Complementary / addition to business as usual activities

These criteria give some guidelines on the scope of this initiative.

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<sup>5</sup> World Bank. 2010

<sup>6</sup> Poor Communities and Trade Programme. 2013. *Midterm Evaluation*, International Trade Centre, March

<sup>7</sup> McWilliams, Abigail; Siegel, Donald. 2001. *Corporate social responsibility: A theory of the firm perspective*. *Academy of Management Review* 26. pp.117–127

<sup>8</sup> Adapted from Armin Bauer. 2014. *Inclusive business or CSR — what's more effective for development*. Lean Alfred Santos, February

## **4 Methodology**

### **4.1 Key Questions**

The key questions addressed in this study include the following:

- What opportunities are there for the development of inclusive business models within the textile and clothing sector in Bangladesh and Myanmar?
- Which of these opportunities show greatest potential for commercial viability and scalability?
- Where is there potential for investment in these opportunities 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?

### **4.2 Desk Study**

Consisting mainly of background research on the textile industry in key Asian countries. This included, but was not limited to, a value chain analysis, the identification of inclusive business models in the textile industry, best practice research, exploration of gender impact, job creation, labour impact and other effects. The role of multinational companies such as IKEA and H&M was also taken into account.

### **4.3 Innovation Workshops**

Innovation workshops with key actors in each country were held to develop innovative ideas concerning inclusive business models and engage local actors in the process. This promoted good participation and shared understanding amongst actors. Workshops with companies were also beneficial to make sure they are engaged in the process and that they understand it. There were two rounds of workshops, one on the first trip and another on the second trip. 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 further defined the opportunities.

Towards the end of the study, we also held a workshop in Stockholm, Sweden, where we went into more detail regarding 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.

### **4.4 Interviews**

Stakeholder consultation in the form of discussions around 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.

### **4.5 Business Development**

Once opportunities have been identified, we have used a criteria-based approach to identify which opportunities have the greatest potential. For these, we have further developed the business cases and proposal in collaboration with those that have shown an interest.

## 5 Overview of the textile industry in Asia

### 5.1 Evolution of a global industry

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.<sup>9</sup> From the 1980s, the industry started to move large parts of its production to Southeast Asia, which by then had already led to the establishment of the protectionist Multi-Fibre Arrangement (MFA) in 1974, regulating 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; though 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.<sup>10</sup> Moreover, the market share guarantee devised by the MFA made other developing countries also benefit as employment opportunities increased. But the quotas also lead to complacency and a lack of competitiveness and effectiveness; and in some instances contributed to corruption since quotas were sometimes allocated to companies with political power, or sold to the highest bidder.<sup>11</sup> 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<sup>12</sup>.

In 1995, with the establishment of the Agreement on Textiles and Clothing (ATC), it was decided that the textile trade should be included under the jurisdiction of the WTO. 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 China 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. One explanation for this is the process of cost-driven relocation, as production constantly moves from countries with rising wages to countries with cheaper labour costs. This is especially true for the garment industry, which is more labour-intensive than the textile sector. Since the end of the MFA, buyers have also been keen to avoid overdependence on China in the global value chain, benefitting smaller countries.<sup>13</sup>

During the last few decades, many Asian countries have leveraged the established labour-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. China, with its scale and effectiveness in production,

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<sup>9</sup> Gereffi, Gary. 2002. *Outsourcing and Changing Patterns of International Competition in the Apparel Commodity Chain*, background paper for the UNIDO World Industrial Development Report 2001

<sup>10</sup> Robertson, David. 1997. *East Asian Trade After the Uruguay Round*, Cambridge: Cambridge University Press

<sup>11</sup> The Asia Foundation. 2012

<sup>12</sup> Pickles and Smith, 2016. *Articulations of Capital: Global Production Networks and Regional Transformations*, Wiley-Blackwell

<sup>13</sup> Keane, Jodie and te Velde, Dirk Willem. 2008. *The role of textile and clothing industries in growth and development strategies*, Overseas Development Institute

is still the biggest exporter in the garment and textile industry, followed by Bangladesh and Vietnam. Vietnam entered the WTO in 2007 and has since proved to be a real competitor for Bangladesh.<sup>14</sup>

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 had therefore 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.

Many Asian countries, both emerging ones 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 which are created, as well as 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 developmental impact of the garment sector.<sup>15</sup>

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 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 their labour 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 spill overs, 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 (footnote 13).

## 5.2 Employment and Wages

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 T&C industry.

International comparisons suggest that wages in the ready-made garments (RMG) sector in Bangladesh are among the lowest in the world. However, the wages women

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<sup>14</sup> Adhikari, R. and Yamamoto, Y. 2008. *The textile and clothing Industry: Adjusting to the post-quota world* in Escap (ed.) *Unveiling Protectionism: Regional Responses to Remaining Barriers in the Textiles and Clothing Trade*

<sup>15</sup> Ibid

are able to earn in the garment industry are generally higher than in alternative forms of employment, such as agricultural employment or domestic services.<sup>16</sup> The informal economy is usually of significant size in developing countries, so the textile industry can provide formal employment opportunities, especially for women. It may also be important to distinguish between the textile and garment industry as wages in the textile industry tend to be higher than in the garment/clothing industry. This is because textile production is more capital intensive and requires more highly skilled workers.

Efforts to increase wages for workers in the textile and garment industry may sometimes leave workers worse off. Local sub-contracted 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 more and more. The possible loss of employment and productivity from an increase in wages can then lead to a decline in welfare in society. In the case of the implementation of international labour standards, on the whole developing countries have rejected the use of them in trade agreements. This is because of fears that standards will be abused for protectionist reasons (footnote 13).

For a point of comparison, a benchmark analysis of employment and earnings for Bangladesh, Myanmar, Indonesia, Vietnam, Sri Lanka and Cambodia is included below.

	percent employed in the textile industry (average)	Bangladesh	Myanmar	Indonesia	Vietnam	Sri Lanka	Cambodia
population (million people)		151.6	51.6	254.4	90.7	20.4	14.8
labor force participation rate							
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 of labor force	4%	3.4%	8.4%	2.8%	2.8%	2.7%	4.9%
Income							
poverty incidence (percent of population)							
the very poor (\$1.9 per capita per day)		18.5	n/a	8.3	3.1	1.9	2.2
the poor (\$3.1)		56.8	n/a	36.4	12	14.6	21.6
the vulnerable poor (\$4.6)		80.5	n/a	60.4	28.5	38.6	52.6
the 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 poor (<\$3.1)		70%	60%	50%	50%	80%	40%
estimated percent of garment workers being low income people (<\$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

Sources: Poverty and Income distribution data from World Bank PovCalNet (download of 5 Oct 2016), Minimum data from ILO, GDP/capita and employment and population data from ADB Key Indicators. Huynh, P (2015) Employment, wages and working conditions in Asia Garment sector: Finding new drivers of competitiveness, International Labour Organization (ILO)(Retrieved on 10th October 2016) . Database access from the Vietnam Trade Promotion Agency (Accessed on 11th October 2016). China National Bureau of Statistics and Ministry of Human Resources and Social Security 2014 (Accessed on 11th of October 2016); Distribution data from World Bank (Accessed 11th of October 2016). Gardner, D. and Burnley, J. (2015) Made in Myanmar- Entrenched poverty or decent jobs for garment workers? OXFAM Briefing paper (Retrieved on 10th October 2016). Database compilation from WageIndicator (Accessed on 11th of October 2016). Poverty segment as a % of garment workers based on high-level estimates based on minimum wage and average incomes.

<sup>16</sup> Kabeer, N. and Simeen, M. 2004. *Rags, Riches and Women Workers: Export-oriented Garment Manufacturing in Bangladesh*

### 5.3 Bangladesh

Bangladesh hosts one of the region's most established textiles and clothing industries, and is one of two focus countries of this study. Currently, the Bangladeshi textile and garment industry 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, as well as to poverty reduction. The industry has also represented the first formal mass employment opportunity for women<sup>17</sup>; a sector that today employs around 4 million people, of which approximately 80% are women. Furthermore, there are many more engaged in the sector who are informally engaged or self-employed, where the poor work as sub-contractors to the formal industry. However, the 4 million formally employed only represents approximately 4% of the labour force in Bangladesh, and so while this sector is strong in Bangladesh, it does not address the country's significant underemployment problem.



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. Indeed, many workers use their income to send remittances to the countryside suggests that it is being used to support their families, indicating a broader developmental impact (footnote 16).

However, the industry has in recent years 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 1100 workers; an unprecedented accident in terms of the high number of victims. Factory fires in 2012 and 2013 also claimed lives. More recently, Bangladesh has also experienced an increase in terrorist attacks, the latest targeting foreigners at a coffee shop, killing 20 people in July 2016.<sup>18</sup> It is obviously too early to predict any long-term effect of these incidents on the textiles and garment industry, but foreign businesses are already limiting travels to the country. Moreover, there is ongoing and increasing competition from some countries.

<sup>17</sup> ILO and ADB. 2016. *Bangladesh – Looking beyond garments: Employment Diagnostics Study*

<sup>18</sup> Chapman, Ben. 2016. *Bangladesh clothing industry hit by terror attack fears as fashion brands pull staff out*, *Independent*. <http://www.independent.co.uk/news/business/news/bangladesh-terror-attack-travel-warning-fashion-clothing-companies-marks-and-spencer-uniqlo-h-and-m-a7121066.html>

## 5.4 Myanmar

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 ILO is implementing the Decent Work Framework, to support the development of Myanmar's garment sector with a range of different strategies and interventions for economic and employment growth. Currently most of the manufacturers in Myanmar are operating on a Cut, Make and Package (CMP) production system, whereby 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 the Myanmar garment industry capture a larger part of the global value chain, the priority being to strengthen Myanmar's garment sector input value chains.<sup>19</sup> If domestic capacity in these areas can be strengthened, the Myanmar garment sector could shift to an FOB basis for pricing, where international buyers pay Myanmar 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 margin in country, increasing opportunities for factories to provide decent employment to workers.

Myanmar has recently made moves towards democratisation which has led to the repeal of European and American export sanctions on the country. This has had immediate effects on the textiles and clothing sector, which is now experiencing new levels of growth from 260,000 workers in 2014 to an estimated 600,000 in 2017.<sup>20</sup> The Myanmar Garment Manufacturers Association (MGMA) reports



that new garment factories open at unprecedented rates, and the number of workers in the industry is forecasted to increase rapidly over the coming years. The MGMA's 10 year strategy seeks to grow the industry in the next ten years from a US\$912 million in 2012 to a US\$8-10 billion industry employing up to 1-1.5 million workers by 2024.<sup>21</sup>

International brands have become increasingly interested in Myanmar with its low-wage workforce. Other countries such as Bangladesh, Cambodia, Vietnam and China are more 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 increasingly expensive to produce in due to rising wages such as in Vietnam, Cambodia and China (footnote 20).

<sup>19</sup> ILO. 2012. *Decent Work in Myanmar*

<sup>20</sup> ILO. 2015a. *Myanmar garment sub-sector value chain analysis*

<sup>21</sup> Myanmar Garment Manufacturers Association, 2016. *Myanmar Garment Industry 10-year Strategy 2015 - 2024*



## 5.5 Cambodia

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

## 5.6 Indonesia

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 sector employing close to 5 million people and there are ambitions from the government to grow that share over the next few years. However, recent competition from neighbouring countries has brought on a slow-down of the Indonesian apparel industry, further enhanced by rising labour costs, with recent increases in minimum wages. Labour costs are higher in regions surrounding the capital Jakarta however, and some manufacturers have relocated to other areas in order to keep wages down.<sup>24</sup>

Moreover, Indonesia has not, in contrast to several other Southeast Asian nations, entered trade agreements with the United States or the EU at special tariff rates, which has also affected the sector negatively.

## 5.7 Sri Lanka

During the 1960s, the textile industry of Sri Lanka was small and catered only for 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 transformed from manufacturing textiles to readymade garments, and the sector continued to grow during the 1980s and 1990s. It had surpassed all other industry sectors by 1986 to comprise the largest export share; and in 1992, the overseeing authority, 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.<sup>25</sup>

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 serve the export market, primarily from the United States. At present, the apparel industry account for around 40 % of total exports from Sri Lanka.<sup>26</sup>

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<sup>22</sup> Ford, P. 2015. Cambodia's Garment Industry Rollercoaster, *The Diplomat*. (accessed 13 September 2016)

<sup>23</sup> ILO. 2015b. *Cambodia Garment and Footwear Sector Bulletin*, Issue 1, July

<sup>24</sup> Emerging Markets Direct, 2015. *Indonesia Textile and Garment Industry Report 2015*.

<sup>25</sup> Chelina Capital Corporation. 2013. *Textile and Apparel Industry of Sri Lanka: an overview*

<sup>26</sup> Ibid.

## 5.8 Vietnam

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

Vietnam is one of the countries included in the Trans Pacific Partnership (TPP), the trade deal between twelve Pacific Rim countries, aimed to be ratified in 2018. With this in place, the textiles and clothing sector of Vietnam is predicted to grow even more, with exports increasing particularly to the other TPP countries.

## 5.9 Gender impact

It has been found that the textiles and clothing industry has contributed significantly to the empowerment of women in the form of formal employment. Job creation in the sector has been especially strong for women in poor countries who have previously had little, if any, income opportunities in the formal sector. Moreover, being employed in the export-oriented industry may be better than working in the domestic economy, or being unemployed. The associated autonomy empowers and an improvement in gender equity, contributing to human development. It is also common to employ unskilled workers, opening up for entering the industry without qualifications (footnote 9).

Even though 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 non-monetary benefits such as healthcare. After controlling for skills, men still earn higher wages than women and around half of the female workers are employed on a temporary or subcontracted basis, whilst the majority of men occupy permanent positions. This makes women more vulnerable as it makes their income less stable and limit 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 (footnote 7). 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 labour rights of workers, but also the related reproductive rights of women workers with regard to things like childcare and other social issues.<sup>30</sup>

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<sup>27</sup> AmCham Vietnam. 2016. *Vietnam looks to revise apparel sector strategy for more growth with TPP*. September. (accessed 13 September)

<sup>28</sup> Textile World. 2012. A small tiger is growing up, October. (accessed 13 September 2016)  
<http://www.textileworld.com/textile-world/features/2012/10/vietnam-a-small-tiger-is-growing-up/>

<sup>29</sup> Fukushini, T. and Yamagata, T. 2014. *The Garment Industry in Low-Income Countries: An entry point of industrialisation*, IDE-JETRO

<sup>30</sup> Barrientos, Stephanie et al. 2004. *The gender dimensions of the globalization of production*, Working Paper No. 17. International Labour Office Geneva

## 6 Preliminary Hypotheses

### 6.1 Early stage activities

Inclusive Business Sweden’s initial work with the textiles 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 which is working towards the following ambition:

***By 2030, enable the development of large-scale inclusive business models in textile and clothing value chains across 10 countries***

While recognising that the textiles and clothing supply chain consists of a complicated string of actors where often supplies are sourced from several different countries or regions, roundtable participants agreed that to develop viable inclusive business models, the inclusiveness should be particularly stressed. Whole communities are often affected by the establishment and presence of an industry and there is much opportunity to make this beneficial for all through inclusive business models. Moreover, the complexity of the industry’s supply chain means that there are multiple inclusive business options within a range of sectors – water and sanitation, healthcare, fibre production and access to energy, to name a few.

As part of the IBCA programme, the Inclusive Business Forum was held in Stockholm in May 2015, with around 170 people attending. At the forum, participants gathered at sector-based workshops, of which one concerned Textiles and Clothing. The workshop focused on the What, the How and the Who of co-creating inclusive business with the BoP, and several interesting ideas emerged that were considered for this study as outlined in

**Figure 2: Inclusive Business Forum, Outputs for Textile and Clothing, 2015**

Needs...	Empowering workers in supply chain	Inclusive fibre production	Inclusive garment/textile production	Healthcare for workers	Textile waste management and recycling	Energy and water inputs
Current... • initiatives • solutions • actors • collaborations	Better work  QuizRR  BSI  Unions	Jutelab Int'l  Juteborg  BCI	'Village mode', Local coop  Handicraft co-ops  NGOs	HER  Doorstep clinics  BSCI  FWF  WaterAid  Peepoople	Europe (MFF, Soex)  Redesign local	BCI  SIWI
High potential... • initiatives • ideas • actors • collaborations	Education: -RnD -Design -Entrepreneurship -Co-owning	Educate after Swedish role model, ex Södra Skogsägarna  New organisation models for local growers	Semi-industrial (handicraft/industrial production)  <i>As social business model possible to replicate.</i> <i>Micro credits from factory?</i>		Recycling new tech  "Rent" – sufficient patents used in relevant industries in West, for instance cellulose technology	Energy recycling incineration  Alternative crop fibres

Figure 2. Among these are facilitating technology transfer to developing countries, especially within waste-to-textiles; creating spaces for use of alternative crop fibres, and outsourcing to semi-industrial units targeting women in BoP communities. Outputs from the workshop also mention the importance of replicable business models concerning waste-to-textiles, between factories and between companies, as well as the sheer magnitude of opportunities as viable business prospects, as opposed to CSR-initiatives or aid projects.

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 Swedish-based organisations, we used this connection as an entry point to a broader value chain and actor network within the local markets. However, Project InTaCt explored IB opportunities 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 inclusive business opportunities that may be able to be developed.

## 6.2 Literature overview

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

## 6.3 Exemplifying business cases

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

- *Better Cotton Initiative* promotes resource-efficient farming solutions to cotton farmers while building and improving capacity of producer organisations, thus improving the overall sustainability of cotton production<sup>31</sup>
- *IKEA Next Generation* collaborates with artisans in small-scale producer groups who would not usually meet the company’s regular demands of supply due to their limited resources and small numbers, but who can produce limited edition collections for IKEA stores around the world<sup>32</sup>
- *International Trade Centre’s Ethical Fashion Initiative* connects marginalised artisans from developing countries to international fashion houses, largely operating in Haiti and several African countries<sup>33</sup>
- *SNV Working with Women Programme* works with ten factories and selected service providers of Sexual and Reproductive Health and Rights in Bangladesh to pilot and test inclusive business models for the distribution of healthcare services to workers<sup>34</sup>
- *Thread – responsible fabric from ground to good* recycles 100% post-consumer PET plastic collected in Haiti and Honduras to produce polyester fabric and clothing<sup>35</sup>
- *The Jaipur Rugs Foundation* is a field-based organization affecting over 40,000 artisans at the grass roots level – promoting social enterprise at the individual level to support artisans from being mere wage earners to owning their own business<sup>36</sup>

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<sup>31</sup> Better Cotton Initiative, [www.bettercotton.org](http://www.bettercotton.org)

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

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

<sup>34</sup> SNV, 2014. *Working with Women*, [http://www.snv.org/public/cms/sites/default/files/explore/download/promoting\\_srhr\\_for\\_business\\_success\\_in\\_bangladesh.pdf](http://www.snv.org/public/cms/sites/default/files/explore/download/promoting_srhr_for_business_success_in_bangladesh.pdf)

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

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

- *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 concerning health and microfinance<sup>37</sup>

We have also looked at these cases as input to our hypotheses.

## **6.4 Hypothesis - potential opportunities**

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

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

### **6.4.1 Co-operatives**

Co-operatives can be reasonably common in the textile and clothing sector, but often at a small scale. Finding ways to structure, support and scale co-operatives – and link them with international supply chains – could be a good way to scaling the establishment of viable micro-enterprises.

### **6.4.2 Home production**

This can be done, for example, by contracting rural women to loom textiles by hand. Basing production out of 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, whereby over 2000 women were contracted to embroider cushion covers, while simultaneously taking part in an educational programme (footnote 32).

### **6.4.3 Waste-to-textile**

IKEA has expressed an interest in exploring new ways to handle waste-to-textiles, from a supply chain as well as a sustainability perspective. Here, the social enterprise department of the company could act as enablers to assess any testable solutions. Inclusive business 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. For instance, for the last decade, global consumption of cotton has surpassed its total production<sup>38</sup> and there are fears that we have reached 'peak cotton'. Thus an increasing demand for alternative fibres is projected on a global level. In addition to textile-to-textile recycling possibilities, some inclusive business models have been developed by collecting and recycling other forms of waste, such as plastics, into textiles (footnote 35).

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

<sup>38</sup> OECD/FAO. 2015. "Cotton", in OECD-FAO Agricultural Outlook 2015, OECD Publishing, Paris. DOI: [http://dx.doi.org/10.1787/agr\\_outlook-2015-14-en](http://dx.doi.org/10.1787/agr_outlook-2015-14-en)

#### **6.4.4 Exploring new materials**

With cotton on the decrease as the most commonly used fibre in the world, incentives are aplenty in trying to find new, sustainable materials. One of these is jute, predominantly grown in Bangladesh and the backbone of a formerly thriving industry. Jute can be used either on its own, or blended with cotton, to manufacture denim or other durable materials. The Swedish company Juteborg has been set up as an inclusive business, partly in conjunction with Bangladeshi partners, to explore ways to re-introduce jute as a manufacturing fibre.

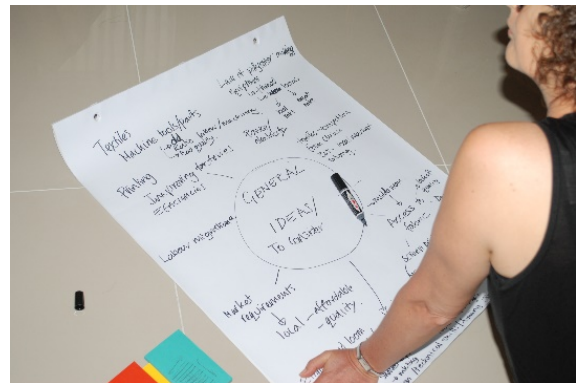
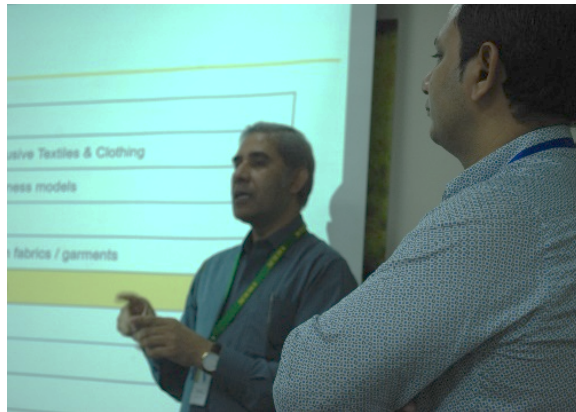
#### **6.4.5 Healthcare**

Health issues including malnutrition, communicable diseases, pregnancy complications, incorrect use of family planning materials, reproductive infections and diseases impact upon the productivity of the textile and clothing industry. However, factories often lack access to healthcare services. The establishment of healthcare inclusive business models that sell products and services to factories and/or factory workers could be one way of delivering services to these factory workers.

## 7 Delivery

### 7.1 Round 1 Workshops: February 2016

The first round of workshops was held in Bangladesh and Myanmar respectively, each with around 20 participants, representing the apparel and textiles industry from a variety of perspectives: from small, community-based cooperatives to large factories sourcing to several global brands. The aims of the workshops were to identify possible areas of exploration into inclusive business models for the industry; investable, scalable and replicable inclusive business models of benefit to all. Several ideas that emerged concerned the expansion of alternative fibres, renewable energy and the up-cycling and recycling of waste and materials. This turned out to be quite typical for Bangladesh where the industry is established and where there are structures in place to realise projects of scale.



Myanmar tackles similar challenges as Bangladesh in terms of safe housing for factory workers, including access to energy and healthcare. The rapid development of the industry often leads to the popping-up of slum communities in areas surrounding the factories. Authorities currently lack the ability to grasp the problems that the establishment of these slum areas bring with them, and there are therefore plenty of opportunity to explore inclusive business models to provide energy, water and other basic services to slum inhabitants – even if not directly related to the textile factory. However, the workshop predominantly focused on the establishment of supporting frameworks such as cooperatives for hand-loomed entrepreneurs and platforms for education, shared experiences and knowledge-building – for factory workers as well as management and other stakeholders. Other opportunities discussed were possibilities of research and development into waste yarn recycling, and the making of polyester from recycled materials, and the establishment of savings groups for factory workers.

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 considering both the needs of workers as well as the profit imperative.

### 7.2 Round 2 Workshops: March/April 2016

Based on a prioritisation and evaluation of the opportunities identified in the first research trip, and a discussion with key stakeholders, a shortlist of high-potential opportunities was identified as a basis for the round 2 workshops. In the second round, 5 half-day workshops were carried out in Bangladesh and Myanmar with a focus on

developing these inclusive business opportunities further, and specifically, defining the business models that could make them sustainable.

Workshops in Myanmar involved approximately 30 participants and focussed on:

- Linking factories and communities for mutual benefit
- Hand-loomed co-operatives and networks

Workshops in Bangladesh involved over 35 participants and focussed on:

- Community energy and water solutions linked to factories
- Textile waste recycling and reuse
- Reinventing the jute industry

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

### 7.3 Field Studies, Factory Visits and Interviews

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

In addition to further identifying and exploring inclusive business opportunities through these activities, the research provided a greater understanding of the context and challenges in and around the industry. One major insight, is that while factory conditions range wildly, from good to poor, it is often the living conditions, not the working conditions, that are the major challenge. Sometimes working in factories is a favourable alternative to other less comfortable and reliable livelihoods, and while it is recognised 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.





## 7.4 The 2<sup>nd</sup> Inclusive Business Asia Forum and its Relevance to the Industry

The first research trip was concluded with a visit to the 2<sup>nd</sup> Inclusive Business Asia Forum, hosted in Manila. With more than 400 participants from business, academia, finance, government and civil society, the discussions held were both inspirational and encouraging. It was especially exciting to take part in talks about the importance of collaboration and co-creation. To realise the promotion, proliferation and scaling of inclusive business, in Asia as well as in other parts of the world, we need to work collaboratively and cross-sectionally – in networks and business associations, but also with development banks, NGOs, corporations and academia. Allowing for internal innovation and intrapreneurship is vital within corporations wishing to explore inclusive business models, but if the project remains a project it risks being suffocated by the core business. An internal inclusive business project thus needs to be integrated into the core business to not disappear completely. Developing inclusive business 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 recognises 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.

Discussions also concerned the UN Sustainable Development Goals (SDGs) and how inclusive business could be the driver for their realisation. The SDGs represent a chance for the world to collaboratively work towards a common goal (or 17 common goals). For this to happen, businesses need to align their core activities to be able to help reach the SDG targets – something that could be done using inclusive business 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 inclusive business models, and to develop policy thereafter. If the governments of Bangladesh and Myanmar would work towards this, in collaboration with businesses and other organisations active in the industry, immense headway could be made towards 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).

In particular, our view is that inclusive business models in the textile and clothing industry can go a long way to address SDG #8 – decent work and economic growth. In particular, these business models can be focussed on working towards these three targets within this goal:

- 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 through access to financial services;
- 8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation;
- 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.

Networks and business associations can provide an ecosystem where inclusive businesses 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 inclusive businesses alike, and relates directly to workshop outputs from Myanmar, where networks and cooperatives were high on the wish list.

Discussions at the Forum made it clear that from a gender perspective, inclusive business 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 inclusive business models, however, women can be impacted implicitly through a focus on women’s issues, and explicitly through the tailoring of business models to target women’s needs. There are several constraints here – such as multiple commitments for women, gender-based expectations, a lack of rights and agency, as well as a lack of skills and education. These can be addressed through inclusive business 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 a large majority of the textile and clothing workforce made up 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 towards meeting equality goals.

## 7.5 Stockholm Innovation workshop

The workshop was held in Stockholm on September 7<sup>th</sup> 2016 involving representatives from a range of Swedish textile businesses, potential investors as well as other relevant actors with a will and ability to join forces towards a more sustainable textile industry in Southeast Asia. Out of the four prioritised opportunities that were presented, there was an interest and working group for three, namely:

1. Sustainable farmer-to-factory supply chain for jute denim
2. The textile recycling ecosystem
3. The self-help hub and resource centre



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

On the Jute Denim initiative, participants were interested to learn of both the properties are array of new uses of jute beyond traditional uses. Swedish retailers like H&M and Lindex were identified as potential customers of the final Jute Denim garments. There were also discussions about the potential to extend the initiative to India, another jute-producing nation.

The textile recycling ecosystem workgroup focussed on some of the challenges that could be faced in the recycling environmental 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 would better focus on factory floor waste as a starting point. We also discussed alternative recycling processes such as waste to yarn or waste to viscose. These alternatives will need to be considered further in the next stage.

The self-help hub and resource centre 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 was the case, Sida could be interested in potentially supporting.

Unfortunately, there does not seem to be much interest in the Swedish side from the fourth prioritised opportunity out of Myanmar – the Handloom Hub, and there is definitely more interest in the Bangladesh market at this point in time. However, the recent terrorist attacks in Bangladesh have made many actors hesitant in pursuing opportunities in and travelling to Bangladesh at this point in time.

Regardless, for the three initiatives, Inclusive Business Sweden will continue to enable collaboration between Swedish and Bangladeshi/Myanmar actors through the Inclusive Business Co-creation Accelerator programme.

## 8 Opportunities Identified

Throughout the Project InTaCt process, quite a number of inclusive business opportunities were identified, and then prioritised based on two main criteria:

- Interest of actors in Bangladesh, Myanmar and Sweden to engage in the development and possible implementation of the initiative
- Extent to which the initiative worked as a commercially viable inclusive business model with significant and scalable impact in the community

As a result, 4 high-potential opportunities were identified and developed in greater detail. Furthermore, we have identified a few more initiatives that could also be explored further in the next few months. The opportunities identified are outlined in the table below.

**Table 2: High-potential opportunities**

<b>Prioritisation</b>	<b>Bangladesh</b>	<b>Myanmar</b>
High-Potential Opportunities (detailed further in this report)	<ul style="list-style-type: none"> <li>• Jute Denim - creation of a sustainable farmer-to-factory supply chain for jute denim</li> <li>• Textile recycling ecosystem creation</li> </ul>	<ul style="list-style-type: none"> <li>• Handloom hub network</li> <li>• Self-help hub and resource centre</li> </ul>
Second-tier opportunities (warrant further exploration)	<ul style="list-style-type: none"> <li>• Collaboration with social entrepreneurs and artisans in small-scale producer groups for limited edition collections e.g. IKEA Next Generation</li> <li>• Decentralised networks of “slow fashion” production</li> <li>• Solar centre providing factory-community energy solutions to factories, workers and the community</li> </ul>	<ul style="list-style-type: none"> <li>• Better Cotton in Myanmar – enabling the introduction of BCI and enabling smallholder farmers</li> <li>• Sustainable textile communities – build new highly-sustainable communities integrated around textile and clothing production in greenfield sites</li> </ul>
Other opportunities identified	<ul style="list-style-type: none"> <li>• Waste water purification to clean drinking water, sanitation and/or agriculture / aquaculture projects</li> <li>• Sludge purification and reuse – for example, to produce bricks for housing or synthetic textiles</li> <li>• Community housing solutions for factory workers</li> <li>• Other alternative fibre development – e.g. bamboo</li> <li>• Centralised waste to energy facilities and business models in clustered factories</li> <li>• Expansion of Fair Price Shop concept offering fair-price products and services for workers</li> </ul>	<ul style="list-style-type: none"> <li>• Creating a “Made in Myanmar” line of highly sustainable / inclusive clothing</li> <li>• Grow factory capacity by enabling sub-contracting of home-based production</li> <li>• Textile recycling programmes – incorporating an inclusive business model for waste collection, hubs, sorting and recycling / up-cycling</li> <li>• Identifying technologies and business models from other more mature textile and clothing markets and applying a leapfrog approach in an emerging Myanmar market</li> </ul>

## 9 High-Potential Opportunities in Bangladesh

### 9.1 Farmer-to-factory Supply Chain for Jute Denim

#### 9.1.1 Background and Overview

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

Jute, known as the golden fibre, is regarded by some as the most sustainable natural fibre in the world.<sup>39</sup> It is 100% biologically degradable and its products can be easily disposed of or burnt without causing environmental hazards. A hectare of jute plants consumes 15 tonnes of carbon dioxide and releases 11 tonnes of oxygen during a 100 day cycle, while cultivating in crop rotations allows for food production and enriches soil fertility.<sup>40</sup>



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

On the other hand, Bangladesh will be the number one sourcing hot spot for the ready-made garment industry over the next 5 years.<sup>41</sup> The vast number of skilled labour force, and governmental as well as international support are the main reasons that have established Bangladesh as the preferred sourcing destination for the world buyers.

Furthermore, the global denim market for jeans alone is expected to reach \$56 Billion by 2018.<sup>42</sup> At the same time, there is growing concern about the sustainability of cotton production, the main component of denim, particularly due to heavy water and pesticide use.<sup>43</sup>

So this is the ideal opportunity to bring in the ground breaking 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 positively impacting the living standard of the BoP in Bangladesh by making them financially empowered.

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<sup>39</sup> Photo: Else-Marie Malmek, Juteborg AB

<sup>40</sup> Food and Agriculture Organization of the United Nations. 2016. *Future Fibres: Jute*. <http://www.fao.org/economic/futurefibres/fibres/jute/en/>

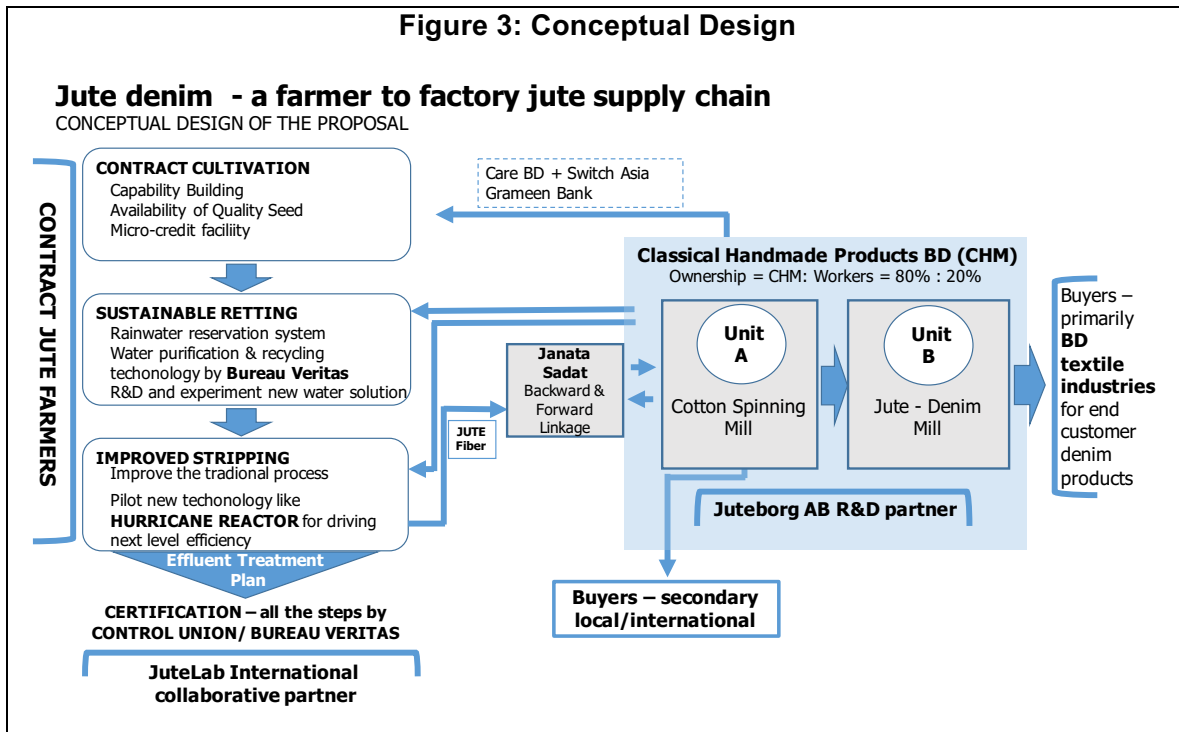
<sup>41</sup> McKinsey&Co. 2011. *Bangladesh’s ready-made garments landscape: The challenge of growth*

<sup>42</sup> Global Industry Analysts, Inc, 2017. *Market Research Report – Denim Jeans*.

<sup>43</sup> Kooistra and Termorshuizen, Biological Farming Systems, Wageningen University. 2006. *The sustainability of cotton: Consequences for man and environment*. [http://www.wur.nl/upload\\_mm/1/3/4/6cdf8347-b399-4365-8459-e24aeaba6922\\_223.pdf](http://www.wur.nl/upload_mm/1/3/4/6cdf8347-b399-4365-8459-e24aeaba6922_223.pdf)

The objective of the initiative is to produce primarily jute denim for the Bangladesh textile industries who will then make Jute denim finished products for global buyers.<sup>44</sup> This initiative would also play an active role in bringing synergies in the entire value chain by building capabilities of the contract jute farmers, and giving technological and improved solutions for non-hazardous retting and stripping process of the fibre in collaboration with other actors. This proposed model would also help to get high quality jute fibre by ensuring the right price for the farmers. The ownership of the production units will be divided as 80:20 ratio between owner and workers where 20% would be kept for the workers as 'workers' dividend'. So overall there would be genuine possibility of economically empowering the part of BoP population in Bangladesh through implementation of this model.

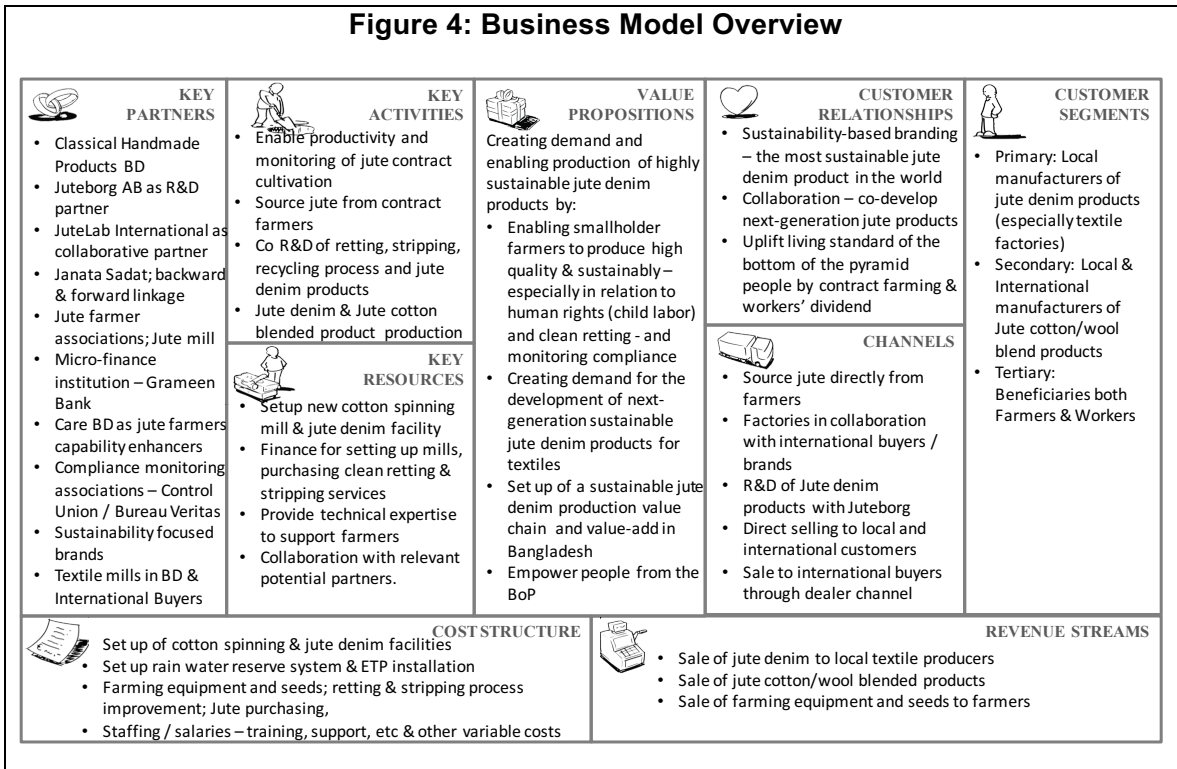
A conceptual design and business model overview for this initiative are included below<sup>45</sup>:



<sup>44</sup> This initiative has been established in close collaboration with JuteLab International, Juteborg AB and Classical Handmade Products Bangladesh, the custodian for this initiative

<sup>45</sup> Ibid

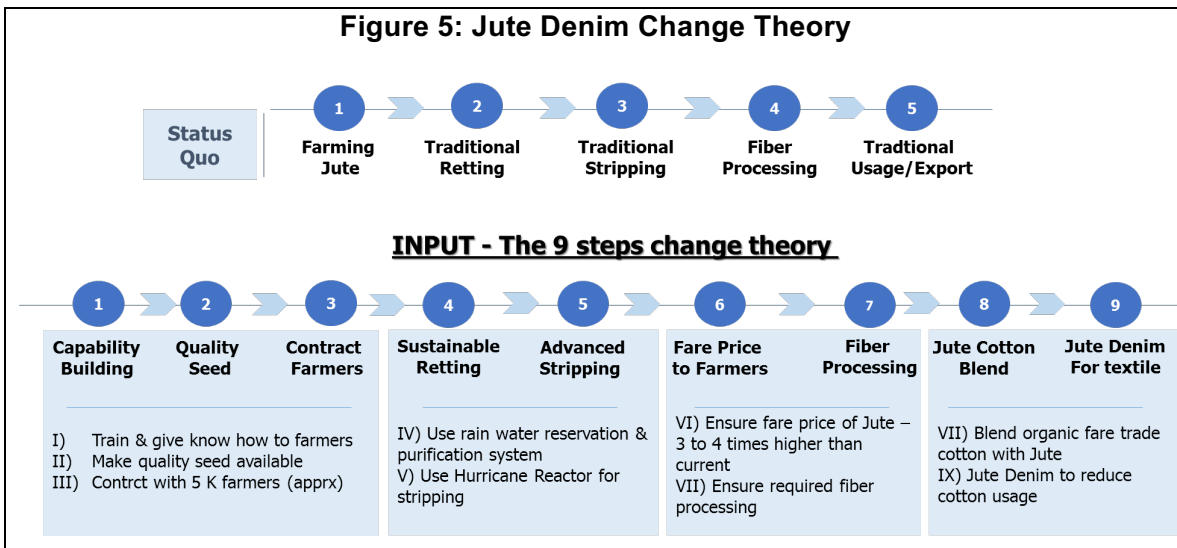
**Figure 4: Business Model Overview**



**9.1.2 Value proposition**

The value proposition seeks to work towards a more sustainable value chain for the production of jute denim from farmer to factory as illustrated in the change theory below:

**Figure 5: Jute Denim Change Theory**



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

- Enabling smallholder farmers to produce sustainably – especially in relation to living incomes, human rights and a clean production process<sup>46</sup>
  - Establish direct contact farming agreement with the jute farmers and help them building capability through training & providing better quality seeds for getting higher quality yields – this could be done in co-operation with Care Bangladesh, the renowned NGO who are already involved in such project supported by Switch Asia, financed by EU.<sup>47</sup>
  - Sourcing the required amount of raw jute directly from them giving right price would also empower them financially.
  - Enable the provision of financial support through micro-credit facility to the poor farmers.
  - Explore potential water purification solutions to make the retting process more environmental 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 fibre from the stem.
  - Enable an evaluation and certification process to ensure compliance in terms of meeting crucial aspects like implementing fair trade, protecting human right, no child labour, proper retting and stripping process etc.
  - The ownership structure of the facilities will be owner: worker = 80:20. Which suggests, the workers will have the part of the ownership of the facilities and they will avail an annual dividend.
- Creating demand for the development of next-generation sustainable jute denim products for textiles:
  - High quality raw jute will be sourced directly from the contract farmers. In the process, the quality & sustainability aspects are strictly maintained and monitored.
  - After primary processing of the raw jute in the cotton spinning mill, the jute denim would be produced in one of the facilities.
  - Perform relevant research work on Jute denim will be carried on in collaboration with relevant researchers and industry expert.
  - The focus on R&D will help 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 the probable buyers for Jute denim products.
- Establish a sustainable jute denim production value chain and add value to Bangladesh. Every part of the value chain will be taken care of with carefully crafted sustainable plan. For example, the rain water reserve system will be introduced to preserve water for the retting process. So it will significantly lower the water wastage. Not only that, 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.

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<sup>46</sup> 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 amongst others. Please refer to the Partners section for more details.

<sup>47</sup> Care Bangladesh / Switch Asia. 2014. *Project Brief: Promoting Sustainable Consumption and Production of JUTE Diversified Products*. [http://www.carebangladesh.org/publication/Publication\\_4815481.pdf](http://www.carebangladesh.org/publication/Publication_4815481.pdf)



- Set up of jute milling facility to meet such demands and value-add in Bangladesh
  - Two different units of mills will be set up in Bangladesh by Classical Hand Made Products BD (CHM) will be the key custodian of the mills.
  - Unit A will be the cotton spinning mill which will create base material for Jute denim.
  - Janata Sadat will play the role for backward and forward linkage by processing raw jute and making it ready to be used in Unit A.
  - Besides, some of the jute processing machines will also be installed there for right processing of raw jute. Unit A will produce jute cotton blend, jute wool blend, flax which are also key products besides jute denim.
  - Unit B will work for processing the processed jute cotton blend further to produce jute denim products for the prospective buyers.
  - Production from both the units will be used to sale to prospective buyers will act as source of revenues.

### 9.1.3 Customer Segments and Channels

The primary customers will be the local manufacturers of jute denim products with a particular focus on Bangladeshi textile and clothing factories. The Bangladeshi garment industry relied on imports to meet 60% of its denim demand, and this demand is increasing quite quickly<sup>48</sup>. Production output of both the units are sellable to these prospective buyers. Suppliers to Swedish brands H&M and Lindex were identified as possible customers of this business.<sup>49</sup>

The secondary customer segment will be the local/international buyers for the production out of Unit A – the jute cotton blend; jute wool blend; flax etc. IKEA has been identified as a potential customer for this solution, especially if a diversified and highly sustainable jute sourcing facility could be established.<sup>50</sup>

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 to meet their needs in producing and supplying jute and generating a sustainable income.

Especially in the early stages, it will be important to work collaboratively with domestic and both local factories and international customers, buyers and brands, in order to sell the benefits of jute to buyers, and ensure buyer requirements are closely met according to functional, comfort, quality and sustainability requirements. This work is already underway with a number of Swedish brands.<sup>51</sup> The processed jute cotton blend and jute denim products will then be sold to the local as well as international customers using direct selling. Furthermore, the dealers channel will also be exploited mostly to reach the international buyers.

### 9.1.4 Key Activities

Key activities of the business model would be the following

- Enable productivity and monitoring of smaller scale farmers – particular in terms of seed provision, improving productivity, helping with capacity building, providing

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<sup>48</sup> The Daily Star. 2016. *Bangladesh: hotspot for denim buyers*. Star Business Report, 3 March

<sup>49</sup> Project InTaCt workshop, Stockholm Sweden, 7 September 2016

<sup>50</sup> Project InTaCt workshops, Dhaka, April 2016.

<sup>51</sup> Including through the Project InTaCt workshop in Stockholm, 7 September 2016

micro-finance 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.
- Collaborate with other development partners to develop technological solutions for retting and stripping process for example process to preserve rain water, waste water recycling through Effluent Treatment plant (ETP), etc.
- Raw jute and jute denim processing for on sale to customers.
- Ongoing research and development of jute denim products with Juteborg AB - to add value in it and make it more contemporary. Juteborg AB will provide this R&D support in collaboration with the relevant stakeholders.

#### **9.1.5 Key Resources**

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

In addition, technologies for sustainable retting and stripping processes needs to be identified and financed. This could 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.

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

Finally, significant human resources would be required for the facility, with plans to grow staff to 160 within 5 years.

It will be important to have ready network for potential customers to sell the processed jute denim products.

#### **9.1.6 Key Partners**

Led by Juteborg AB and Classical Hand Made Products BD, a number of partners are being and will be engaged for the set-up of this ambitious initiative, including the following:

- Classical Hand Made Products BD (CHM) will be the key custodian of the facilities in Bangladesh. With a specialisation 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 – Serve to collaborate with different actors for bringing effective innovative solutions and also ensure the right process is in place. JuteLab International will act as a collaborative partner in the capability building and technological upgradation using its strong network.
- Juteborg AB – Research and development partner for conducting research on jute denim products.

- Janata Sadat –The largest manufacturer and exporter of Jute products in the private sector in Bangladesh.<sup>52</sup> A strong partnership will be established with Janata Sadat for raw jute processing support through backward linkage and forward linkage system. Backward linkage consists of colouring, bleaching, softening, improving lustres, improving uniformity, making shorter fibre, spreading jute fibre etc. On the other hand, forward linkage consists of continuous yarn/fabric colouring, fabric hand feel improvement, fabric construction and design improvement, different kinds of input development in order to enable to make jute diversified products as well.
- Jute farmer associations – Involvement will ensure a healthy relationship and successful negotiation for implementing contract cultivation.
- Care Bangladesh – to build on and extend the work of capability building with jute farmers (footnote 47)
- Jute mills – a healthy business relationship with the experienced jute mills like Janata-Sadat is required, especially during the modification stage of the spinning mill.
- A micro-finance institution such as Grameen bank to provide farmers with financial support during their capability building phase and also to avail quality seeds.
- Compliance monitoring associations – Collaboration with compliance monitoring associations such as Control Union or Bureau Veritas would also enhance the credibility and right monitoring of the issues like fair trade, child labour and protection of other human rights aspects along with sustainable jute processing.

### 9.1.7 Revenue Streams

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 1,000,000 metres per year of jute denim and 260,000 kg per year of jute blend to buyers by year 5, resulting in revenues of \$8.5 million.

The sale of farming equipment and seeds to farmers can be another revenue source, but this will be set at a low price to enable farmer affordability of these solutions.

### 9.1.8 Cost Structure

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

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

In relation to farming, certification costs for managing and improving the sustainability of the farming process are also significant.

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

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<sup>52</sup> <http://www.janata-sadat-jute.com>

### 9.1.9 Cost Benefit Analysis

**Table 3: Cost Benefit Analysis**

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

### 9.1.10 High-level Business Case and Investment Approach

A high-level business case<sup>53</sup> has been developed based on key assumptions as outlined below:

**Table 4: Jute Denim Business Case**

Net Present Value, 5 year, 10% discount rate (not applied year 1)			\$4 - \$5 million
<b>Profitability</b>	<b>Year 1</b>	<b>Year 5</b>	<b>Total 5 years</b>
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

<sup>53</sup> Please note: 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.

Gross Profit	-\$6.6 million	\$3.5 million	\$6.3 million
<b>Key Drivers / Assumptions</b>	<b>Year 1</b>	<b>Year 5</b>	<b>Total 5 years</b>
Sales volumes Jute Denim (metres)	360,000	1,000,000	4,000,000
Sales volume Jute cotton blend (kg)	90,000	260,000	1,000,000
Staffing	60 FTE	160 FTE	
Cost of goods sold (purchase and transport of raw jute)	\$0.9 million	\$2.5 million	\$9.7 million

Note: Business case details and assumptions outlined in Appendix 2. FTE= Full Time Equivalent

The investment approach is to secure 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
- The Asian Development Bank through their Inclusive Business Programme
- The Swedish Government potentially through Sida or Swedfund
- The Bangladeshi Government (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)
- Private investors that are interested to co-finance (discussions undergoing with Getco Industries, Esquire Group)

Furthermore, Juteborg have opened discussions with IKEA, and their major supplier in Bangladesh, Zaber & Zubair fabrics limited – to explore possibilities for a collaboration and potential investment.

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:

- Classical Hand Made, the key custodian of the facilities in Bangladesh is ready to bring in 8% of the total investment requirement of the initiative 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 be benefited with the processed fibre in terms of developing other applications for their own branches.
- 15% funding requirement is targetted to come from Sweden – possibly through Sida or Swedfund as a part of supporting environmental change in through reducing cotton usage in denim with jute while at the same time and helping to reduce poverty in Bangladesh.
- 15% by Bangladesh Government since the country will enjoy the economic benefit by directly creating employment opportunities for 5000 farmers and 160 workers. Not only that, this pilot initiative would have the possibility to replicate to revive other functional state owned jute facilities.
- Asian Development Bank to potentially bring in 47% of the investment requirement of this initiative. This would be a grand opportunity to help Bangladesh economically by reviving the Jute industry with probable opportunity of escalated replication of the infrastructure of the said industry.

### 9.1.11 Routes to Impact

The major positive development impacts have been identified:<sup>54</sup>

**Table 5: Major Positive Development Impacts**

<b>Routes to impact</b>	<b>Type</b>	<b>Unmet need addressed</b>
Supply chain - more reliable market for goods and services produced by the poor	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 on 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, as well as ensuring access to world markets.
Supply chain - technical support for low-income producers	Poor as producer	Producers would gain access to technical assistance from national and international jute actors.
Increased employment opportunities	Poor as labourer	Because 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, and then scaling the initiative, would ensure employment.
Wider systemic impacts		The Jute Denim initiative can create demand and enable production of highly sustainable jute products through enabling smallholder farmers to produce sustainability; in particular in relation to human rights (related to child labour) and clean retting, as well as monitoring compliance. The facility would also create a demand for development of next-generation jute products (textile and non-textile), thus ensuring potential for scaling-up and the replicability of the business model. Customer segments include local manufacturers of jute products (esp. textile factories) and jute farmers.
<b>Impact targets (year 5)</b>		<ul style="list-style-type: none"> <li>• Source \$2.5 million of raw jute providing livelihoods for 5,000 farmers and their families, providing 4 times the current average income of a jute farmer<sup>55</sup></li> <li>• Manufacturing jobs to 160 staff within the facility</li> <li>• Lead the transition to a higher value being placed on jute production putting an upwards pressure on the price and value of raw jute</li> </ul>

This initiative seeks to boost the economy of Bangladesh by creating employment opportunities, building capability and reviving Jute industry which could be replicated in a

<sup>54</sup> Based on ADB's ex-ante impact assessment tool

<sup>55</sup> Estimate, Classical Handmade Products BD

bigger scale. This project would create sustainable and fair trade assured materials and Jute Denim finished products for a more sustainable world.

### 9.1.12 Proposed Next Steps

Proposed next steps are as follows:

- Classical Handmade Products BD and Juteborg AB to continue discussions with interesting parties in Bangladesh and Sweden to confirm 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 to hold discussions with IKEA, and their major supplier, Zaber and Zubair, to discuss possibilities for collaboration and a potential co-investment
- Juteborg to lead a discussion with the a development bank and other investors around a potential co-investment

## 9.2 Textile Recycling Ecosystem

### 9.2.1 Background and Overview

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.<sup>56</sup>

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 left-over scraps of fabric to create jobs in the local market. Jhoot is often now exported to India and China for recycling to cotton and yarn, and then re-imported to Bangladesh. The Bangladesh textile and clothing sector produced over 350,000 tonnes 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.<sup>57</sup>

<sup>56</sup> International Trade Centre. 2016. Trade Map, Accessed on May 3, 2016, <http://www.worldstopexports.com/cotton-imports-by-country/>

<sup>57</sup> Ovi, Ibrahim Hossain. 2014. *Rags to riches: The prospects of recycled RMG by-products*, Dhaka Tribune. <http://archive.dhakatribune.com/bangladesh/2014/nov/22/rags-riches-prospects-recycled-rmg-products#sthash.PuaLyRyU.dpuf>

Textile waste is generated during the textile manufacturing/dyeing process and during cut and sew operations for making apparels. Initiated by poor people who took the initiative, over the years wastes have been recycled for day to day use in low-income communities in Bangladesh.<sup>58</sup>

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 on to local traders at a higher price. As a result, both factory owners and traders have been arguing to formalizing the sector in order to decriminalize the trade, reduce risks and attract investment in the recycling sector. (footnote 57) Furthermore, workers in the informal sector generate very low incomes, approximately \$24 a month<sup>59</sup>.

Participants at the Project InTaCt workshop in Bangladesh in March 2015 made a rough estimate that the textile industry wastes around 10% through the manufacturing process, and agreed this provides high potential for significant growth and employment. The stated aim at the workshop was that Bangladesh should seek 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 space.

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

The aim of this is to move beyond internal factory initiatives and ineffective recycling of waste into low-value products into a more effective and strategic ecosystem of waste handling and recycling. This would include 3 main elements:

1. The mass organization of a network of collectors working to collect traceable waste from factory floors and other sources within Bangladesh.
2. A hub/facility that can first sort the waste into different forms, recycle some of the waste by spinning cotton yarn from the waste for domestic use, and distribute / sell the remainder of the waste for up-cycling.
3. A network of entrepreneurs and processing centres that can up-cycle the waste for domestic use and export.

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.

A conceptual design and business model overview for this initiative are outlined below:

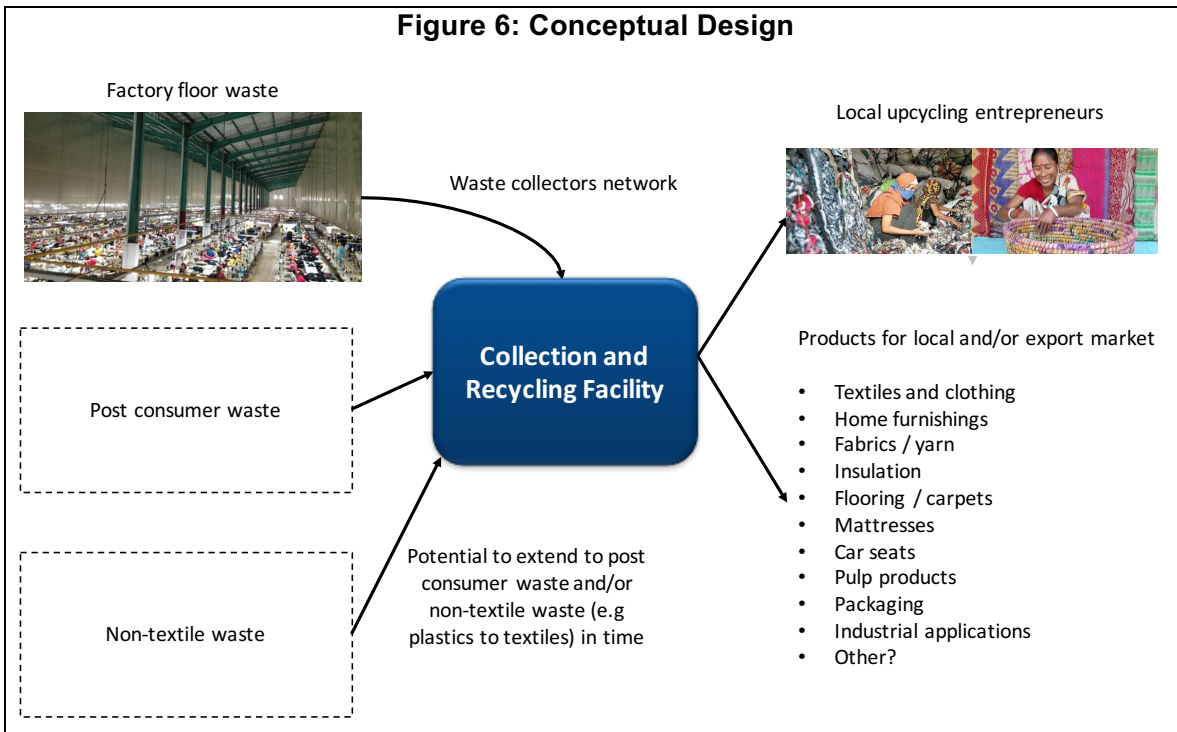
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<sup>58</sup> Correspondence with Zahidullah, Mohammed. 2016. Head of Sustainability, DBL Group

<sup>59</sup> ADB, 2010. *The Informal Sector and Informal Employment in Bangladesh: Country Report Bangladesh*



**Figure 6: Conceptual Design**



**Figure 7: Business Model Overview**

KEY PARTNERS	KEY ACTIVITIES	VALUE PROPOSITIONS	CUSTOMER RELATIONSHIPS	CUSTOMER SEGMENTS
<ul style="list-style-type: none"> <li>Textile and clothing manufacturers</li> <li>International brands</li> <li>Regulatory bodies</li> <li>Financial institutions</li> <li>Nominated waste collector</li> <li>Waste consultancy firms and technology companies</li> <li>Waste collecting agencies and buyers</li> <li>Trade associations</li> </ul>	<ul style="list-style-type: none"> <li>Enable raw material collection and tracing network and logistics</li> <li>Waste segregation</li> <li>Product development</li> <li>Capacity building</li> <li>Business development, marketing and sales</li> </ul>	<p>Aim: 10% growth and employment with the same material inputs</p> <p>Converting textile waste to value:</p> <ul style="list-style-type: none"> <li>Premium branded textiles and clothing made from high-quality / traceable waste</li> <li>Low-cost / unbranded textiles and clothing</li> <li>Non-clothing and textile products</li> <li>Crushed fabric and pulp for local and export applications</li> </ul>	<ul style="list-style-type: none"> <li>Business relationships based on sustainability and innovation</li> <li>Use to rebrand the Bangladesh textile and clothing industry as recyclers</li> </ul>	<ul style="list-style-type: none"> <li>Domestic textile and clothing industry</li> <li>Local and international buyers of waste and recycled products</li> </ul>
	KEY RESOURCES		CHANNELS	
	<ul style="list-style-type: none"> <li>Textile waste</li> <li>R&amp;D</li> <li>Technology</li> <li>Logistics</li> <li>Unemployed human resources</li> </ul>		<ul style="list-style-type: none"> <li>Domestic - traders and wholesalers</li> <li>Export – to manufacturers</li> <li>Waste fabric suppliers</li> <li>Local authorities</li> <li>Trade fairs / consumer associations</li> </ul>	
		COST STRUCTURE		REVENUE STREAMS
		<ul style="list-style-type: none"> <li>Raw materials</li> <li>Investment in technology</li> <li>Logistics and warehousing</li> <li>R&amp;D</li> <li>Marketing and business development</li> </ul>	<ul style="list-style-type: none"> <li>Waste and waste product sales</li> </ul>	

### 9.2.2 Value proposition

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 in

order to substantially increase growth, employment and small-scale business opportunities with the same material inputs.

The aim is to sort and convert different types of factory floor waste into different product categories:

- Premium branded textiles and clothing made from high-quality / traceable waste
- Low-cost / unbranded textiles and clothing from low-quality waste
- Non-clothing and textile products
- Crushed fabric and pulp for local and export applications
- Blended yarn (coarse yarn, neppy yarn and inject yarns) for making textiles.

It should be noted that there is further potential to expand this initiative in time to post consumer textile waste and/or non-textile waste. However, at this point, customs fees and restrictions make it non-viable to import post-consumer waste from other countries and technologies and the required investments would need to be explored further in order 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 easily available factory floor waste.

While a staged process would be required to establish this initiative, the broader ambition is to create a recycling ecosystem engaging multiple brands, suppliers, collectors and entrepreneurs.

### 9.2.3 Customer Segments and Channels

The priority customer segment is the domestic textile and clothing industry who are able to use the recycled or raw waste in their production. This would include both medium to large factories who could reuse recycled products in their manufacturing process as well as a network of entrepreneurs who could work with specific up-cycling applications. For the latter, it is suggested that the business partner with an NGO and/or a micro-finance institution that can support and finance these small-scale entrepreneurs.

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 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 his company from their homes for the local market.<sup>60</sup> IKEA has expressed they would like to work further with such community-based recycling initiatives.

To connect to these customers, the initiative will need to work with several channels, including traders, wholesalers and local authorities. It will be particularly important to get local buy-in in order 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.

In the local market, the initiative will seek to sell products to socially aware retailers, such as BRAC's Aarong retail chain, which seeks to empower artisans to rise above poverty<sup>61</sup>.

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<sup>60</sup> Rahman, Fazlur. 2015. *From rugs to riches: Karupannya weaving hope for country*. The Daily Star. <http://www.thedailystar.net/frontpage/rugs-riches-116767>

<sup>61</sup> Aarong, <http://www.aarong.com/about-aarong/>

#### 9.2.4 Key activities

The main activities of the business model will include:

- Recruiting factories into the ecosystem – starting with credible factories that are interested in enabling a more efficient and valuable recycling network in Bangladesh.
- Enabling waste material collection through a network enabled by tracing and logistics mechanisms – waste collectors should also have the possibility to sell the waste directly if appropriate, or sell the waste to the facility at an agreed and fair rate.
- Waste segregation – sorting waste into different categories, either for recycling in the facility or for supply to 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 textile waste, supply and capacity build a network of up-cycling entrepreneurs, in partnership with an NGO, or potentially with IKEA's Next Generation programme.
- Establishment of a technology platform to manage the waste and up-cycling network.
- Business development, marketing and sales to factories and buyers

#### 9.2.5 Key Resources

Key resources required for this include:

- 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 onsale.
- 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.

#### 9.2.6 Key Partners

At this early stage, there are a number of key partners that are already keen to pioneer this initiative:

- IKEA will pursue this initiative as part of their broader sustainability strategy which aims to have material recycled 80% of the waste from their operations by 2020.<sup>62</sup> Other Swedish buyers, such as H&M, Lindex and KappAhl, have also expressed an interest in this initiative.
- Zaber and Zubair (photo beside) – the largest textile supplier to IKEA in Bangladesh, and the largest subsidiary



<sup>62</sup> IKEA, 2012: The IKEA Group Sustainability Strategy 2020

- of the Noman Group - a conglomerate with over \$1 billion in revenues<sup>63</sup>.
- Karupannya, a major supplier to IKEA, manufactures and exports rugs from Bangladesh, supplying about 90% to IKEA. Karupannya produces these rugs using about 1000 tonnes / year of waste fabric from Zaber and Zubair, who 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.<sup>64</sup>
- 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, NTTML, A-Text, Classical Handmade Products and Qualitex industries, amongst others, have expressed an interest to remain involved.
- Mistra Future Fashions has been working 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 Bangladeshi based development organisation, has expressed an interest in engaging in this initiative, with the potential to sell final products through the Aarong retail network.

At the Inclusive Business Forum held on October 20<sup>th</sup>, 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.

In addition to this, the initiative should engage with other partners:

- Regulatory bodies
- Financial institutions
- Waste collectors, consultancy firms and technology companies
- Trade associations

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

### **9.2.7 Revenue Streams**

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 up-cycling entrepreneurs. The aim will be to generate a mark-up of 50% on the raw cost of the waste – assumed in the business case to be at the export value.

### **9.2.8 Cost Structure**

The main capex will be for the purchase and upgrading of a central recycling and sorting facility geographically located within a cluster of textile factories. The main operational cost will be in purchasing the waste from the collector's network. Furthermore, there will 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.

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<sup>63</sup> Noman Group. 2016. <http://www.nomangroup.com/bpage/at-a-glance/>

<sup>64</sup> Selim, Shafiqul Alam. 2016. Managing Director, Karupannya (e-mail)

### 9.2.9 Cost Benefit Analysis

**Table 6: Cost Benefit Analysis**

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

### 9.2.10 High-level Business Case and Investment Approach

A high-level business case<sup>65</sup> has been developed based on key assumptions as outlined below:

**Table 7: Textile Recycling Ecosystem Business Case**

Net Present Value, 5 year, 10% discount rate (not applied year 1)			\$3 - 4 million
<b>Profitability</b>	<b>Year 1</b>	<b>Year 5</b>	<b>Total 5 years</b>
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
Gross Profit	- \$3 million	\$4 million	\$6 million
<b>Key Drivers / Assumptions</b>	<b>Year 1</b>	<b>Year 5</b>	<b>Total 5 years</b>
Sourcing input / waste collected (aim 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/upcycled waste	50%	50%	
Staffing	10 FTE	100 FTE	

Note: Business case details and assumptions outlined in Appendix 2. FTE = Full Time Equivalent

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 have been that the textile industry wastes around 10% through the manufacturing process, the upside potential of this business case is expected to be significantly greater if a significant ecosystem of buyers, suppliers, collectors and entrepreneurs can be created.

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

<sup>65</sup> Please note: 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.

- Continue discussions with Zaber and Zubair - one of the first steps would be to explore the investment required to upgrade one of their spinning mills to recycle textile waste as a potential component of this solution.
- Engage IKEA as a supporting partner and potential investor
- Reconnect with H&M and the DBL-Group – a diversified business entity with USD 320 Million in turnover in 2015<sup>66</sup> - as potential co-financers and/or venture partners
- The Asian Development Bank through their Inclusive Business Programme
- The Swedish Government potentially through Swedfund

### 9.2.11 Routes to Impact

**Table 8: Major Positive Development Impacts**

<b>Routes to impact</b>	<b>Type</b>	<b>Unmet need addressed</b>
Job-related opportunities – increased employment opportunities	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 into new textiles and clothing but also be part of home furnishing, fabrics and yarn, insulation, flooring, etc.
Job-related opportunities – opportunities for skills development, training	Poor as labourer	A textile recycling centre could also handle the reformation of plastics into textiles, which would enhance job skills among labourers as well as ensuring a better quality of environment
Quality of environment – reduction in pollution	Poor as producer	Textile waste is often dumped in landfills and left to pollute and eventually rot; while it could, if taken care of, 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. Waste recycling also opens up for entrepreneurs within waste segregation, wholesalers, 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 should be used to rebrand the Bangladeshi textile and clothing industry as recyclers; promoting environmental sustainability as well as increased entrepreneurial and employment opportunities for and among the BoP.	
<b>Impact targets</b>	<ul style="list-style-type: none"> <li>• Source \$10 million of textile waste providing \$5 million in</li> </ul>	

<sup>66</sup> DBL-Group. 2016. <http://dbl-group.com/About-DBL-Group>

<b>(year 5)</b>	<p>income<sup>67</sup> to for 5,800 waste collectors and their families, providing income of \$860 per collector pa – 3 times the current average income of an informal worker (footnote 59).</p> <ul style="list-style-type: none"> <li>• Sell \$3 million of waste to 1500 up-cycling entrepreneurs, and enable them to earn an income of \$1000 pa based on a 50% markup on the cost of the waste product</li> <li>• Employee 100 staff (minimum) in the core facility</li> <li>• Create a systemic change to place a greater value on textile waste for recycling and up-cycling in the domestic industry</li> </ul>
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### 9.2.12 Next Steps

There are 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:

- Consider whether the model proposed will be pursued, or a more simplified version of this business model acting as a co-ordinator organizing waste collectors and up-cycling entrepreneurs – matching waste and enabling the capability for up-cycling;
- Confirm specifically 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 evaluation capital expenditure and capacity;
- Decide whether the main focus and impact will be on the collection side and/or up-cycling side. The business model assumes that it will work with both, but either the supply or demand side could also be the main focus.

The broader ambition is to create a recycling ecosystem engaging multiple brands, suppliers, collectors and entrepreneurs. However, in the short-term, it is proposed that we commence with those who have expressed an interest in taking this forward – that is IKEA, H&M, Zaber and Zubair, DBL-Group, Karupannya and BRAC.

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 towards the investment.

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<sup>67</sup> Assumes collectors will sell their waste at 2 times the price paid to factories from which the waste is procured.

## 10 High-Potential Opportunities in Myanmar

### 10.1 Handloom Hub

#### 10.1.1 Background and Overview

Myanmar hand loomed fabrics are a neglected national treasure. Unfortunately, the social benefits of hand loom livelihoods and profits producing these unique fabrics is decreasing quickly. Similar to in India where the number of hand loom weavers is declining<sup>68</sup>, Myanmar is also experiencing in a decline in the sector with the handicraft not being passed on to the new generation.

Hand Loom Hub Myanmar (HHM) is a newly formed organization that aims to advance a sustainable and inclusive hand loom 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 neglected Myanmar communities.



Dr Gunthorpe has established a working group in Myanmar to develop this model further. This proposal addresses the social benefits of supporting a Myanmar hand loom industry, define the reasons for its decline, and outline realistic solutions that compel social impact investors to support the initial funding of Hand Loom Hub Myanmar.

There are three main reasons that small hand loom operations are losing profits<sup>69</sup>:

1. Producers are in remote areas, disconnected to each other, suppliers and market, losing profits to middle person connectors
  - Challenged communication - phone and internet
  - No access to skills training - marketing and basic business
  - High transportation costs of obtaining supplies and shipping products
  - No access to financing
2. Products are low quality and quantity, losing the opportunity to value up 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 mould, rodents, sun fading
  - No access to hand loom skill training

<sup>68</sup> Government of India, Ministry of Textiles. 2015: Note on Handloom Sector, Office of the Development Commissioner (Handlooms)

<sup>69</sup> Gunthorpe, 2016, BusinessKind

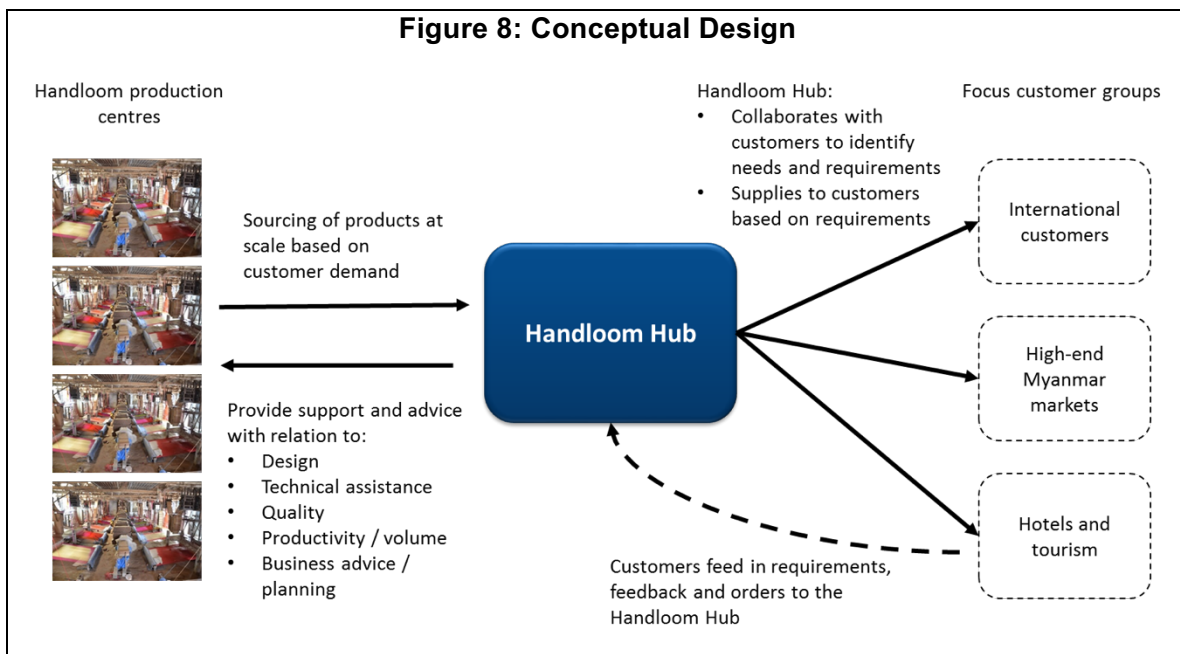


3. Competition with large non co-operative hand loom factories (> 100 looms), decreasing potential market share

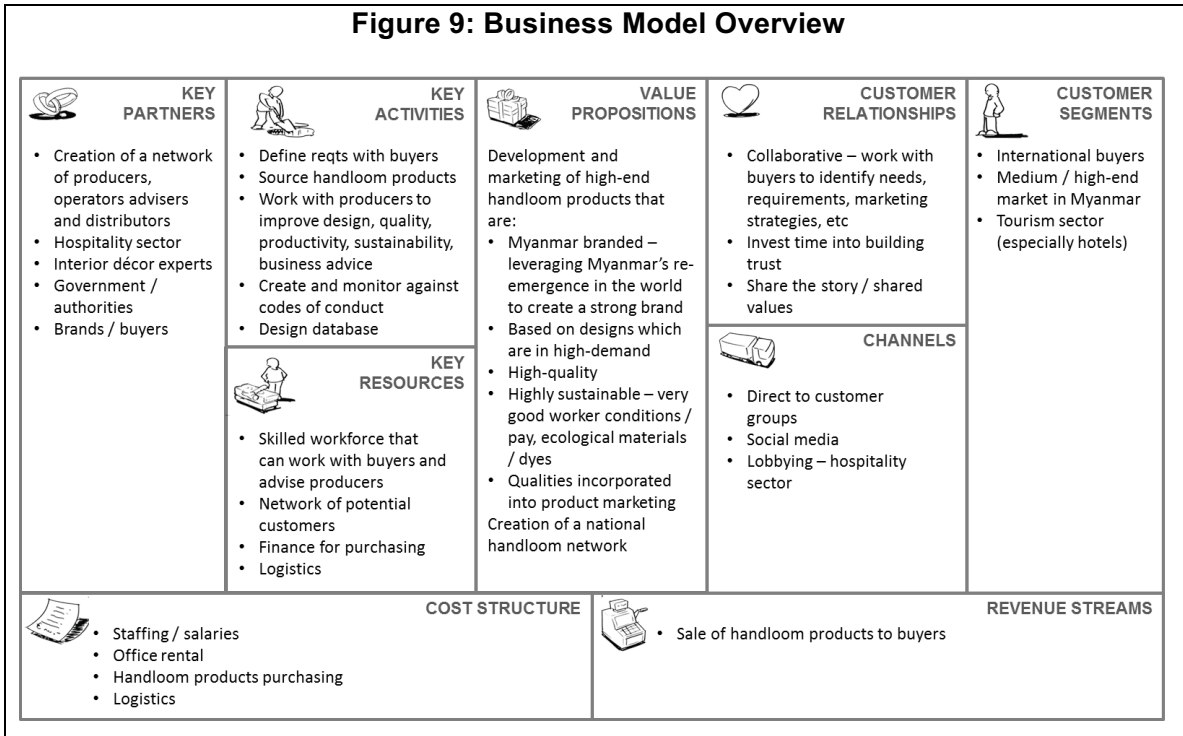
- Small producers have a disjointed production process - spinners, dyers, warp and were weavers, not working together

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

A conceptual design and business model overview for this initiative are outlined below:



**Figure 9: Business Model Overview**



### 10.1.2 Value proposition

Most small hand loom operations are located in remote underserved communities. Their products are connected to buyers by profit taking middle people who do not ramp up the product value. Production of hand loom products is rarely market demand driven resulting in waste of materials and low profit margins. HHM will scale up the value of these neglected treasures increasing profits for the producers and suppliers by streamlining producer, supplier and buyer transactions. The keystone advantage that HHM brings to its buyers is the broadest selection of the highest quality hand loom products that are designed for their demands, delivered on time, and have an end service commitment.<sup>70</sup>



The hub’s priority is to allow producers to maximize their resources towards 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 keystone activity being connecting customer needs with producers’ high quality products. The realized profits are used to achieve funding independence for the hub and inclusive profit sharing for producer and supplier members.

### 10.1.3 Customer Segments and Channels

On the demand side, key customers include bulk or individual buyers of hand loomed textiles or ready made products from hand loom textiles. These international and

<sup>70</sup> Photo: Debelak, M. 2016. *Handloom fabric product from the Chin region*

national market targets will have different demands and profiles. HHM's first priority is to meet the specific market demand regarding colour, design, fibre blend, and products.

In the international market, the main customers will be bulk textile buyers who make products from hand loom textiles, bulk buyers of hand loom products and individual buyers. Direct sales will focus on fashion and interior designers as well as large city clothing, home décor and gift boutiques.

In Myanmar, online sales will target bulk textile buyers who make products from hand loom textiles (these buyers might be members), bulk buyers of hand loom products such as high quality handicraft shops, hotels, tourist sites, spas, restaurants, etc as well as individual buyers through high-quality clothing boutiques, longyi shops and markets. Interior designers and fashion designers will be collaborated with to reach a broader market.

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<sup>71</sup>. Many Myanmar working women want to wear traditional longyi fabrics designed into professional office attire.

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

#### **10.1.4 Key activities**

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 a HHM code of conduct for itself and members – to be used for branding HHM
- Identify highly skilled producers and high quality material vendors that are already operating and motivated to be members
- Identify and capture international and national market customers that value high quality hand loom textiles and products
- Identify competition and add advantage to HHM products over competition quickly
- Connect products directly with market customer demands
- Design and maintain an active web site and social media for online sales
- Negotiate highest competitive price of products with buyers
- Connect highly skilled producers with high quality material and equipment vendors
- Negotiate lowest price of highest quality materials and equipment with supply vendors
- Ensure a stable on time supply of high quality market driven product for buyers
- Establish and maintain trade license and facilitate transportation of materials and products

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<sup>71</sup> Gray, Denis. 2016. *Myanmar's longyi -- love it or leave it?*. Nikkei Asian Review. <http://asia.nikkei.com/magazine/20160310-ASIA-300-TAKING-A-PLUNGE/Tea-Leaves/Myanmar-s-longyi-love-it-or-leave-it>

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

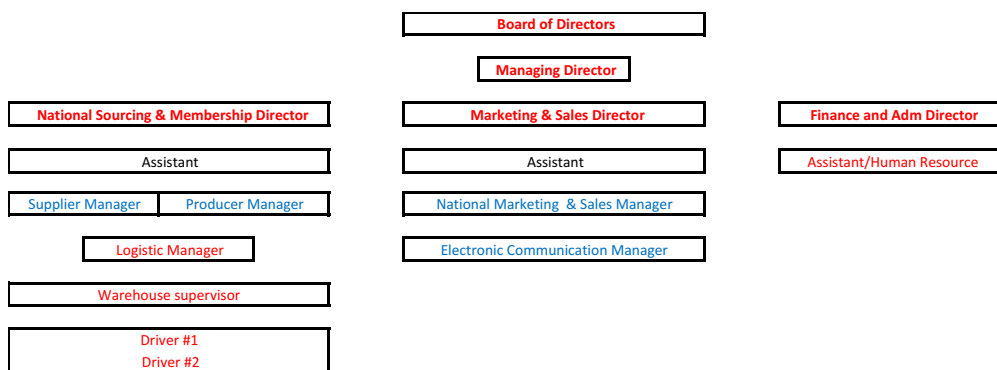
Over the 2-5 year period, the priority will be to expand the customer base, increase membership to new producers and supply venders and implement supportive services for members. Some of the activities over this period include:

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

The aim after 5 years is to have 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 hand loom business. Profit sharing will continue to be distributed among members.

### 10.1.5 Key Resources

The main resources needed are staffing, made up of a talented and motivated team with a passion for hand loom textiles, and supported by a strong administrative and logistical foundation. The initial organizational chart for the initial set-up is illustrated below (footnote 69):



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

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

### **10.1.6 Key Partners**

The HHM conceptual model has been developed in close collaboration with Dr. Helen Gunthorpe from BusinessKind – a non-profit organization that has established a number of social businesses in poor neglected Myanmar communities. Dr Gunthorpe has established a working group in Myanmar to develop this model further, and seeks to champion the initiative after the study.

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

On the supply side, HHM will engage with hub members as quasi-customers which will include individual producers, co-operative producers and material suppliers. Members will receive a percentage profit of sales defined by the HHM's bylaws. These producers and suppliers, hub members, are key partners. They are contracted with HHM to produce the highest quality market driven hand loom textiles and products. The first members will be selected because they are already producing high quality products and only need support in connecting 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.

Customer groups, such as national hospitality sector, international and national home and fashion designers are key partners in that they must ramp up the value to their individual customers. They must communicate crisply what their projected buyers want in colour, fibre and design.

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

### **10.1.7 Revenue Streams**

The main source of income will be generated from the sale of hand loom products to the various customer groups identified, earning an estimated 60% mark-up 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 a full service contract or producer-to-buyer contract.

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

### **10.1.8 Cost Structure**

Salaries are 60% of initial budget with the benefit of attracting the most experienced marketing director. The highest budget item is costs of products to sell on at an expected average cost of \$15 per product.

For the full service contract, HHM will set a price with buyers to make products. Producers are operating as cut-make-package. HHM provides them with high quality materials to produce products that have already been ordered by buyers. HHM sets a price with producers to make products. For producer to buyer contract, producers source their own materials (suppliers must meet 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.

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

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

### 10.1.9 Cost Benefit Analysis

**Table 9: Cost Benefit Analysis**

<b>Costs</b>	<b>Benefits</b>
<ul style="list-style-type: none"> <li>• Staffing and facility for handloom hub</li> <li>• Costs of sourcing handloom products for on sale</li> <li>• Logistic costs – purchased services</li> </ul>	<ul style="list-style-type: none"> <li>• Sale of handloom products to buyers – at volume</li> <li>• Higher margins from sales to premium markets</li> <li>• Handloom production centres benefit from improved productivity and increased demand / sales</li> <li>• Handloom workers benefit from improved working conditions and pay</li> </ul>

### 10.1.10 High-level Business Case and Investment Approach

A high-level business case<sup>72</sup> has been developed based on key assumptions as outlined below:

**Table 10: HHM Business Case**

Net Present Value, 5 year, 10% discount rate (not applied year 1)			\$1-2 million
<b>Profitability</b>	<b>Year 1</b>	<b>Year 5</b>	<b>Total 5 years</b>
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
<b>Key Drivers / Assumptions</b>	<b>Year 1</b>	<b>Year 5</b>	<b>Total 5 years</b>
Costs of goods sold	\$0.2 million	\$1.5 million	\$3.6 million
Mark-up on product sales	60%	60%	

Note: Business case details and assumptions outlined in Appendix 2. FTE = Full Time Equivalent

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

<sup>72</sup> Please note: 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.

### 10.1.11 Routes to Impact

**Table 11: Major Positive Development Impacts**

<b>Routes to impact</b>	<b>Type</b>	<b>Unmet need addressed</b>
Product or service – product or service reducing vulnerability	Poor as supplier	In Myanmar, hand loomed products have a long tradition and is 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 both markets and use designs that are not always in demand; making hand looming an unreliable source of income. The establishment of a handloom hub, where producers gain greater market access and can be advised on design adapted to customer demand, can ensure higher incomes.
Job-related opportunities – increased employment opportunities	Poor as supplier	Producers linked to the hub and who see an increase in demand for their products, will be able to grow their business and create employment opportunities. This will also help to increase job opportunities working from small towns outside the cities, helping to address migration challenges.
Job-related opportunities – opportunities for skills development, training	Poor as supplier	Greater access to design processes will increase producers' knowledge and open up for skills development.
Gender – improved opportunities for women as labourer/producer	Poor as supplier	Handloomers are often women, and creating a space in which producers can learn, sell and develop new products will benefit women at a greater level. There are also societal benefits of women generating income from safe home based production facilities.
Wider systemic impacts		Myanmar's tradition of hand looming is widespread across the country but suffers from a lack of market access. A handloom hub designed to be the centre of a national handloom network will bring producers together and creates opportunities for skills development, as well as creating greater access to current and new markets. The handloom hub will serve to leverage Myanmar's re-emergence 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, incl. pay, organic materials and dye. Women make up a large majority of handloom producers and through the handloom hub their skills and income will be greatly increased.
<b>Impact targets (year 5)</b>		<ul style="list-style-type: none"> <li>870 hand loom weavers earning double the minimum wage – i.e. \$5.80 per day – for producing premium products to an international marketplace</li> </ul>

### 10.1.12 Next steps

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. Furthermore, they will reconnect with DaNa facility who plans to have a relevant call opening in November 2017. Once a few potential investors are identified, the initiative will engage with a development bank to identify other potential investors.

## 10.2 Self-help Hub and Resource Centre

### 10.2.1 Background and Overview

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 a small voluntary association of people, from the same socio-economic 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 enable the development of financial services as well as wider development programmes. SHGs enable women to grow their savings and to access the credit, and act as community platforms from which women become active in village affairs.<sup>73</sup> SHGs have also proven to be a highly scalable business model, with about 8-9 million SHGs supporting tens of millions of people in India alone.<sup>74</sup>

While SHGs are often village-based, we believe there is great potential to enable these self-help groups in factory settings in a financially sustainable manner. Project InTaCt workshops held in February and March 2016 identified the need for a “resource centre” in factories that could help meet the needs of the staff working there. Many needs were identified including for:<sup>75</sup>

- Savings plans / micro-finance / micro-insurance
- Educational programmes
- Healthcare advice, products and services
- Community / home needs
- Guest house needs / pooled services
- Home production facilities

In some cases, these needs are met by the factories, but not always in a quality way. For example, some factories provided workers with housing and food at a cost. But some of these lodgings are very poor quality with workers living 4-5 in a room and a poor state of hygiene, as shown in the photos beside.<sup>76</sup>



<sup>73</sup> Care, Catholic Relief Services, USAID, GTZ. 2006. *Self-Help Groups in India: A Study of the Lights and the Shades*, <https://www.microfinancegateway.org/sites/default/files/mfg-en-paper-self-help-groups-in-india-a-study-of-the-lights-and-shades-2006.pdf>

<sup>74</sup> Kande. 2015. The Self Help Groups movement in India, <http://www.impatientoptimists.org/Posts/2015/01/The-Self-Help-Groups-movement-in-India#.V7bIDY5hyuU>

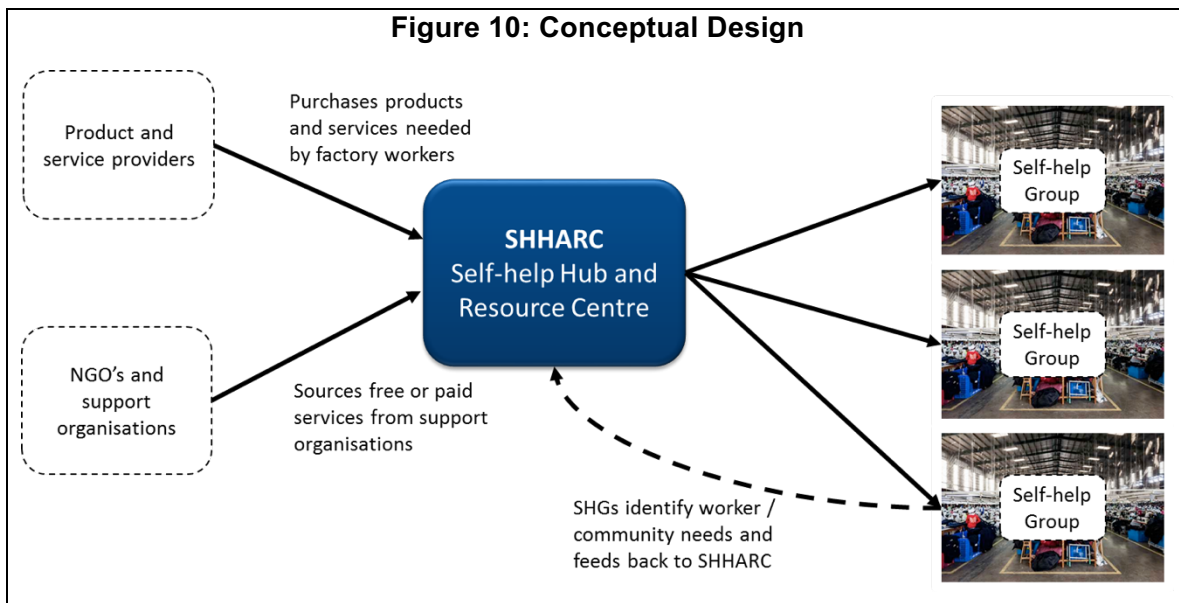
<sup>75</sup> Project InTaCt workshops and worker interviews

<sup>76</sup> Photos: Mike Debelak, Inclusive Business Sweden



This initiative, named SHHARC (Self-Help Hub and Resource Centre) seeks to meet the needs of factory workers using a SHG model by both helping to establish SHGs within factories and by 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. To be clear, SHHARC would be a stand-alone business which would have factories and factory workers as its customer base.

A conceptual design and business model overview for this initiative are outlined below:



**Figure 11: Business Model Overview**

KEY PARTNERS	KEY ACTIVITIES	VALUE PROPOSITIONS	CUSTOMER RELATIONSHIPS	CUSTOMER SEGMENTS
<ul style="list-style-type: none"> <li>Factories / management</li> <li>Local / international NGOs</li> <li>Micro-finance institution</li> <li>Product providers</li> <li>Local authorities (department of labour, associations)</li> <li>Brands / buyers</li> </ul>	<ul style="list-style-type: none"> <li>Set-up of Self-Help Groups in factories</li> <li>Get feedback on major needs</li> <li>Source products and services from providers</li> <li>Provide / sell services to workers</li> </ul>	<p>Meeting factory workers needs, including:</p> <ul style="list-style-type: none"> <li>Education – vocational, high-school, literacy, entrepreneurship, etc</li> <li>Financial: Savings plans / micro-finance / micro-insurance</li> <li>Healthcare: advice, products and services</li> <li>Women's rights / safety: self defense, etc</li> <li>Community / home needs – lighting, water, childcare, etc</li> <li>Guest house needs / pooled services</li> <li>Home production facilities (e.g. sewing machines)</li> </ul>	<ul style="list-style-type: none"> <li>Two-way – between SHHARC and SHGs</li> <li>Needs-based relationship</li> <li>Trust-based, long-term relationship building</li> <li>Business for good</li> <li>Regular face-to-face contact</li> </ul>	<ul style="list-style-type: none"> <li>Primary: Factory workers</li> <li>Secondary: Workers family, communities</li> <li>Beneficiary: Factories – a more productive workforce, increasing productivity and quality</li> </ul>
	<p><b>KEY RESOURCES</b></p> <ul style="list-style-type: none"> <li>Staff</li> <li>Facility / space</li> <li>Trainers</li> <li>Financial</li> </ul>		<p><b>CHANNELS</b></p> <ul style="list-style-type: none"> <li>Factories – forums after work and/or during lunch break</li> <li>Community centres</li> <li>Online / e-platform / social media</li> </ul>	
<p><b>COST STRUCTURE</b></p> <ul style="list-style-type: none"> <li>Staffing / salaries</li> <li>Office rental</li> <li>Community centre (potential to use existing facilities)</li> <li>eLearning / online portal</li> </ul>		<p><b>REVENUE STREAMS</b></p> <ul style="list-style-type: none"> <li>Sale of products and services to factory workers (e.g. healthcare)</li> <li>Educational fees</li> <li>Micro-loan/saving interest / micro-insurance premiums</li> <li>Subsidies from factories, brands or donors</li> </ul>		

### 10.2.2 Value proposition

While NGOs, unions and governmental organisations work towards improved rights and worker conditions in Myanmar, there are fewer organisations focusing on meeting the broader needs and aspirations of workers. The core value proposition is to meet worker needs, particularly in the areas of:

- Education – vocational, high-school, literacy, entrepreneurship, etc.
- Financial: Savings plans / micro-finance / micro-insurance
- Healthcare: advice, products and services
- Women’s rights / safety: self-defence, etc.
- Community / home needs – lighting, water, childcare, etc.
- Guest house needs / pooled services
- Tech solutions (mobile phones/subscriptions, SMS services, apps)
- Home production facilities (e.g. sewing machines)

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

### 10.2.3 Customer Segments and Channels

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 production for export markets are based in Yangon.<sup>77</sup> 90% of these workers are young women, many of whom are from remote regions and have come to Yangon to find work.<sup>78</sup> As such they lack much of the products, services and support structures they have in their home towns, and face challenges with health, security and a lack of access to education amongst other needs (footnote 77).



A secondary beneficiary are the factories who can benefit from a healthier, happier and more productive workforce. Educational and healthcare services should be particularly beneficial. There may also be potential to sell and distribute other products and services directly to factories for additional income.

Channels will be to first make an approach to factories for them to agree to be part of the SHHARC network, and to collaborate to establish a SHHARC hub. There have also been suggestions to work with and through unions, but some concerns have been raised as to how open factories will be to this.

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

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<sup>77</sup> SMART Myanmar, 2015. Responsible Sourcing in a Frontier Market

<sup>78</sup> Myanmar Garment Manufacturers Association, [www.myanmargarments.org](http://www.myanmargarments.org)

#### **10.2.4 Key activities**

The main activities of SHHARC will be to:

- Engage with factories who are interested in participating in the programme
- Set-up SHGs in factories – this involves recruiting the appropriate workers in the factories to be the representative SHG and training them about the programme
- Get feedback on major needs – through regular meetings/workshops and other online/offline forums
- Source products and services from providers – products and services can be donated by NGOs or businesses, or purchased from businesses
- Provide / sell services to workers through the SHGs through an ordering and delivery system

#### **10.2.5 Key Resources**

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

- Management, communications, administrative and financial staff to run the hub
- SHG co-ordinators to recruit the factories into the programme, set-up the SHGs and sell and deliver products and services through the SHGs.
- Sourcing staff to source relevant products and services from multiple sources

While 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.

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

#### **10.2.6 Key Partners**

SHHARC will need to work closely with a number of actors in order to meet the various needs of factory workers. As a starting point, it would make sense to work closely with the Myanmar Garment Manufacturers Association as a strategic partner who can provide connections with factories and enable a positive introduction. Furthermore, it would be valuable to connect with local authorities in the sector such as the Department of Labour, and potentially unions, though this would need to be explored further. It could 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.

From the Swedish side, QuizRR, who provides technology solutions to enable decent working conditions and safe workplaces for employees in global supply chains, put forward the concept of developing technology solutions to enable worker engagement and empowerment as part of the self-help hub offering. Sida has also expressed an interest in supporting such an initiative.

On the supply side, SHHARC would connect with local and international NGOs, micro-finance / micro-insurance institutions and other product and service providers in order to distribute and sell to factory workers.

#### **10.2.7 Revenue Streams**

Revenue will be predominantly generated through the sale of products and services to factory workers through the SHGs. This could include, amongst other things, the sale of basic-needs products (healthcare, lighting, water, etc.), education fees, micro-loan/saving interest, micro-insurance premiums, accommodation rental, mobile phones and associated services and other products and services.

Furthermore, SHHARC could also generate income from selling relevant services directly to factories such as training services. In addition, there may be the possibility of generating additional subsidies from donors and/or brands where SHHARC can help to meet some of their goals.

### 10.2.8 Cost Structure

The majority of costs are personnel costs associated with the management, communications, administrative and financial staff to run the hub as well as the SHG co-ordinators staff and sourcing staff. This makes the cost structure highly variable and flexible to grow with the demand.

The other major costs includes 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 in order to minimize this cost.

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

### 10.2.9 Cost Benefit Analysis

**Table 12: Cost Benefit Analysis**

<b>Costs</b>	<b>Benefits</b>
<ul style="list-style-type: none"> <li>• Low initial resourcing costs in terms of staffing – will grow with expansion of services to additional factories</li> <li>• Set-up of function and facilities – offices and online</li> <li>• Training functions and trainers</li> <li>• Day-to-day costs limited as SHGs can take an active (voluntary) role</li> </ul>	<ul style="list-style-type: none"> <li>• Potential to meet a broad range of factory workers needs in an effective way</li> <li>• Business model viable through the sale of products and services</li> <li>• Factory workers provide a large potential customer base with similar needs</li> <li>• Factories benefit from a happier and more productive workforce</li> <li>• Open up other opportunities for employment and entrepreneurship</li> </ul>

### 10.2.10 High-level Business Case and Investment Approach

A high-level business case<sup>79</sup> has been developed based on key assumptions as outlined below:

**Table 13: SHHARC Business Case**

Net Present Value, 5 year, 10% discount rate (not applied year 1)			\$2-3 million
<b>Profitability</b>	<b>Year 1</b>	<b>Year 5</b>	<b>Total 5 years</b>
Revenues	\$0.2 million	\$8.5 million	\$17 million

<sup>79</sup> Please note: 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.

Opex	\$0.4 million	\$6 million	\$12.8 million
Gross Profit	-\$0.2 million	\$2.5 million	\$4.1 million
<b>Key Drivers / Assumptions</b>	<b>Year 1</b>	<b>Year 5</b>	<b>Total 5 years</b>
% workers engaged through SHGs	1% - 2600	20%- 150,000	
% spending of wages through SHHARC	5% - \$57 pa	5% - \$57 pa	
Staffing (15 in core team and 1 SHG co-ordinator / 2000 customers)	16 FTE	89 FTE	

Note: Business case details and assumptions outlined in Appendix 2. FTE = Full Time Equivalent

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

It is recommended that this is initially set-up as a project pilot 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 in Myanmar.

#### 10.2.11 Routes to Impact

**Table 14: Major Positive Development Impacts**

<b>Routes to impact</b>	<b>Type</b>	<b>Unmet need addressed</b>
Job-related opportunities – improved labour conditions	Poor as labourer	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 healthcare and financial facilities. The SHHARC will address these, and other, aspects of current working conditions and meet factory workers' needs.
Gender – improved opportunities for women as labourer/producer	Poor as labourer	A great majority of factory workers are women, and addressing their needs in particular (such as maternity care, safe housing, childcare, and women's safety) would greatly enhance their position.
Wider systemic impacts		The establishment of a SHHARC within the realms of any cluster of textile and clothing factories would meet workers' needs where the workers' work and live, thus enhancing its chances to make real impact. Addressing such needs (educational/vocational, financial, healthcare, community, etc.) would mean a great step forward for working conditions and would in the long term contribute to an increase in productivity. Replicability would mean training of workers to set up their own hubs in other factory clusters, which would promote support for informal pro-poor network, albeit in a formal setting.

<b>Impact targets (year 5)</b>	<ul style="list-style-type: none"> <li>• Meet basic needs of 150,000 garment workers by year 5</li> </ul>
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### 10.2.12 Next Steps

To establish SHHARC, it is recommended that an entrepreneur be engaged willing to champion and own the initiative, 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.

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 whether they could be interested in investing in the pilot focussing on their supplier factories.

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 establishment of the business model.

## 11 Insights and Conclusions

In terms of sustainability, the textile and clothing sector in Asia is currently focussed on more traditional CSR measures – both in social terms focussed on worker conditions and human rights, and environmental measures addressing water, chemical and energy use. These measures are extremely important, but still remain focussed on improving the sustainability of the traditional industry through measures that may not always directly drive economic value creation.

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

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

Despite some of these challenges, 11 broad opportunities were identified in Bangladesh and a further 8 in Myanmar. As the two countries are in very different stages of development of the sector, we found that the countries had a very different focus when identifying these initiatives. The opportunities identified in Bangladesh focussed on creating additional value for the sector as well as addressing significant environmental concerns, while the opportunities in Myanmar focussed on meeting needs and addressing gaps in an emerging sector.

Within each of the two countries, two opportunities were prioritised based which were considered to be commercially viable and scalable with a great potential for positive impact, and that actors in Bangladesh and Myanmar were interested in engaging with.

In Bangladesh, the two initiatives prioritised included a:

- Sustainable farmer-to-factory supply chain for jute denim

- Cluster-based textile recycling ecosystem

In Myanmar, the two initiatives prioritised were a:

- Handloom hub network
- Self-help hub and resource centre

While further detailing and sizing is required, we have made a quick assessment of these 4 opportunities in the table below<sup>80</sup>.

<b>Table 15: IB Quick Assessment</b>					
<b>Dimension</b>	<b>Criteria</b>	<b>Jute</b>	<b>Recycling</b>	<b>Handloom</b>	<b>SHHARC</b>
Market and Value Chain	Future prospect of market	H	H	M	M
	Product Stability (risk)	H	H	L	M
	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)					

Based on this assessment and overall potential, it is recommended that the two Bangaldeshi opportunities – Jute Denim and the Textile Recycling Ecosystem – be detailed further in working towards a significant investment and implementation. In

<sup>80</sup> Please note: This assessment is a very rough assessment based on the insights obtained from the study.

Myanmar, the Handloom Hub will seek initial donor financing and the Self-Help Hub and Resource Centre requires a pilot project to test its potential further.

It is recommended that a development bank subsequently:

- 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 potential impact investors or donors for the Handloom Hub and SHHARC initiatives

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





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## 14 Appendix 1: Participating Organisations

Below can be found a list of Swedish, Bangladeshi and Myanmar actors we have engaged with during the project's implementation.

**Table 16: Project InTaCt participant organisations**

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

		<ul style="list-style-type: none"><li>• Sunflower Group Social Enterprise</li><li>• Flame Tree Myanmar</li></ul>
<p>Note: The list above reflects organisations involved in workshops, interviewed, participated in field study visits and/or involved in the development of the initiatives.</p>		

## 15 Appendix 2: Business Case Calculations

### 15.1 Creation of a sustainable farmer-to-factory supply chain for jute denim

This business case below 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 (metres)		360 000	792 000	871 200	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%
<b>INCOME</b>								
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 indigo color
Sales revenue from jute cotton/wool blend	\$8	\$720 000	\$1 584 000	\$1 742 400	\$1 916 640	\$2 108 304	\$8 071 344	Year on year groupd has been projected
Other revenues		\$15 000	\$15 750	\$16 538	\$18 191	\$20 010	\$85 489	Year on year groupd has been projected
<b>TOTAL INCOME</b>		<b>\$2 895 000</b>	<b>\$6 351 750</b>	<b>\$6 986 138</b>	<b>\$7 684 751</b>	<b>\$8 453 226</b>	<b>\$32 370 865</b>	
<b>FIXED COSTS (CAPEX)</b>								
Set up cost of Jute Denim & cotton spinning facility; building construction		\$4 307 500					\$4 307 500	Tentative set up cost and cost of construction
Upgrading cost of cotton spinning mill		\$690 000					\$690 000	Upgradation of existing cotton spin mill has been
ETP & new machine installation, Installation of solar power, stripping mechanism		\$2 160 000					\$2 160 000	Water purification system, recycling, stripping process, solar panels
<b>TOTAL</b>		<b>\$7 157 500</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$7 157 500</b>	
<b>OPERATING COSTS (OPEX)</b>								
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%	\$864 000	\$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 & Travels		\$240 000	\$264 000	\$290 400	\$319 440	\$351 384	\$1 485 264	5 person per year, 20 travels, includes accommodation, food etc
Other	\$12 000	\$12 000	\$14 400	\$16 560	\$20 369	\$26 479	\$89 808	
<b>TOTAL</b>		<b>\$1 848 000</b>	<b>\$3 463 200</b>	<b>\$3 853 440</b>	<b>\$4 343 901</b>	<b>\$4 952 396</b>	<b>\$18 460 937</b>	
<b>TOTAL COSTS</b>		<b>\$9 005 500</b>	<b>\$3 463 200</b>	<b>\$3 853 440</b>	<b>\$4 343 901</b>	<b>\$4 952 396</b>	<b>\$25 618 437</b>	
<b>GROSS PROFIT</b>		<b>-\$6 110 500</b>	<b>\$2 888 550</b>	<b>\$3 132 698</b>	<b>\$3 340 850</b>	<b>\$3 500 830</b>	<b>\$6 752 428</b>	

NET PRESENT VALUE

\$4 005 605

Discount rate

10%

## 15.2 Cluster-based textile recycling ecosystem creation

This business case below 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
<b>INCOME</b>								
Sales revenue		\$0	\$3 000 000	\$6 000 000	\$10 500 000	\$15 000 000	\$34 500 000	50% markup on waste
<b>TOTAL REVENUE</b>		<b>\$0</b>	<b>\$3 000 000</b>	<b>\$6 000 000</b>	<b>\$10 500 000</b>	<b>\$15 000 000</b>	<b>\$34 500 000</b>	
<b>FIXED COSTS (CAPEX)</b>								
Purchase / building of facility		\$2 000 000					\$2 000 000	Rough purchase price for factory/facility in Gazipur. Bikroy.com
Upgrading of facility		\$1 000 000					\$1 000 000	Set-up cost estimate
Other capex							\$0	
<b>TOTAL</b>		<b>\$3 000 000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3 000 000</b>	
<b>OPERATING COSTS (OPEX)</b>								
Staffing numbers / FTE		10	25	50	75	100	260	
Staffing costs	\$4 200	\$42 000	\$105 000	\$210 000	\$315 000	\$420 000	\$1 092 000	\$350 per month, mix of workers
Office/factory rental and 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 exports \$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	
<b>TOTAL</b>		<b>\$263 000</b>	<b>\$2 307 500</b>	<b>\$4 465 000</b>	<b>\$7 622 500</b>	<b>\$10 780 000</b>	<b>\$25 438 000</b>	
<b>TOTAL COSTS</b>		<b>\$3 263 000</b>	<b>\$2 307 500</b>	<b>\$4 465 000</b>	<b>\$7 622 500</b>	<b>\$10 780 000</b>	<b>\$28 438 000</b>	
<b>GROSS PROFIT</b>		<b>-\$3 263 000</b>	<b>\$692 500</b>	<b>\$1 535 000</b>	<b>\$2 877 500</b>	<b>\$4 220 000</b>	<b>\$6 062 000</b>	
<b>NET PRESENT VALUE</b>	\$3 679 366							Discount rate 10%



### 15.3 Handloom hub network

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

		Year 1	Year 2	Year 3	Year 4	Year 5	Total
<b>OPERATING COSTS (OPEX)</b>							
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
Ware house 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 Adm 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 X2 ( 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 Adm 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 costs 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
							\$0
<b>TOTAL COSTS</b>		<b>\$671 900</b>	<b>\$866 900</b>	<b>\$1 176 900</b>	<b>\$1 687 500</b>	<b>\$2 292 500</b>	<b>\$6 695 700</b>
							\$0
<b>TOTAL REVENUE - 60% mark up of products</b>		<b>\$300 000</b>	<b>\$750 000</b>	<b>\$1 500 000</b>	<b>\$2 500 000</b>	<b>\$3 750 000</b>	<b>\$8 800 000</b>
							\$0
<b>GROSS PROFIT</b>		<b>-\$371 900</b>	<b>-\$116 900</b>	<b>\$323 100</b>	<b>\$812 500</b>	<b>\$1 457 500</b>	<b>\$2 104 300</b>
<b>NET PRESENT VALUE</b>	\$1 394 787					Discount rate	10%

## 15.4 Self-help hub and resource centre

This business case below 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
Garment sector workers		260000	338000	439400	571220	742586		Number of workers involved in the industry is 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
Workers engaged		2600	16900	43940	85683	148517		
Average wage pa	1140							\$95 per month is lower end of average \$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							
<b>INCOME</b>								
Sales revenue	\$57	\$148 200	\$963 300	\$2 504 580	\$4 883 931	\$8 465 480	\$16 965 491	
<b>TOTAL INCOME</b>		<b>\$148 200</b>	<b>\$963 300</b>	<b>\$2 504 580</b>	<b>\$4 883 931</b>	<b>\$8 465 480</b>	<b>\$16 965 491</b>	
<b>OPERATING COSTS (OPEX)</b>								
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	\$671 460	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
<b>TOTAL</b>		<b>\$391 950</b>	<b>\$938 925</b>	<b>\$1 973 205</b>	<b>\$3 569 875</b>	<b>\$5 973 283</b>	<b>\$12 847 238</b>	
<b>TOTAL EXPENSES</b>		<b>\$391 950</b>	<b>\$938 925</b>	<b>\$1 973 205</b>	<b>\$3 569 875</b>	<b>\$5 973 283</b>	<b>\$12 847 238</b>	
<b>GROSS PROFIT</b>		<b>-\$243 750</b>	<b>\$24 375</b>	<b>\$531 375</b>	<b>\$1 314 056</b>	<b>\$2 492 198</b>	<b>\$4 118 254</b>	