Organic cotton production and processing in Tajikistan: an assessment of the current situation and future potential
Organic cotton production and processing in Tajikistan: an assessment of the current situation and future potential

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\(^2\) Alexandra Perschau contributed to the market study undertaking interviews with experts, and to the results to this study.
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Acronyms

ACSC  Agricultural and Commodity Service Cooperative
BCI   Better Cotton Initiative
CIF   Cost, Insurance, Freight (INCOTERMS Term for shipping cargo)
CIS   Commonwealth of Independent States (some countries that made up former USSR)
CMT   Cut, Make, Trim (Also known as Sewing)
DAF   Delivered at Frontier (Incoterm no longer in use for new contracts replaced by DAP: Delivered at Place)
ELS   Extra Long Staple (cotton fibre)
EU    European Union
EU    European Union
Ex-Works Incoterm for deliveries made available at seller premises
FLO   Fairtrade Labelling Organisation
FT    Fair Trade
GDP   Gross Domestic Product
GIZ   Deutsche Gesellschaft für Zuzammenarbeit
GM or GMO Genetically Modified Organism
ICCO  Dutch Interchurch Cooperation for Development
IFOAM International Federation of Organic Agriculture Movements
IMO   Institute for Market Oekologie
Incoterm International Commercial Terms
ITC   International Trade Centre
IVN   xxx xxx Naturtextil
JICA  Japan’s International Cooperation Association
KGS   Kyrgyz Som (Kyrgyz national currency)
MAP   Medical and Aromatic Plants
NE    Number of yarn hanks (of 840 yards) per pound of yarn
PPP   Purchasing Power Parity
R&D   Research and Development
SECO  Swiss Economic Cooperation
SME   Small and Medium Enterprise
T&C   Textiles & Clothing
TE    Textile Exchange
TIR (carnet) Transports International Routier
TJS   Tajik Somoni (Tajik National Currency)
USA   United States of America
USAID United States Aid for International Development
USP   Unique Selling Point

Weights and measures

All figures in this report are quoted in metric measures. Tonnes means a metric tonne of 1,000 kilogrammes. Distances and areas use metres, hectares and so on.
1. Executive Summary

This report examines the current status and future potential of organic and Fairtrade cotton in Tajikistan. It is based on an examination of the literature, results from a field study in November 2013 and follow-up interviews with actors in the international market. Information gathered from reviews of published documents was tested during field work, which also sought information on the production and processing in the country of both conventional and organic cotton. The first draft of this report was presented to stakeholders at a round-table in Tajikistan on February 25 2014, which saw discussion of the report and a general acceptance of the proposed preferred strategy for organic cotton processing to focus on increasing yarn production in the short term, with some fibre export and possibly some research into handicraft options. Longer term strategies should focus on value chain development further upstream.

Tajikistan faces undoubted challenges but also offers opportunities, including opportunities for collaboration in organic cotton processing and more widely in the T&C sector. Challenges include investor and buyer confidence in the stability of the country, logistics, and access to affordable finance. On the other hand, there are causes for optimism: the Tajik industry is upgrading rapidly due to a government programme of tax breaks. Other constraints to growth include ‘government regulations and interventions that weaken the business climate, weak control of corruption resulting in informal taxation that adds to the cost of doing business, and costly and unreliable connectivity service raising the cost of trading and limiting access to markets and technology. We can summarize these constraints into two: a constrained production capacity and constrained accessibility to market.’ (Coulibaly 2012). To date, the Tajik textile industry has concentrated on cotton yarns and fabrics, and in 2009 (excluding fibre exports) was worth US$28 million, just under 1% of GDP (ITC 2010). Estimates for the growth potential of organic cotton by promoters may be optimistic, but it is possible it could reach a level where it could be processed at economies of scale. That said, the scepticism that is present to some degree among donors has a serious basis, and reflects that projections have not always been realistic and grounded in solid research. The conclusion is still that there is potential to integrate organic and Fairtrade cotton into textiles value chains in Tajikistan.

The global production of organic cotton has been declining according to sector reports for the past two years, but despite this market growth continues to be reported. However, respondents to our survey suggested that questions remain over whether market demand for organic cotton is actually increasing. Various respondents assumed an oversupply of organic cotton rather than a shortage. The organic cotton sector also remains dominated by India in production as well as processing, particularly in low cost fibre and garments. Countries like Tajikistan need to find niches where they can compete, following the example of other small countries.

Before it can seriously compete and find its niche, however, Tajikistan needs to grow its organic cotton production to an economic level, where it can provide enough supply to achieve economies of scale in processing. The present situation is that in 2011/12, Tajikistan was the 18th largest organic cotton producer out of 18 producing countries, with 16 metric tonnes, although it is expected to reach 100 tonnes in 2012/13 (the 2013/14 season is expected to see 300 to 350 tonnes of certified organic cotton and some 800-900 tonnes in-conversion to full organic status).

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3 Organic cotton in Tajikistan is not yet certified Fairtrade, but the Terms of Reference explicitly require both organic and Fairtrade to be examined
4 Participants included the Deputy Minister for Economic Development and Trade, representatives of the Ministry of Economic Development and Trade, Ministry of Industry and New Technologies, Ministry of Agriculture, Chamber of Commerce and Industry, Tajik Standards Institute, Textiles Companies (Hema Textile, Olim Textiles, Nafisa), Association of Light Industry, International NGOs and Donors (Helvetas, ITC, Swiss Cooperation), the organic cotton producers association, Sughd Organic, the Technical University and Academy of Science, and other stakeholders (33 in all)
5 Respondents is used in the text to indicate market actors we interviewed in the UK and Germany
Organic cotton development is hampered by unclear signals from international markets, while most companies that are inclined to build long-term partnerships already have projects they associate with—and finding new ones with the required capacity and finance is likely to be a challenge. The larger and anonymous buyers in organic cotton prioritise the affordable organic cotton from India, or countries where there is manufacturing, such as Turkey, which is close to the market as well. Organic cotton partners in Tajikistan need to demonstrate their capacity in client relations and in product—a chicken and egg situation. Marketing also needs to be greatly improved. Nonetheless, a growing and vibrant cotton textiles industry which is seeking new markets is an opportunity for organic to develop alongside it. For example, Tajikistan now exports yarn in increasing quantities, especially to Turkey and the garmenting sector is developing rapidly. Yarn is the most competitive textile industry product, with good prospects in finished products.

From the research, we can conclude that Tajikistan can both increase production of organic cotton fibre, and find an industry that could process it. For the first, we know the limitation is the possible size of the market, while for the latter we know that as well as the market the textiles industry is not yet aware enough of certification and market demands, and buyers have unanswered questions over real quality. To move forward, any strategy needs to:

1) Identify and address the incentives for manufacturers to look at organic cotton.

2) Undertake market research both on the products and types of buyers who might consider coming to Tajikistan.

3) Identify any smaller buyers who are interested in seeking secure and traceable production with long term relations and any possible coalitions of these that might come together to source in Tajikistan.

4) Identify possible investors to create a new Remei-style value chain all or partly in Tajikistan, and the scale of required investment.

5) Identify organisations that could undertake market research and develop relations with clients and interested parties for the long term.

6) Identify specialised higher value/low volume niches where finished products are competitive and/or in demand.

It is thus possible to recommend some strategies for Tajikistan to look at in more detail, as in Box 1 below. However, it is the conclusion of the study, endorsed at the round-table in February 2014, that option 3, that of focussing development and scaling up on spinning (with continuation of fibre exports and some efforts around handicrafts) is the way forward

### Box 1: Possible strategies for the organic cotton sector

<table>
<thead>
<tr>
<th>Option</th>
<th>Current status</th>
<th>Needs and limitations</th>
<th>Potential markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fibre export</td>
<td>All organic fibre is currently exported.</td>
<td>Production remains low and while conversion is accelerating, it is not clear the buyer will be willing to absorb this. Expert opinion suggests this is <strong>not a good option to reach the volumes required for</strong> EU, Turkey, CIS</td>
<td>1 (only viable in concert with another strategy such as 4 below for example)</td>
</tr>
</tbody>
</table>

6 Remei is a Swiss platform that supports producers in India and Tanzania and coordinates a vertically integrated production chain to finished product (including options for customised products), and directly markets Textiles & Clothing to buyers such as Coop Switzerland. See [www.remei.ch](http://www.remei.ch)

7 A check list of areas to take into account when planning for organic cotton value chain development in business, and a calculator, are included under section 13.
| Fibre and local handicrafts | There is a local handicraft sector using cotton being backed both by ITC programmes and the Chamber of Commerce. | Like many such sectors, most workers are small groups or individuals, but there is now an association for the sector. Styles are popular and costs are low, making this a potential sector to explore with organic cotton for domestic, tourism and export markets. Absorbed volumes of organic cotton would however be small | Domestic tourism and gift markets; adapt products to uses in export markets: rugs, cushions, wall hangings, in traditional and modern styles, for export to the EU, CIS, US and Asia. | 2 (only in concert with another value chain strategy) |
| Spinning | Spinning is developed and growing in Tajikistan, as part of the government's drive to create jobs and manufacturing. | All yarn is in the ranges below NE38 with a few exceptions, mostly carded and not combed. The limited range is suitable for many applications. Expert opinion suggests the industry should aim for more counts around NE40, as well as NE30, combed. This sector is cost-competitive and already finding conventional markets. **This is certainly the best option in the short term for organic cotton.** | Turkey, CIS, EU (possibly) and perhaps further afield. | 4 |
| Development of weaving/sewing | This is the fastest growing sector as industry invests through the government tax relief programme | Weaving is being developed in many plants, including knitted fabrics. Dyeing and finishing is an important aspect to add to develop the next stage and understanding the market demand is also important. | EU, US, Turkey, CIS | 2 (or 4 if a partnership can be made with Kyrgyzstan for supply to the sewing industry there) |
| Development of full value chain | Some companies already producing finished products for export markets, including kimonos, socks, casual adult wear and jeans/trousers for the fashion industry. | Many companies do not yet have enough idea of what might be needed or attractive and cost effective in the market, with the exception of foreign owned companies and one local company. **Costs are a little above expected ranges in the market, and volumes are too small for larger retailers.** If these can be resolved then this is the **best long term option.** | EU, Asia, Russia, US, CIS | 3 to 4 (costs to investigate, quality and market research to be strengthened) |
2. Introduction

This report examines the current status and future potential of organic and Fairtrade\(^8\) cotton in Tajikistan. It is based on an examination of the literature, results from a field study in November 2013 and follow up interviews with actors (called respondents in the text) in the international market (notably covering Germany, the UK, France and Switzerland).

Information gathered from reviews of published documents was tested during field work, which also sought information on the production and processing in the country of both conventional and organic cotton. The combined results, particularly on costs, volumes and qualities were then tested further with international market experts. The first draft of this report was presented to stakeholders at a round-table in Tajikistan on February 25 2014\(^9\), which saw discussion of the report and a general acceptance of the proposed preferred strategy for organic cotton processing to focus on increasing yarn production in the short term with some fibre export and possibly some research into handicraft options. Longer term strategies should focus on value chain development further upstream.

These activities have allowed an assessment of the potential for increasing organic cotton production and trade, the state of Textiles & Clothing processing and the interest in and knowledge of organic markets among processors in Tajikistan.

Tajikistan faces undoubted challenges but also offers opportunities, including opportunities for collaboration in organic cotton processing and more widely in the T&C sector. Challenges include investor and buyer confidence in the stability of the country (as well as concerns over issues such as child labour), logistics (freight delays and costs of shipping to international markets), and access to affordable finance. On the other hand, there are causes for optimism: the Tajik industry is upgrading rapidly due to a government programme of tax breaks.

The estimates of the potential for production growth by organic cotton promoters may be optimistic, but it is possible for it to reach a level where it could be processed at economies of scale, especially if there were more opportunities to bulk fibre production from Tajikistan with that of Kyrgyzstan. That said, the scepticism that is present to some degree among donors has a serious basis, and reflects that projections have not always been realistic and grounded in solid research. Nevertheless, the conclusion is that there is potential to integrate organic and Fairtrade cotton into textiles value chains in Tajikistan.

3. Overview of the global market for organic cotton

The global production of organic cotton has been declining according to sector reports for the past two years, following several years of reported rapid growth. It stood at 138,813 Metric Tonnes of lint in 2012 (an 8% drop on the previous year and over 100,000 tonnes less than the earlier reported high of 241,698). Of the 2012 production, over 100,000 tonnes were grown in India.

Despite this drop, a promoting body reports ongoing growth in market value to US$ 8.9 Billion for organic cotton textiles (Textile Exchange 2013b). Other views may suggest that these figures need to be taken with some caution, as market value for similar production levels was much less in earlier years (e.g., US$ 3.2 billion in 2008 for production of 145,872 tonnes in 2007/8 – less than half the reported market value for a slightly higher production level). Meanwhile FAO (2009) showed that ‘...the market for branded organic cotton items has grown from 74 839 tonnes in 2007 to 92 998 tonnes in 2008, and will reach 123 272 tonnes

\(^8\) Organic cotton in Tajikistan is not yet certified Fairtrade, but the Terms of Reference explicitly require both organic and Fairtrade to be examined

\(^9\) Participants included the Deputy Minister for Economic Development and Trade, representatives of the Ministry of Economic Development and Trade, Ministry of Industry and New Technologies, Ministry of Agriculture, Chamber of Commerce and Industry, Tajik Standards Institute, Textiles Companies (Hema Textile, Olim Textiles, Nafisa), Association of Light Industry, International NGOs and Donors (Helvetas, ITC, Swiss Cooperation), the organic cotton producers association, Sughd Organic, the Technical University and Academy of Science, and other stakeholders (33in all)
This projected market volume for organic cotton textiles is in line with TEs own production numbers now, and may be more realistic given other market numbers. In 2007, the OTA in the US estimated the market for organic textiles at $472 million.

UK sales of organic cotton were £85-90 million in 2008\(^{10}\), reaching 280 million in 2012 (Hartman 2007 in FAO 2009): Marks & Spencer sold 1.1 million items in 2008, while for one year New Look out-performed them with 2.3 million pieces. Switzerland used 2250 tonnes of organic cotton in 2007 and France consumed 600 tonnes. Other markets were Sweden (350 tonnes), Italy (250) and Netherlands (100) (ITC in FAO 2009).

In 2008, Fairtrade product sales were Euros 175.9 million (In FAO 2009). In Fairtrade, The UK consumed £100 million of FT cotton in 2008 and M&S used one third of global FT cotton in 2007; Sainsbury are also a big player in this market (FAO 2009). That said, both are now buying BCI and/or CmiA cotton as well, and their FT sourcing is focused on India. According to FAO (2009) though, the UK apart, in 2009 global markets for Fairtrade were tiny.

Organic cotton fibre production in 2012/13 is expected to remain flat or decline slightly, despite predictions for continued market growth (Textile Exchange 2013). Respondents to our survey also suggest that questions remain if market demand for organic cotton actually is increasing as claimed by market reports. Various respondents assumed an oversupply of organic cotton rather than a shortage.

### Table 1: Reported production and retail sales of organic cotton and textiles

<table>
<thead>
<tr>
<th>Year</th>
<th>Production (metric tonnes of cotton lint)</th>
<th>Sales (US$; of textiles made with organic cotton)</th>
</tr>
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<tbody>
<tr>
<td>2005/6</td>
<td>31,017 (2005/6) later adjusted to 37,799</td>
<td>583 million</td>
</tr>
<tr>
<td>2006/7</td>
<td>57,931.00</td>
<td>1.9 billion</td>
</tr>
<tr>
<td>2007/8</td>
<td>145,872.00</td>
<td>3.2 billion</td>
</tr>
<tr>
<td>2008/9</td>
<td>209,598.00</td>
<td>4.3 billion</td>
</tr>
<tr>
<td>2009/10</td>
<td>241,698.00</td>
<td>5.61 billion</td>
</tr>
<tr>
<td>2010/11</td>
<td>151,079.00</td>
<td>7 billion</td>
</tr>
<tr>
<td>2011/12</td>
<td>138,819.00</td>
<td>8.9 billion</td>
</tr>
</tbody>
</table>

Source: compiled from various Textile Exchange reports

There may have been previous over-reporting of organic cotton production for various reasons, including double counting, wrong reporting and inclusion of cotton that was fraudulently labelled organic (Ferrigno 2010, 2012). There is thus some doubt over the higher figures reported for markets given the contradictory reports of declining production and rapidly growing markets, and the assumptions behind the numbers. Nonetheless, there is a market for organic cotton and demand continues even if, according to traders, the boom years in organic cotton are over, and markets have now stabilised at a lower level.

Sales prices of organic cotton are generally based on local or world market prices (for conventional cotton) to which is added a premium. Premiums have been squeezed both by buyer pressure and high market prices in India in recent years, and rarely pass 8% any more there, while in other regions a 20% premium is the norm and can be as high as 30%. There are also two known cases of producer groups fixing prices outside the conventional cotton market, using production costs and a mark-up as a basis for sales, which

\(^{10}\) Few detailed studies by market or segment are available for more recent years.
reduces the uncertainties for buyers linked to price volatility but can lead to significant price differences for each party in some years compared to conventional market prices. Pricing in both Kyrgyzstan and Tajikistan is linked to international indexes (Cotlook A), but local pressures (Ginning over-capacity, for example) mean that farmers often receive higher than market prices, while ginner margins are squeezed, especially given logistics issues locally.

Globally, organic cotton saw a period of strong downwards pressure on prices and premiums (between 2008 and 2010), even as demand appeared to be soaring. This was made worse as production always seemed to outpace demand, while rumours about potential fraud in India reduced confidence in the sector even as the country became the largest and indeed dominant producer (Indian organic cotton remains the cheapest on the market). The Indian government has addressed integrity concerns by introducing a traceability and registration system (Tracenet), which explains some of the fall in organic cotton production, as some producers have disappeared.

Price pressures on organic cotton, including challenges to the payment of premiums, will affect other regions given India's importance in organic cotton. Organic cotton is increasingly being challenged and overtaken by rival sustainability systems, notably the Better Cotton Initiative\(^\text{11}\), which is easier to enter and grow to scale as it is based on IPM\(^\text{12}\) rather than organic practices, pays no premiums and is backed by major donors as well as global brands. Organic cotton is lagging behind others as little finance is now coming in, and there are no mechanisms to raise funds to pay for new production or indeed research, which BCI and CmiA\(^\text{13}\) both enjoy.

According to Textile Exchange (2013) the organic cotton sector remains very challenging for farmers in terms of weak market signals. Although they do not discuss price, this remains an important issue, as while organic farming requires long term investment by farmers, prices remain volatile. Long term relationships between buyers and farmers are critical to achieving a more stable market situation, although they remain rare.

3.1 The organic and Fairtrade cotton sectors, and their major players

ITC estimated in 2007 that 25 large brands absorbed some 50-60% of organic cotton: Nike was estimated to use 5000 tonnes and H&M was predicted to reach 3000 tonnes by 2009 (FAO 2009).

The major organic cotton users according to Textile Exchange (2013) include C&A (EU), H&M (EU), Nike (US), Puma (EU), Coop Switzerland (Europe), Anvil Knitwear (EU), Williams-Sonoma (USA), Inditex (EU), Carrefour (EU) and Target (US). However, other major users may not be included in this list, as suggested by the fact that a company can be in the organic cotton top 10 while using just under 1000 tonnes of organic cotton lint. These are all either US or EU retailers, showing that the consumption of organic cotton remains concentrated here, despite the existence of retail markets in other regions, such as South Africa and South America as well as Japan and South Korea (countries where much of the sector remains in the hands of small or medium sized retailers, which may be more interesting for the volumes of production possible in Central Asia). There are also many 'sleeping giants' including China, Russia and India in this market, with growing middle classes who are beginning to consume organic food and may potentially consume organic cotton textiles.

\(^\text{11}\) The Better Cotton Initiative, or BCI, is verified, but non certified production system based on production principles and criteria that include respect for the environment and attention to 'decent work'.

\(^\text{12}\) IPM, Integrated Pest Management, is a form of agricultural production defined for example by the FAO. It includes the following principles: 1) growing a healthy crop 2) prevention of the development of pest populations 3) Preservation and encouragement of populations of beneficial insects 4) regular observation of the health of the crop and populations of pests and beneficials 5) management of pesticide resistance. See for example [www.fao.org/agriculture/crops/thematic-sitemap/theme/pests/ipm/en/](http://www.fao.org/agriculture/crops/thematic-sitemap/theme/pests/ipm/en/)

\(^\text{13}\) CmiA, or Cotton Made in Africa, is a system with similarities to BCI, aimed specifically at smallholder farmers in African growing under rain-fed (i.e., not irrigated) conditions.
Traders involved include major merchants such as Reinhart and Plexus Cotton, while some manufacturers directly control organic cotton through long-term contractual relations (for example, Pratiba Syntex in India). A portion of organic cotton remains supported by donors, but much today is operating on a commercial footing, particularly in Turkey and the US as well as much of India, South America and Africa.

In the global market, product ranges found in organic are the same as in conventional, with many markets items such as outdoor clothing, baby and child, home textiles and fashion being leaders. There are also many products in the health sector, including sanitary pads, cotton pads, and bandages.

### 3.1.1 Manufacturing regions

Major markets in production and processing are dominated by certain countries with comparative advantages in low costs, domestic fibre production, industrial clusters and the presence of brands seeking organic cotton. In production, these include India, a long way ahead of Turkey, China and the US, and in manufacturing, India, followed by China and Turkey (Textile Exchange, 2013).

Manufacturing regions, as reflected by certification, are led by India (30% of certification, alongside its 70% of cotton production), China (16%), Bangladesh (15%), and Turkey (14%), South Korea (9%), and Pakistan (5%) all in the top 10, with Japan, Hong Kong, Sri Lanka and Thailand; other manufacturing regions exist, but are minor so far, such as Portugal, Paraguay, Peru, and so on (Textile Exchange 2013).

To succeed in organic production and processing, smaller countries need to find niches where they are competitive, and forget about trying to compete in high volume, low cost products such as cheap t-shirts. Successful examples of small production/processing clusters do exist, including in other landlocked countries (Paraguay) and other smaller producing countries (Tanzania, Peru). The experience of these countries suggests that while the organic cotton value chain is largely concentrated in countries with both production and large, competitive manufacturing sectors (India, Turkey, China) or large scale production (US), the potential exists for smaller countries to find a place in the organic cotton sector. Of these, Paraguay and Peru process all their cotton fibre domestically, and much of Tanzania’s production is supplied into a vertical value chain or domestic processing.

However, projects with smaller production volumes are more fragile when they rely on fibre trade, although there are some that manage to work at low levels of production, including as low as 100 tonnes where there is full-processing of the production or 300-400 tonnes where fibre alone is traded (but these small volumes remain vulnerable to falling world market prices and it is difficult at these smaller levels for projects to grow, find new customers and raise finance). A common consensus would be that fibre producers need between 500 and 1000 tonnes of organic fibre production and efficient structures to break even.

### 3.1.2 Sourcing of Organic Cotton and Textiles

Interviews show that the bulk of organic cotton currently used comes mostly from India and Turkey, with the US as an additional supplier specialised in extra-long staple cotton and other regions such as China, Greece and Tanzania also enjoying some security of market. Other regions sell as these origins are used. Other exceptions include countries consuming their own production in manufacture (Peru, Paraguay). A few companies have long-term relationships with farm projects, but much of the trade remains anonymous.

India and Turkey also dominate organic textiles sourcing. Most companies have a small range of specialized suppliers, and there was little interest by respondents in testing new partners. Several interview partners stressed the (human) resources that had to be invested to set-up relationships, and explained they were now very satisfied with their suppliers. At all levels – yarn producers, fabric producers, traders and retailers – it was stressed that good relationships with suppliers were not only based on prices, but more importantly on product quality, provision of services and reliability in delivery.

### 3.1.3 Certification and consumer action
Despite the presence of the GOTS standard, meant to ensure a more unified approach to certification and reduce the proliferation of new standards in organic (FAO 2009), there is a growth of new sustainable fibre as well as cotton standards (including with contents claims, such as the TE standards), and this is a threat to consumer trust due to confusion. Cottons from certain origins are also now making sustainability claims, including US and Australian cotton (Cotton Leads).

There is growing demand by consumers for more transparency, but according to Cotton Incorporated (2012), they expect others to do the work for them: only 27% of consumers make conscious choices to buy environmentally friendly products. Consumers remain attached to bargains and value when shopping, as well as influenced by design. The Lifestyle Monitor (Cotton Incorporated 2012) reports that 'Currently, 98% of consumers say fit, comfort (96%), quality (94%), price (93%) and durability (92%) are important to their apparel purchase decisions, according to the Environment Survey. Environmental friendliness (47%) is last on the list.'

Retailers may often use this information to explain their lack of interest or large investment in sustainable options. On the other hand, ongoing concerns over the environmental damage from cotton and textiles, and over issues such as child labour, are driving retailers to change.

Responses to our survey suggest that the organic market includes large players and retailers who use organic fibre in anonymous supply chains (that is, without any traceability from field to finished product or long term commitments between parties, leaving farmers vulnerable to short term market vagaries and the whim of the buyer), and others, mainly small and medium sized companies, who want to 'preserve the organic benefit throughout the supply chain and hand a “truly organic” quality product to the consumer'.

Consumers like to save the environment while saving money. Cost neutrality is key to many consumers, with few actually willing to pay more. Thus for countries like Tajikistan it is important that any textiles strategy aims to find a niche that is not as price sensitive as some. Given relative economies of scale, items such as tee-shirts (which India and China can produce much more cheaply, even in organic), are probably not the right ones, unless these were to be fashion items, i.e., higher priced. Bedding, home textiles, baby and children’s products, and higher end men’s and womenswear might be more interesting.

Box 2: A note on standards and certifications

Organic cotton is grown under organic farming production standards which are defined in law in different jurisdictions, the most important of which are the EU and US regulations. IFOAM\textsuperscript{14} also defines organic farming, in a more comprehensive way in that it also requires social elements. However, only certifiers accredited by IFOAM will verify to this rather than the purely environmental national or regional standards. Beyond farming, some textiles processing using organic cotton is also now certified to the Global Organic Textiles Standard (GOTS), which assures both transparency and traceability as well as environmentally and socially responsible textiles processing to finished goods and retail. It also allows a unified certificate covering all the different stages, making trade and export easier\textsuperscript{15}. Some other standards verify traceability, such as those promoted by Textile Exchange.

The IFOAM basic standard says that 'Organic agriculture is a whole system approach based upon a set of processes resulting in a sustainable ecosystem, safe food, good nutrition, animal welfare and social justice. Organic production therefore is more than a system of production that includes or excludes certain inputs'.\textsuperscript{16} Organic cotton normally receives a premium price over conventional prices.

Fairtrade is a social standard developed and promoted by the Fairtrade Labelling Organisation, which also includes some environmental criteria, notably on prohibition of certain pesticides. The Fairtrade cotton

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{14} The International Federation of Organic Agriculture Movements is the global membership body representing the organic industry
\item \textsuperscript{15} See \url{www.global-standard.org/the-standard/general-description.html}
\item \textsuperscript{16} IFOAM 2008 \url{www.ifoam.org}
\end{itemize}
\end{footnotesize}
standard includes a set Fairtrade Minimum Price for cotton in different producing regions, which ensures farmers receive a price above the cost of production, on top of which comes a social premium. Fairtrade-organic also requires a minimum 20% organic premium.\(^{17}\)

Organic cotton does not have to be processed under GOTS, but there are in all cases definitions and criteria on how products are labelled, e.g., 'Made with X% organic cotton' or 'Organic Cotton' for GOTS or 'Made with cotton produced under organic agriculture'. Further rules may apply to blended fibres, yarns and fabrics.\(^{18}\)

Fairtrade-organic cotton essentially includes both certifications.

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**Box 3: Organic cotton labelling in textiles according to the IFOAM Basic Standard**

**Extract from the IFOAM Basic Standard (2006):**

7.2 Fibre, Textiles and Apparel

General principle: Organic fibre, textiles, and apparel are labelled in a way that accurately conveys the organic content of the product.

Recommendation: Labels and tags attached to the products should declare materials in non-textile accessories.

Standards shall require that:

7.2.1 Labelling of textiles follows all standards on labelling organic food with the exceptions in this section.

7.2.2 Only substances allowed by the certification body based upon the criteria for textile processing in Appendix 1 shall be used to process fibre products labelled as “organic.”

II. IFOAM Basic Standards

7.2.3 Apparel and other textile products labelled as organic consist of at least 95% by weight organic fibre as described in section 6.7\(^{*}\).

7.2.4 Textiles may be labelled “made with (…%) organically produced fibres” only if at least 70% of the fibres are organic as described in section 6.7\(^{*}\).

* (Percentages in 7.2.3 and 7.2.4 refer to the total weight of the fibres, and do not include the weight of the non-textile accessories such as buttons and zippers.)

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3.2 Global, regional and national context for cotton and textiles

The OECD/FAO (2013) predict flat prices for cotton in the next few years (but perhaps higher than long time average trends), with China’s production declining 17%, and India becoming the largest producer. They also predict a continuing decline in cotton’s market share (driven by changes in textiles demand rather than a decline in absolute cotton production). China’s stocks will decline, while production growth will be below 2% per year, reaching 27.2 million tonnes in 2022.

Cotton is a major crop for the Central Asia region (producing 1,688,000 tonnes of fibre in 2004 but much less than the high of 2,996,000 in 1980), from which 2/3 of production is exported, contributing 10% of world cotton exports, although a decline in exports is partly explained by increased consumption in the textiles and clothing sector (ICSTD 2013). Tajikistan is the third largest producer in Central Asia, although the region is dominated by Uzbekistan.

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\(^{17}\) See [www.fairtrade.net/small-producer-standards.html](http://www.fairtrade.net/small-producer-standards.html)

\(^{18}\) See the IFOAM basic standards, available at [www.ifoam.org](http://www.ifoam.org)
Cotton production was severely disrupted following the collapse of the Soviet Union and independence for regional states (Peyrouse 2009), with problems including financial constraints and absent or slow reforms. Tajikistan remains very dependent on cotton, a situation that could increase as it seeks to build a more complete cotton and textiles sector.

Tajik cotton production declined to 120,000 tonnes of fibre by 2011/12 (ICAC 2012), with domestic consumption of just 7,000 (a figure which seems low given the industry capacity seen on the field visit). ICAC (2012) were predicting further falls in 2012/13 to 105,000 tonnes. Government interventions (price support, cotton reserves, etc.) in major cotton producing countries (US, China, India) are likely to affect markets and prices for smaller regions such as Central Asia in the near future, e.g., as stocks are released or as prices are affected by interventions.

The decline in the sector (in volume and in productivity) and its associated problems (environmental and social) can all be said to be legacies of the Soviet Union, but a slow process of liberalisation and lack of investment (seed research onwards) are holding back potential development both in agriculture and textiles. Problems of corruption and issues of child or forced labour remain, including in Tajikistan, where much cotton growing is still on collective farms; other commonly reported problems in the region include debt bondage (Peyrouse 2009). Land ownership is reformed in some countries in the region but remains the property of the state in Tajikistan, although individuals can claim the right to farm land. As well as social problems and economic constraints to growth, there is a legacy of environmental problems in cotton growing, including outdated irrigation systems and resulting issues with salinity.

3.3 Organic cotton in Central Asia

Kyrgyzstan and Tajikistan contribute a very small percentage of the current supply of organic cotton and none of the demand; there are as yet no other organic or Fairtrade cotton initiatives in Central Asia. In 2011/12, Kyrgyzstan and Tajikistan were respectively the 12th and 18th largest organic cotton producers out of 18 producing countries, with 156 and 16 metric tonnes each (0.12% of world organic cotton production).

Production in Tajikistan is expected to reach 100 MTs in 2012/13 with much more in-conversion (800-900 tonnes or so). Tajikistan can grow extra-long staple in small quantities, and most of its other production is longer and better quality medium staple than many competing producers.

3.4 Experiences with organic cotton in similar countries and lessons for Central Asia

Tajikistan has similarities to Paraguay in its production volumes and landlocked state, but farmers in Paraguay benefit from good markets for rotation crops (indeed, cotton was added after markets were in place for crops such as sesame, soya and sugar cane), while all cotton is processed locally, making the low volume (100 to 150 tonnes per annum since 2004) more competitive – and making the lack of production growth in organic cotton less of a concern. The situation is similar in other Latin American countries with small volumes of organic cotton, notably Peru, which benefits both from domestic processing and the production of speciality cottons such as long staple and coloured cottons. To succeed, small production countries will do better if they have an integrated manufacturing chain, or a hybrid system. For example, in Tanzania, successful projects are integrated either into the Remei global value chain or into local processing, while the one contract farming operation with mainly fibre exports has struggled. In Benin, the most successful organic cotton programme has some long term buyers but is struggling to find new buyers to grow as its small volumes limit its capital, and in Burkina Faso it is the demand from one buyer that is supporting growth. In other words, being without a pool of confirmed buyers with a global network or an integrated value chain or again without other crop markets, means organic cotton struggles to grow and remains vulnerable when dependent on fibre exports.

For example, the lack of local processing is the reason for the end of organic cotton in Zambia, which as a landlocked country was not competitive for fibre exports alone; unfortunately, the local textile industry was
closing down following the end of the Multi-Fibre Agreement (MFA) at the time organic cotton was beginning.

4. Overview of the Tajik market

Tajikistan is a complex country from the policy point of view, with an interventionist government in both cotton growing and the Textiles & Clothing sector, but an unreformed financial sector with little competition leading to costly loans, which makes investment difficult (Rates can be as high as 32% according to our survey). Current investment in textiles is driven by tax breaks.

Box 4: The government tax break programme

The policy environment includes a push for the development of full value chains in textiles instead of raw material exports. Companies developing these gain 12 year exemption from most taxes if they achieve this before December 2015. There is no VAT, and no duty on the imports of machinery that creates efficiency and jobs as well as exemption from land tax, income tax and export taxes.

The cotton production sector remains reasonably large despite falls in production since the Soviet era, but with issues in productivity, and tensions between traders and ginners (who favour fibre exports), and the government (who favour the creation of a full value chain and reduced reliance on fibre exports). There are also corruption and political patronage, while Tajikistan’s landlocked status means there are logistical challenges with an under-developed freight sector in terms of size and competitiveness, and border issues for routes through Uzbekistan. Overseas buyers are present, but there seems to be a watching brief on future stability among potential foreign investors. Investors may also be deterred by concerns over forced and child labour in the country and in cotton in particular, and this will be a factor to address in any efforts to seek investment in sustainable cotton (IoM 2013, Eurasianet 2009, Peyrouse 2009). Other issues in the country include governance, land rights, poverty, human rights, ethnic tension, terrorism and drug trafficking (Nichol 2013, Peyrouse 2009). The lack of a customs union and easier border crossings (notably with Uzbekistan) are a hindrance to Central Asian development in general, although the former is due to come into being soon.

However, in recent years a new approach, ‘freedom to farm' has been implemented to address issues of coercion in cotton, and the situation seems to be improving, even as debt has been cancelled or frozen and farmer prices have risen (Coulibaly 2012). Some analysis supports the view that Tajikistan has a comparative advantage in agro-industry and possibly in clothing for the regional market (including India, Turkey, China, and Russia as well as Central Asia, Coulibaly 2012) but transport infrastructure is a weakness.

Tajikistan has 7.6 million inhabitants of whom 67% worked in agriculture as of 2009. In some rural areas women are the main component of the labour force, probably as a result of male emigration for work.

The economy in 2010 was based on services (57%), Industry (22%) and agriculture (21%), but remittances from overseas contributed to 45% of GDP (Nichol 2013, Peyrouse 2009, Ashurov 2002). Tajikistan registered 7.4% GDP growth in 2011 and above 6% in 2012 (CIA 2013), with GDP per capita of US$ 2200 p.a., which Danzer and Grundke (2013) suggest place Tajikistan’s GDP PPP/capita 150th out of 185 as of 2011, at only a quarter of China's and 1/24th of the USAs.

In 2011, 21.5% of the population still lived below $1.25 per day with 47.2% below the national poverty line (UNDP 2012).

4.1 Agriculture

Agriculture contributed 18% of GDP in Tajikistan in 2010 (UNEP 2010), and provides 50% of employment, a figure which has risen post-independence (Lermand and Sedik, 2008, SOAS, CIA 2013), with agricultural growth of 12.1% in 2013 (ADB 2013), although arable land is only 500,000 hectares. Irrigation covers some...
75% of cultivable land (arable and perennials). Most farming households have diverse incomes, with only a minority dependent on farming alone (53% of income comes from farming on average).

Input costs have risen and mechanisation rates have fallen; production has however recovered since 1988, with growth driven by household and peasant farms. A process of land reform has seen 400 large farms (72% of the total) become 14,000 farms allocated to individuals, although between 1/3 and 40% of farms remain state owned. Collective peasant (dehkan) farms are technically partnerships, in which farm members are supposed to hold shares. Land rights remain non-transferable and agricultural reform is slow (Lermand and Sedik, 2008). Large and collective farms are less productive than peasant farms and household plots, and also more indebted.

Box 5: The agricultural expert view

Until the second half of the 20th Century and again since independence, much of Tajik agriculture has been organic by default - no pesticides or fertilisers are used, and the crop is hand-picked. The exception was under the Soviet Union from the 1960s, when intensive agriculture was pushed by government. There can be much more organic cotton, but this needs financial assistance as harvests are falling. Overall, agriculture needs to use more organic fertilisers, and to manage soils well - healthy soils are essential. Infrastructure needs improving, which includes better irrigation with clean water and no chemical residues.

Good access to finance is needed for farmers too. If all this is in place then organic can work. The quality of cotton is high; but processing capacity also needs to increase. A full value chain would equal 5 times as much export income as fibre alone. They also need good agronomists, a good national policy and its implementation, and to avoid cheating, such as false certificates.

4.1.1 Cotton production and ginning

Cotton itself has declined to 19.3% of the agricultural sector (CIA 2013), and covers 30-40% of arable land (with 50% of all irrigated land under cotton). Large farms put 70% of land to cotton, family peasant farms 40%, and household plots 25%. Cotton is the major export crop, making Tajikistan the 13th largest producer and 9th largest exporter of cotton lint in the world (Peyrouse 2009), providing 1/3rd of total exports (Danzer and Grundke 2013, SOAS 2010); 80-90% of agricultural exports are cotton. Tajikistan provides 1% of world cotton exports but cotton provides 30% of the country's export earnings (FAO 2011 in Danzer and Grundke 2013).

Production in 2011/12 was 120,000 tonnes, predicted to decline to 105,000 in 2012/13 (ICAC 2012), with 90% exported as fibre (Central Asia Online 2013), and a reported yield of 597 kg/ha (ICAC 2012). This is less than half the production level in 1990. The most recent report on Tajik cotton production (Timesca.com, January 2014) shows production on 191,333 hectares, 4% lower than 2012. This is partly due to government directives to 'increase areas under vegetables, fruits and fodder crops', to lower international prices and a lack of government budgets for developing the cotton sector'.

Cotton retains advantages over other agricultural crops in access to finance and inputs, and it is labour intensive. The Tajikistan Universal Goods Exchange (TUGE) registers contracts for internal and external cotton purchase and prices are set on a floor based on the Liverpool Cotlook for Asia, ex-works. Credit is usually provided by gins, at lower cost than banks. However, inputs are hard to source as they not made in country, especially for smaller farmers.

For farmers, the main attraction of cotton remains access to cotton inputs (which are put to other uses) and/or the value of wages paid in 'collective' farms (those farms that are not divided into individual plots and where income is paid as wages). Debt remains a problem in cotton, and state targets for cotton were only relaxed in 2007.

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There are 22 cotton gins each with a local monopsony. Most were privatised in 2000 but remain tied to cotton trading companies (Danzer and Grundke 2013). Their out-turn is very low at 30%. Gins are said to often cheat farmers by evaluating cotton as lower quality (Lermand and Sedik, 2008, also confirmed by local interviews), while cotton farmers’ earnings are lower than in other crops (Peyrouse 2009). However, cotton taxes and duties are said to provide 27% of the government budget (Khakulov).

Cotton quality is affected by both production issues (seeds, inputs) and storage (where 20-25% of value may be lost).

The major trade partners for cotton are Russia, China and Turkey along with Latvia, Iran and Switzerland (Nichol 2013) with some new destinations appearing such as Pakistan (2000 tonnes of fibre shipped in 2011, Express Tribune 2011).

Box 6: Tajik cotton quality. The views from the inspection services

Testing cotton for quality to international standards by a private body is a new development in Tajikistan. Cotton is tested against 14 different parameters, using both visual USDA tests and machine testing, including length, strength, colour, trash and micronaire.

Most Tajik cotton is strict middling (80%), with a micronaire last year around 4.7 to 8, length 1/18 inch (60%). There is normally a small amount of ELS, but none last year.

Cotton tests by gins and others are overseen by a state service, Tajikstandart, which is responsible for assessing the tests performed, and the laboratories involved. The gin’s own labs do the first testing (weight, humidity), and there might be intervention if there is a dispute between gins and farmers. They also test seeds, and try to give exact numbers, out-turn, expected output, and so on. All gin laboratories also have to be accredited, and all equipment, methods, and staff competency are checked. Gins are inspected each season, and cotton seeds are tested annually for purity. Permission for seed use comes from the MoA after agronomic and ecological trials. They sample seeds for quality, against USDA standards.

4.2 The textiles industry

To date, the Tajik textile industry has concentrated on cotton yarns and fabrics. In 2005, these made up only 5% of total exports, much lower than in the mid-1990s. Constraints to growth in textiles include ‘government regulations and interventions that weaken the business climate, weak control of corruption resulting in informal taxation that adds to the cost of doing business, and costly and unreliable connectivity service raising the cost of trading and limiting access to markets and technology. We can summarize these constraints into two: a constrained production capacity and constrained accessibility to market.’ (Coulibaly 2012).

The current aim is for Tajikistan to process around 70,000 tonnes domestically through a development programme that began in 2006. Yarn is now exported in growing quantities, especially to Turkey, and investors such as Indonesia have shown interest (Nasibova 2013). The Textiles & Clothing sector is also developing.

Box 7: The view from the Light Industry Association

There is a state programme for cotton/textiles, aiming for job creation, targeting 200,000 to 220,000 new jobs annually. This is within the limitations set by joining the WTO, which happened in 2013. What is needed is a climate favourable for attracting FDI, for companies to be created.

Current production is low, and only 8-10% of this is processed in the country; the rest is exported. This justifies the government programme of tax breaks to 2015, to enable companies to acquire new equipment, and to begin to process. This begins with yarn and is now moving to finished garments. Yarn quality is world class, and selling this has not been a problem. Many companies have orders 1 year ahead,
already paid for.

Now there is organic cotton. To grow, there is a need to educate dekhan farmers in the importance of organic cotton: they need to know the benefits. More information is also needed on the markets.

In 2004/5 prices collapsed to $1,000/tonne, and this caused many problems. The break-even point is $1,500, and this price can even be profitable if yields were raised.

There are other problems to resolve including 1) information and awareness campaigns 2) TV shows giving examples of organic success in other countries 3) a full value chain from field to final product 4) long term partnerships with buyers and a state programme for cotton 5) access to finance.

4.2.1 Fibre

Fibre quality in Tajikistan is quite good, with a decent reputation in the market and sought after characteristics, even if it is not as well-known as others. However, production has been declining and Tajik fibre is not as well known in international markets for example as Turkish cotton. The fall in production means ginning is over-capacity at present, while uncertainty exists among traders because of the push for more textiles processing, which must come at the expense of fibre exports; traders feel threatened by this, and there is also uncertainty over investment in cotton production growth and associated areas such as seed. The sector is also highly exposed to international price volatility, while the situation with capacity means gins might overpay farmers to secure cotton, reducing their margins.

**Box 8: The view from the gins**

The ginning sector is over-capacity with new investment ongoing. Major markets include Turkey. Many gins rely on exports and trade and are concerned about the increased drive for more in-country processing. Exporters face a 10-11% export tax as well as freight costs. Spinning mills and textiles get tax breaks on customs duties, VAT and taxes. This is unfair to ginners and farmers who still have taxes to pay.

Most gins provide farmers services such as credit and seed, and some also extension and inputs.

Prices are paid based on Liverpool indices although gins sometimes pay above the odds to secure supply, for example US$750/tonne of seed cotton instead of 700. Offers from buyers are around $1650 for lint, so the margins are tight.

Cotton prices are relatively high in Tajikistan, as there is over-capacity in ginning and much competition for farmers. Last year seed cotton was bought at $520, while this year it has been $700 or more. Yield and area are also falling, and debt is high. Tajikistan land reform and cotton reform are ongoing, with the break-up of Dekhan farms. This aims to 1) diversify from cotton to seek food security and 2) to promote textiles rather than cotton lint exports.

Transport is a challenge given the borders Tajikistan has.

Ginning out-turn is 31 to 32%.

Farmers are disorganised. Other problems are input quality (low quality, fake, or too expensive); increasing production costs (diesel/oil prices); access to reliable machinery (though high prices in the past 2 years did see some farmers buy new tractors); access to affordable finance (Interest rates are over 30%); degraded soils (over-irrigation, fertiliser); irrigation (no rational use, pricing per hectare at fixed rate not by cubic metre, and use cannot be measured).

4.2.2 Textiles & Clothing: spinning, weaving, sewing

4.2.2.1 Spinning
Spinning is the most developed part of the textiles sector in Tajikistan, working mainly with cotton, and markets are established for yarn, notably with Turkey. Yarn counts are between NE 8 and NE 30 in the main, with some counts reported up to NE 40. These are fairly standard in international markets although some respondents report a move towards higher yarn counts for many products. Capacity is low for most mass market products, but suitable for many niches. Although most yarn is rung-spun, it is not always combed, which would be a basic requirement in many markets outside the core existing ones such as Russia. Most spinning mills are adding or planning to add fabric making and sewing.

Box 9: The view from the mills

Many mills have begun with spinning before moving to knitting/weaving, yarn and fabric dyeing and sewing. Capacity is in the hundreds of tonnes of yarn a month, with most increasing capacity. The move to a full value chain is demanding that most mills invest in market research to find the best areas to invest in, while yarn is traded to markets including Russia, Turkey, China, and Latvia. Yarn is sold to traders, often via word of mouth.

Most mills work on 3 or 4 shifts, over 7 days, with reasonable salaries and working conditions, and some have additional standards such as OHR 8000 standard for first aid.

Most are financed by their own capital, with some credit, although interest rates are high, a situation most hope will change following WTO accession.

Equipment is usually new, of European manufacture and with maintenance by expatriate engineers.

There is some basic knowledge of environmental standards including organic, as well as of issues such as dyes and water treatment. This would however need to be improved to achieve entry to certified organic markets.

Garment capacity for an individual mill can reach 3.5 million pairs of socks or 500,000 units of adult clothing per year. Fabric ranges are quite diverse.

4.2.2.2 Weaving

The weaving industry in Tajikistan is in full development, but for many companies it remains a new addition. The range of fabrics is however growing and is suitable for a wide range of products. Equipment is modern as a result of recent investment, and most mills are working to good standards of labour, although market knowledge needs to be improved. As with yarns, total capacity is not on the right scale for the mass production of many products but a range of niche products are possible, including children, men’s and women’s wear. Some mills are also able to make home textiles as well as work clothing and uniforms. Equipment is often from Europe and maintained by qualified engineers. This sector, like spinning and sewing is benefiting from the government’s tax break programme.

4.2.2.3 Sewing

Sewing is thus far the least developed part of the sector. The sewing sector is the least developed textiles sector so far, although some mills are more advanced with domestic or overseas markets. Others are still installing equipment and researching markets. Nonetheless a range of products from specialised sportswear (kimonos) to uniforms are already available as well as socks, men’s and women’s wear and children’s clothing and home textiles. There is also capacity in artisanal and traditional decorative textiles, including bags.

4.3 Tajik organic cotton

Organic cotton production in Tajikistan is only 4 years old, and certified production remains small. Early results suggests yields are higher than in conventional, and there is a significant volume of cotton in conversion to organic. Should this volume achieve certification there are certainly grounds to believe that
this is enough to interest the T&C sector, in that this volume would make it feasible to have a segregated, full time organic cotton production line - if buyers are found (one factory estimates a volume above 1000 tonnes per annum would allow a dedicated production line). There are also smaller sub-sectors such as Kimono (competition grade) manufacture which could be interesting for organic cotton – however, this would require clever marketing towards national federations from countries with good awareness of organic cotton as well as appropriate sports (For example, Germany, Japan). Growth seems possible, seed research and purification are being developed, some policy makers are interested and there is said to an organic law in place.

However, political patronage and corruption remain threats to organic and conventional cotton, as they do across the economy. The entry of BCI on a large scale could also detract from organic cotton, especially if accompanied by a rise in the availability and quality of chemical pesticides and fertilisers, unless more cooperation is developed between organic and BCI focussing on natural soil and pest management, for example.

The sector also needs to determine its break-even point and a path towards self-sufficiency. Local advice and existing experience elsewhere suggests though that this is far above current production, perhaps 500 tonnes as a minimum and nearer 1000 of certified organic cotton to really allow for growth and investment.

An ongoing problem is that market signals are not clear for organic cotton. Growth in Tajikistan however is still being absorbed by the current buyer (but this growing demand is unlikely to be sufficient to reach break-even point). Tajikistan, like Kyrgyzstan needs value chain partnerships, at least fibre to yarn, which reduce market risks. This is a big challenge, especially as the more suitable small and medium sized players may need only a few tonnes of organic cotton a year, and so many buyers are needed.

4.3.2 Financial support

There is some scepticism among donors about the potential to achieve scale in organic cotton production in Tajikistan. The reasons for this include low awareness in country, cost risks, and that the sector needs to be demand driven. Outside organic cotton, textiles as a sector is politically exposed, and this could expose farmers to pressure to sell below break-even price. This risk needs to be tested with cotton companies: would they resist such pressures, and what pressures do they face given the government’s support programme for textiles? Supportive policies are needed that could help secure cotton supply (organic and otherwise) for the textiles industry, but not barrier policies so much as enabling policies, e.g., incentives. What fiscal measures could encourage domestic consumption and processing of organic cotton?

4.3.3 Sector partners and moves towards local ownership

Helvetas are looking for a sustainable cotton sector. At present, cotton is often unprofitable with high costs and low prices, and there are other problems; however, Tajikistan is very favourable for organic. The organic cotton sector has a focus on reducing production costs, and raising soil fertility which is leading to results, such as improving yields, which are now reportedly higher than conventional.

Globally, market demand for organic cotton is rising, but there are threats, e.g., from GM contamination in India. Brands are now looking for other sources of organic because of this, which is an opportunity for Tajikistan, although here brands may be concerned about child labour (a problem being addressed). The sector is not (yet) certified Fairtrade.

To date there are 1000 farmers in the organic sector, of whom 206 were fully certified by 2011 (36% were women). By 2014 they plan to reach 1500 farmers. Current production is 100 tonnes of certified organic cotton fibre, which next year should reach 300-350 tonnes, plus 900-1000 tonnes in conversion (Box 10 has the total figures including for in-conversion).The price is based on the Liverpool Price (Cotlook Index) plus 20% premium at the date of shipping, and quoted FOB. The last sales were at $1900 per tonne, plus a 20% premium. The farmer contribution to marketing costs is 15 Euros.

Farmers are supported by field agents from sowing to harvest. Certification is by IMO, and Helvetas also work with SAS Organic (services) as well as the farmer cooperative, BioKishovarz. They have plans to add
ELS cotton in some areas (Karibadan, Zafirabad), for which they think to have a secure market. They are also looking at BCI as an opportunity for the sale of in-conversion cotton. However, industry awareness is a gap, although an organic law has been approved in Tajikistan.

Sector partners do not see growing more organic cotton as a problem, the set-up could be replicated, and organic has fewer problems than conventional, which depends on imported inputs and suffers from damaged soils. Production could double year on year, although there are issues with addressing soil fertility, and crop rotation. There are however risks of economic interference by the state - in crop patterns, rotation, and land reform. Growth would also need funding and/or secure markets.

4.3.4 The partner organisations

Services to the organic cotton sector are currently provided by SAS Organic, an open joint stock company that is providing training, services and marketing. They support the Internal Control System for certification, and marketing. SAS see organic developing, and are exploring options.

Finance to date comes largely from donors. They are however aware that funds are for limited periods and they need to become self-sufficient. Spreading costs through the whole value chain would help. Some costs are already passed to producers. Expanding sales of rotation crops would also bring in more income. Break-even for cotton requires some 6,000 hectares in production and preferably to integrate marketing for products from crop rotation, for which there is said to be potential interest in Russia and Germany.

There are other possible service providers should rapid expansion be sought, including one already working in Better Cotton, and so with some understanding of sustainable agriculture.

4.3.5 Production and primary processing

Production is pre-financed by buyers (Helvetas 2011). According to a sector study (SAS 2012), organic cotton yields are higher and more profitable than conventional, but with high costs for export ($5000 per container to the EU or $1000 for Turkey). Generally, prices are higher than in India, although quality is higher in Tajikistan and does not suffer from the same concerns over integrity.

Box 10: The view from the farmers’ cooperative

BioKishovarz are the only organic cotton producers in Soghd region, and work with SAS Organic as their partner. The cooperative is quite new, and this is their second year of being certified organic, after exporting certified organic for the first time in 2012. Organic farming began in 2009, supported by Helvetas. Cotton is the main crop but they also grow fruits and vegetables. Half of the land is sown with cotton, which receives a 20% organic premium after conversion. Other crops are sold domestically although some Russians are buying dried herbs and fruits as organic. Other crops include wheat, bulgar, rice, and beans.

Organic cotton production is 44 tonnes of lint for the most recent harvest, of which 16 tonnes was certified as organic (the rest was in conversion) and was exported as organic. More growth is planned over the next 4-5 years. Cotton exports are to Germany, and the Cooperative pay a 3% fee to SAS for marketing. Farmers have problems with the gin, who deduct too much money against loans made to farmers for inputs. This happens even to the organic farmers.

Yield is on average 700kg/ha of cotton lint. The variety is Khujand 67, with a staple length of 33 to 34mm, micronaire 3.7 to 3.8 and goretex 4.7 (this is different to figures quoted earlier for conventional cotton).

Helvetas provide consulting but no direct funds, although they do pay for technical support. This includes agronomists, consultants and certification. Farmers contribute a membership fee to support the cooperative. Salaries are covered 60% by Helvetas and 40% by the Coop. Certification is very expensive. They are planning to take over more costs next year as well as add more land and more members.

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20 A study has also looked at the potential for other organic products (SAS 2012). These have more potential in Russia and other less developed organic markets.
They need to produce and sell 1000 tonnes of organic cotton to be self-sufficient, which will take 3-4 years. However, of the 1300 existing hectares, half are not growing cotton yet, so growth is possible. They need pre-finance to increase the area, which only gins provide at present, and micro-lenders. They need access to more finance options, as even micro-credit is expensive at 18-32%. They also plan to add seed farming and are looking at growing ELS in a suitable area from next year.

Helvetas find their clients. Developing a value chain is needed, it is expensive to grow and ship fibre alone. It would be good to have contacts with yarn producers, to make a chain. But factories must be certified, which is more expensive.

There is no awareness in Tajikistan of the benefits of organic yet, but they would like to organise shelves in supermarkets. They have taken part in a fair which was a success. BioKishovarz has 16 agronomists, 3 office staff as well as the head of the cooperative and the coop board.

4.3.6 Self-sufficiency of the sector

The cooperative estimate that 1000 tonnes of organic cotton are needed to ensure break-even and achieve self-sufficiency, with Helvetas estimating an ideal of 600 tonnes. Experiences in other regions suggest these estimates are probably in the correct range.

4.3.7 Constraints to cotton and organic cotton

A problem with developing organic cotton is markets: in organic, market signals are very unclear according to sector respondents, with on the one hand reported increases in market size and on the other, stop-start demand at the field level in all projects-initiatives worldwide. It is unclear what is the real situation with production and stocks and demand. Traders say there is no great demand and no pressure from the market for more organic cotton, let alone more demand than supply.

In Tajikistan, there is also a lack of awareness among many stakeholders including industry, and it would be useful to hold seminars on organic cotton and textiles in the country, including on certification, markets and benefits.

4.3.8 The view from the market

Most companies inclined to build long-term partnerships already have partner projects – the challenge for newcomers like Tajikistan is to find new businesses interested in building similar long-term partnerships and with the capacity to build the scale of production needed, for which finance is also needed-required. Alternatively, such businesses that seek expansion to new areas are needed. It appears the existing buyer alone is not sufficient. Outside such types of businesses, much of the organic cotton market at present is anonymous, meaning that buyers do not seek to identify who grows their organic cotton or to source from individual farmers or programmes on a long-term basis. These buyers largely source in countries with lower cost organic fibre, such as India, or in countries with manufacturing and proximity to consuming markets, such as China and Turkey. When sourcing, most buyers choose established producers, and few showed an interest in looking at new options as they were satisfied with existing suppliers. Transparent supply chains with long term relationships are seen by respondents as requiring a large investment in human resources, and they also stressed that good relationships with suppliers are not only based on prices, but more importantly on product quality, provision of services and reliability in delivery.

5. The use and needs of organic cotton by the T&C sector in Tajikistan

Tajikistan's industry is in rapid change. Previously based on fibre exports and yarn, with few complete value chains, the T&C industry is investing heavily, spurred by the government’s tax break programme for value chain development. The sewing sector is much less developed however than in Kyrgyzstan, and most
companies seek more information on markets and demand. Nonetheless, some companies have developed good product ranges (men's and women's casuals, socks), sold also in local markets. Unlike Kyrgyzstan, the industry is cotton focussed, making collaboration and participation in organic much easier. There is certainly potential, although international respondents suggest ranges remain limited and quality is an unknown, so the industry does have work to do to build its client base, especially in more demanding markets such as organic and ethical textiles.

The spinning industry already has good markets abroad, in a range of yarns from NE8 to NE40 mostly, carded or combed, open-ended and ring-spun, suitable for a range of products (although external experts consulted suggested that the yarns above NE40 would probably not be up to the required standard given the fibre available). There is also a specialist sector in Kimono manufacture, of very high quality for competition garments, a potential niche market suitable for exploring with organic cotton.

The handicraft sector has very competitive prices in the local market, and is another avenue worth exploring for organic cotton, although no experiments have taken place so far. Handicrafts would represent only a small consumption of the needed volumes of organic cotton, but as a potential high value added product, should not be neglected.

The growth of the T&C sector in Tajikistan, and its need for new markets and opportunities is an opportunity for the organic cotton sector as it seeks to grow, moving from experimentation and piloting to a full market operation.

Factors to address though include the relatively high cost of Central Asian cotton, despite its quality, and shipping logistics. Respondents have also raised some concerns over the marketing ability of NGO-led projects such as this one, and that other specialist, smaller producers like Turkey and Tanzania thus have an edge in the organic cotton market. Respondents also indicate that at a minimum cotton yarn is needed to grow exports; fibre would not be competitive due to costs and distance to markets. The ongoing competition by gins for seed cotton from farmers is exacerbating the situation by making fibre expensive and squeezing the margins of ginners and traders.

More effort is needed in marketing both the potential for organic textiles processing in Tajikistan and also the Tajik T&C sector. It is likely a commercial trader/industry expert is needed to partner with the sector.

5.1 Support organisations in the textiles sector

Several international traders are active in Tajikistan, and local gins often provide advice and financial support to farmers. The Light Industry Association is also active in the Textiles sector along with the Chamber of Commerce and Industry of Tajikistan. All could play a part in organic cotton, whether in educating and supporting industry domestically (to understand the demands of certification and buyers), or in helping promote the capacity of the Tajik T&C sector abroad (along with its (potential to date) organic sub-sector).

The biggest gap in support services is in affordable credit provision.

5.2 Interest in and capacity of the textiles and clothing sector in organic cotton

Most of the companies we visited had a mild to a strong interest in organic cotton, as this rapidly growing industrial sector is now faced with finding markets to justify and recoup its investment. The industry is also relatively modern, and aware of at least some of the social and environmental demands for textiles products. That said, an earlier attempt to certify a factory did fail, which suggests a need to train and raise awareness in the sector, a need backed by the Chamber of Commerce and Industry's suggestion for workshops around the country aimed at the textiles industry.

A small amount of certified organic cotton fibre is already being marketed internationally, but to just one buyer (via an international trader). Responses we have received suggest that fibre is not a good route to production and export growth, and that yarn is the minimum required value addition to scale up. The
quality of the fibre is quite good, but Tajik cotton is not a famous origin in the world market, which makes it relatively expensive, while distance to ports is a problem.

The potential volume of textiles though remains small by the standards of major competitors such as India and China; yarn prices and qualities seem to be competitive, if garment prices are a little on the expensive side according to respondents (and this may change as the industry learns and becomes more efficient). Market actors interviewed have shown some interest, even if many are committed to existing supply chains at present. This suggests that any strategy to attract buyers could take time and investment. It also suggests that niche or medium to small sized brands are the likely targets, or specialist products needing smaller unit volumes. However, most of these types of buyers are not going to source enough individually to support a sufficient volume of production for the sector to reach break-even, and thus a coalition is needed. But will they all need the same type of product, of similar qualities shipped to the same destinations?

Another concern in Tajikistan is the government policy of pushing business to build mills for finished goods. This raises concerns for fibre traders who might reduce their investments.

Finally, as suggested by one respondent, ‘in organic cotton, the boom years are over, but markets have now stabilised at a lower level’. Niche markets need to be sought for this cotton at a time when global markets are much tighter. That said, the opportunity here is on building a reputation for integrity, as many traders and buyers will not buy or are wary about Indian organic cotton, while manufacturing could concentrate on products that are less competitive in price, avoiding for example cheaper, fast fashion items such as basic tee-shirts. The investments in Tajikistan in knitted products could pay off here.

However, what could be missing in Central Asia are buyers able to make the investments in value chains and long-term relations and capacity building that Remei/Bio Re have done in India and Tanzania; as mentioned by programme-sector partners, value chain partnerships are needed for the sector, at least fibre to yarn, which would reduce market risks. This gap needs to be filled.

Market players are also concerned about prices and premiums in the region for organic: anything above a 20% price difference for organic cotton is not acceptable from their point of view, which makes many of them wary about organic/Fairtrade joint certification.

The attraction of Central Asia for international buyers would be for seeking new options away from existing centres such as India and China. That said, for those we approached for this survey, Central Asia is not (yet) on the list, and options being considered are rather Pakistan and Ethiopia. Promotion activities for the organic and T&C sectors in Tajikistan need to highlight the comparative advantages for the country, whether it is a modernised industry or attention to labour conditions and welfare.

5.2.1 Fibre

Fibre quality in Tajikistan was viewed by respondents to our market survey as being of reasonably good quality, even above average. That said, fibre quality parameters presented in the questionnaire have been questioned by some who suggested that the testing may have been to older Russian Gost Norms rather than modern tests, although higher count yarns (up to NE 40) can be produced with the given fibre quality, resulting in a slight competitive advantage.

In the conventional sector, cottons from Tajikistan and Kyrgyzstan are provenances that are requested by European traders and spinners, as lots of their customers ask for Uzbek-free supplies. Nevertheless, the remaining spinning sector in Europe is rather small and there are no huge warehouse capacities, allowing them to store cotton specifically from those countries. Spinners take what traders can deliver, be it from Kyrgyzstan, Tajikistan, Turkmenenistan or other countries from Central Asia.

Fibre prices were more often ranked as being less competitive compared to what is actually paid in other regions. Purchase of organic cotton from India was said to be cheaper, especially when taking the relatively high freight costs into account. Prices were assumed to possibly be interesting for spinners in Turkey in case they are running out of supply from their own country.

5.2.2 Yarns
For Tajikistan, yarn counts up to a maximum of NE40 were commonly seen as feasible by interviewed experts. However, when it comes to yarn production, carded yarns are not of great interest for Western markets. Combed yarns are standard quality for international markets.

The yarn prices given were generally felt to be competitive, especially for combed qualities but NE40s were felt to be preferable to NE30s in terms of market potential and current usage by some, although others were happy with NE30. Partly, the yarn used depends on product, but even tee shirts might commonly use NE40/1 yarns today. Yarns also have to be ring-spun and combed in the main.

One interviewee explained that his companies already made trials in sourcing yarns from Tajikistan, but this had not led to satisfying results. Problems were related to quality of yarns, based rather on the limited skills of technicians than on machinery. The management of processing units was said to be unwilling to invest in human resources, whether sending people for training to more advanced countries, or hiring experienced expatriates e.g. from India (at higher labour costs than in-country employees command – although some mills we visited were employing expatriates, so the situation may be changing). The T&C industry needs to work hard to convince potential buyers that it is competitive and high quality.

Additionally, more than one respondent mentioned language barriers, an under-developed understanding of international trade, and missing provision of services for the customer as major challenges that need to be solved if these countries wanted to develop value adding processing steps for cotton within their countries. They are to develop value adding processing steps for cotton within their countries.

### 5.2.3 Finished Products

There were mixed views by respondents about finished products. While some interviewees said that the annual capacity for the products was too low to be of interest for European retailers, others said it would be sufficient for medium-sized companies, but certainly too small for bigger retailers. One respondent said 40,000 to 50,000 trousers per month would be a good output (but many factories in China could do 500,000 units a month rather than per year). The price for shirts seemed to be interesting, though a closer look into quality parameters and possible add-ons, like the possibility of embroidery, would of course be necessary to give a valid assessment. Another retailer also felt that finished garment prices were reasonable, if a little on the high side, but that if the quality was good this could be interesting.

The price for the Kimono was far too high to be of any interest to most respondents (who were however not the types of companies engaged in this specialist market), and artisanal wall hangings were not of interest for the product ranges of the mainstream retailers that have been interviewed.

One respondent questioned if production of textiles in these countries would be competitive for western markets, as India, China and other South-East Asian countries are able to deliver high quality products at low prices. Others were more sanguine. Some did suggest that the socks in particular might be interesting, with shirts and trousers a little top heavy on price, but potentially interesting if the quality was very high.

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For a final assessment of the competitiveness of finished products, more detailed information on quality parameters (e.g. woven or knitted shirts or possibilities to have embroidery on shirts) and actual monthly capacity of producers are needed. For sewing units it would be of additional value if any auditing on social compliance would already be in place, e.g. SA 8000 certificates.

### 5.2.4 Freight costs and delivery time

The response rate to freight costs and delivery time was not very high. Nevertheless, some interesting aspects were identified, and delivery times were assessed as being realistic. Additional possible routes, especially by train via Uzbekistan to Latvia (Riga) were mentioned several times and assessed to be reliable, although for organic cotton there is a certain risk when passing through Uzbekistan to have the cotton fumigated (fibre), which might cause problems with permethrin residues.

Transport costs were rated as rather high. This puts a heavy load on the competitiveness of the organic cotton fibre, as the price can increase some 10%.
Transporters are working to international norms but trucks may return empty from some destinations, so there are efficiencies to be gained.

Box 11: Destination times and freight costs from Tajikistan

<table>
<thead>
<tr>
<th>Destination</th>
<th>Time</th>
<th>Cost</th>
<th>Destination</th>
<th>Time</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>10 days</td>
<td>Border destinations: $200/tonne</td>
<td>Ukraine</td>
<td>10-12 days</td>
<td>$1500/container</td>
</tr>
<tr>
<td>Belarus</td>
<td>10-12 days</td>
<td></td>
<td>Kyrgyzstan</td>
<td>1 day (Osh)</td>
<td>Bishkek?</td>
</tr>
<tr>
<td>Turkey</td>
<td>15 days</td>
<td>Izmir: $170/tonne</td>
<td>Iran</td>
<td>1 week</td>
<td>Not known</td>
</tr>
<tr>
<td>Germany</td>
<td>15 days</td>
<td>Munich: Euros 340/tonne</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.2.5 Finance

The banking sector in Tajikistan is not liberalised, and as a result credit supply remains expensive, and is expected to stay so during the 5 year transition to WTO accession. The resulting Interest rates above 28% and up to 32% are a major barrier to future growth in textiles. Any T&C strategy needs to think about how to address this to allow manufacturers to pre-finance production, and this applies to organic as much as to conventional cotton and textiles. At the farm level, there are reports of 10-22% interest being levied on inputs, while loans may be linked to political influence in some cases.

Other sources of finance are from initiatives such as the IFC, who provide some finance to the Tajik cotton sector via partner banks (Tojiksodirotbank and First Microfinance Bank) with Canadian Development support. ABN Amro is also reported as investing in Tajik cotton with ECOM from 2013 (this bank actually bought organic cotton garments for staff uniforms in Paraguay around 2005).

5.3 The future of the T&C sector and organic

The government focus on pushing for 100% processing in country is causing some concern and uncertainty, especially for traders, who depend on exports. It might be more sensible to pursue a joint policy encouraging manufacturing but also maintaining a position in lint exports. Even in a context with larger manufacturing, gins and traders play an essential role in the cotton sector. The government’s aim to process 100% of lint locally may be both unrealistic and counter-productive as it could drive international merchants away, even as many of these may offer farmers support in agronomy and finance in future. Far better would be to aim to increase both local processing and productivity in cotton farming.

5.3.1 Corruption

Corruption remains a threat and a concern and may deter investors, as may political interference.

5.3.2 Logistics

General freight and logistics have been addressed earlier. However, with regards to potential collaboration in organic cotton and textiles with Kyrgyzstan, road linkages exist and are being improved, so it feasible to consider Kyrgyz organic cotton being shipped to Tajikistan for processing or yarn and fabric from Tajikistan.
going to Kyrgyzstan to be made up in the dynamic Kyrgyz sewing sector. The journey from Osh to Khujand, or from fibre to processing, takes 5-6 hours by car, and presumably half to twice as long again by truck. This could still be quicker than cotton from Osh being shipped to Bishkek for processing.

5.3.3 Education and training

Weaknesses in education and training have been raised by some respondents both in country and abroad with regards to organic knowledge, and this is also a concern with international quality standards and market research. Stakeholders suggest a need for more education and awareness on organic cotton: what it is, how it is grown, and what certification requirements mean for manufacturers.

5.3.4 Cotton growing

Competition for cotton notably in Tajikistan can lead to higher local prices than world prices, which can lead Better Cotton and organic farmers to seek quick, high price sales rather than maintaining long term relations with standard promoters and buyers.

Cotton growing is also threatened by a lack of seed breeding and thus quality, and poor production inputs and methods. This situation also affects organic cotton, notably the seed issue (where GM contamination is another concern). The presence of some longer staple varieties is an opportunity for the country if turned into higher yarn counts, used for example for high-end bedding.

5.3.5 Textiles processing to international standards

There is a lack of awareness around issues such as dyeing and water treatment. For sustainable textiles users, these are essential areas to address; on the positive side, working conditions and health and safety seem to be of reasonable standard, and wages are above local minimum wage levels, with employers often providing food and even transport.

5.3.6 Policy, legislation

The government policy of tax breaks is driving investment in textiles, but policies are also needed to support more affordable finance and credit.

5.3.7 The future of organic cotton

The consensus among experts is that a large scale export of organic fibre from Tajikistan is not competitive. The sector needs a value chain, at least to yarn and preferably to finished product. Yarn could be targeted at Turkey, while finished products could be marketed to any identified emerging markets in the CIS as well as in the EU or even South-East Asia. Indeed, the emerging organic cotton markets in South-East Asia, for example Japan and South Korea should be researched.

5.3.8 The organic cotton production and processing round-table in Tajikistan

At the round-table held on February 25, 2014, in Dushanbe, Tajikistan, 33 representatives of government, the private sector, NGOs, donors and farmers reviewed the results of the study and provided discussion and feedback on this and the proposed strategies. The meeting was introduced by the Deputy Minister for Industry and Trade, and moderated by Mr Farukh Soliev, Head of Foreign Economic Cooperation Department.

Emerging issues and lessons from the round-table discussion include:

- A need for more knowledge and information on what organic cotton is, how it is defined and certified and how its costs and benefits relate to conventional cotton. There is recognition of the ecological and social imperatives for sustainable cotton, but more industry and consumer education is needed. The existence of an organic law in the country is a positive step.

- The need to know more about markets, both overseas and potentially domestically with the growth of the middle-class.
The need to understand manufacturing sectors in neighbouring countries and their strengths.

Value chain development is essential, fibre is not enough (especially as Tajikistan has a goal of creating enough jobs to retain new workforce entrants at home). This is as true for organic cotton as for conventional. Companies are already reporting interest in organic at trade fairs, although the issue is with the numbers, which are often too low. There also needs to be more detail, more comparison and more cost analysis on how organic and conventional perform and cost. It needs economic data to persuade farmers and others.

The industry has wider concerns linked to China, and its ability to produce enormous volumes.

The day concluded with group discussion on which strategy was best suited to Tajikistan’s organic cotton, including what to do, how to do it, who would be responsible for different activities, what each participant would do and recommend to their superiors, what contribution (financial or in-kind) they might make, and what were the gaps and needs to achieve the strategy.

In general, groups backed continued exports of organic fibre but moving to yarn processing to increase volumes and reduce exposure to market price volatility. Tajikistan has more than enough capacity to include organic cotton in yarn manufacturing: there are 17 spinning mills of varying sizes in Tajikistan, with 70,000 tonnes aggregate capacity.

The two working groups during the round-table broadly endorsed the report and made the following suggestions:

<table>
<thead>
<tr>
<th>Question/answer</th>
<th>Group 1</th>
<th>Group 2</th>
</tr>
</thead>
</table>
| What is the most appropriate strategy for Tajikistan in organic cotton | - Export organic fibre  
- Develop production and sale of organic yarn | - Develop yarn production in organic cotton  
perhaps by dedicating 1 or 2 lines to gain more experience  
- In future, add more levels of the value chain up to finished products |
| Who is prepared to do what?                               | - Consider and register a National Technical Document (NTD) for organic cotton  
- Allocate a dedicated spinning line for organic cotton (NE40) |                                                     |
| What are the problems for development of organic cotton?  | - More information, contacts and research are needed (e.g., markets)  | - There needs to be more training for the textile industry  
- There needs to be more market research on the best avenues for Tajikistan |

**6. Cost comparison**

**6.1 Cost and technical data**

*Box 12: Information on costs, volumes and qualities*

<table>
<thead>
<tr>
<th></th>
<th>Tajikistan</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lint/Fibre price</td>
<td>Organic Lint 2012: $1900/tonne + 20% premium</td>
<td>(DAF – delivered at frontier – obsolete term, replaced by FCA or DAP)</td>
</tr>
<tr>
<td><strong>In-conversion</strong> $1200-1300 Purchases from farmers in conventional: $700-750/tonne seed cotton. Conventional break-even price: $1500/tonne</td>
<td>Similar to 2006 price for higher grades (1398 and 1344 CIF)</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td><strong>Staple</strong></td>
<td>Good quality by international standards, but not a well-known origin. Potential markets from being 'Non Uzbek' and 'Not Indian' (in organic)</td>
<td></td>
</tr>
<tr>
<td><strong>Yarn types</strong></td>
<td>Higher yarn counts questioned by some respondents, but NE40 considered by some to be possible and essential for current textiles demand.</td>
<td></td>
</tr>
<tr>
<td><strong>Yarn price</strong></td>
<td>Prices deemed competitive, international prices in or slightly above this range for similar counts. International needs combed more than carded</td>
<td></td>
</tr>
<tr>
<td><strong>Finished good types</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Freight costs</strong></td>
<td>Considered on the high side.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Staple</strong></th>
<th>30-34mm</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Yarn types</strong></td>
<td>NE8 to NE 50</td>
</tr>
<tr>
<td><strong>Yarn price</strong></td>
<td>$3-4/kg upwards, NE 20-30 $2.5 to 3.10 to Turkey FCA $3 / NE30/1 combed</td>
</tr>
<tr>
<td><strong>Finished good types</strong></td>
<td>Tajikistan Kimono: $100 under own label, 50,000 units p.a. and growing. Use yarns 8, 12, 20 Artisanal wall hanging: $10-15 retail in local markets Trousers, shirts, socks, military and work wear, home textiles</td>
</tr>
<tr>
<td><strong>Freight costs</strong></td>
<td>$160 to $340 per tonne according to destination (Turkey to Germany in ascending value and against Freight costs considered on the high side.</td>
</tr>
</tbody>
</table>

Socks: 3.5 million pairs Garments 500,000 units p.a. +/- 5-6% of fibre processed in country and growing Shirts sell for $5-6 FCA, and trousers $6-9 FCA. Socks are between 24 and 80 Cents FCA Jeans 1.5 million year Kimonos for competition a specialised and small market. A small market in specialised stores. Work wear is currently under-explored in international organic markets, but in the past there have been opportunities, including for office wear. Socks are deemed interesting Volumes are considered small by largest retailers Prices reasonable to a little high
6.2 SWOT

Table 2: SWOT analysis

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynamic and growing T&amp;C sector</td>
<td>Insufficient market knowledge</td>
</tr>
<tr>
<td>Potential for growth in organic cotton production</td>
<td>Expensive finance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cotton quality</td>
<td>Political instability</td>
</tr>
<tr>
<td>Good and price competitive yarn production</td>
<td></td>
</tr>
</tbody>
</table>

7. Market potential and possible markets for Tajik organic

A growing and vibrant cotton textiles industry which is seeking new markets is an opportunity for organic cotton and textiles to develop with it. The existence of small organic retail and fair trading retail in Europe and elsewhere also offers smaller opportunities for some handicrafts as well as smaller volumes of textiles.

Box 13: Handicrafts in Tajikistan

No experiments with organic handicrafts have taken place so far. There is however a national association, and the Chamber of Commerce have supported some promotion in handicrafts, which recently led to a new deal with Turkish buyers. This is a potential area to explore for small volume, high value addition use of organic cotton, which could be sold both locally and exported.

For example, the National Association of Business Women of Tajikistan (www.nabwt.tj) supports handicrafts, and supports rural women with business planning and micro-credit. Cotton handicrafts fetch quite reasonable prices in the local market: the Souzoni style might fetch 10-15$ in the local market as a wall hanging. There could be bigger markets and it could be interesting to have sales points for example at the airport. They are also looking at shop fronts in embassies, and online stores.

The CCI have also worked with the Turkish embassy, and local handicrafts can be cheaper than Turkish ones. A new project will now produce Turkish designs locally for sale in Turkey. They have 20 workers already on the Turkish project. Each product is unique.

8. Recommendations on the most suitable sales channel for Tajik producers of organic and in-conversion cotton

From the research, we can conclude that Tajikistan can both increase production of organic cotton fibre, and has an industry that could process it. For the first, we know the limitation is the possible size of the market, while for the latter we know that it is not yet aware enough of certification and market demands, and buyers have unanswered questions over real quality. Yet the potential is there. To move forward, any strategy needs to:

1) Identify and address the incentives for manufacturers to look at organic cotton: the value of new markets, the potential prices for goods, the value of long-term relations, and the value of upgrading environmental and social conditions in work places.
2) Undertake market research both on the products and types of buyers who might consider coming to Tajikistan. Countries to look at include the EU (especially Germany, UK, Scandinavia, France, Italy, Spain), South-East Asia (South Korea, Japan) and Turkey (for yarns and materials).

3) Identify any smaller buyers who are interested in seeking secure and traceable production with long term relations, and any possible coalitions of these that might come together to source in Tajikistan.

4) Identify possible investors to create a new Remei-style value chain all or partly in Tajikistan, and the scale of required investment. Is there, for example in Russia, a combination of investor and mill that could re-create what Remei and Buhler achieved in developing value addition from farmers in India and Tanzania to Switzerland and then globally through an organised value chain, design and marketing platform?

5) Identify professional organisations (their experience in market development is more important than their knowledge of organic and Fairtrade) that could undertake market research and develop relations with clients and interested parties for the long term.

6) Identify specialised higher value/low volume niches where finished products from Tajikistan are competitive and/or in demand.

Further to the above, the following points emerge from the testing of the results with international experts and companies:

a) The current volumes of organic cotton in Tajikistan are not significant in volume for the global organic cotton market. The price range for the produced organic fibres seems to be OK, but prices in India are said to be lower.

b) Looking at the quality parameters, Tajikistan cotton is however rated as higher than global averages.

c) In the conventional market, Tajik cotton is in demand by European spinners, though the sector as a whole is small.

d) It is unlikely that the conventional market will become a reliable partner for the organic project, which has implications for those projects, e.g. when thinking about collaboration with BCI. This may not be realistic except in terms of production methods.

e) Adding value by integrating the cotton into national/regional processing steps from fibre to finished products is not likely in the short term. It takes time to bring together the value chain (spinning, CMT) and to build “western standard” trade relations. Tajikistan is some way down this road – but the effort to convince the market and attract investors and buyers needs to be made.

f) The international view is that any expansion strategy for the project in Tajikistan needs to be thought through from the sales side. It is essential to find partners who are specifically interested in the region and in the development aspect of the projects.

g) Scaling up organic cotton production in Tajikistan is essential to run self-sufficient projects. One way to do this is to focus also on creating a national organic standard and to find additional local markets for rotation crops. This is on the radar locally, but is a long-term and uncertain project. A national organic standard for food and other crops would however increase political influence and help to keep the region effectively GMO-free. This could lead to a competitive advantage for their organic cotton, as some buyers remain concerned about GM-contamination problems in India that are, despite a willingness at project level, hard to solve.

h) To rely on a growth strategy that focuses on the “anonymous” organic cotton mass market (i.e., anonymous sourcing without relationships between farmers and the value chain) was commonly assessed as counterproductive by respondents. Though the organic cotton market can be described as a niche in itself, it has grown to an extent where major organic cotton users do not necessarily track the organic

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21 See www.remei.ch
cotton down to the field level. The buyers found need to be those seeking traceability and transparency and long-term partnerships.

I) There are only few actors in the supply chain or at retail level, who would be both interested and have the economic clout to realize such long-term development projects. Projects were advised to seek partnerships similar to Coop Switzerland related to bioRe projects in India and Tanzania.

j) To find such partners, the projects sector needs to prepare “promotional materials” highlighting both facts and figures on organic cotton and its technical parameters, giving a clear picture about the positive impact the projects do achieve for involved farmers, their families and the environment. In other words, the projects need to define their USP. This also needs professional marketing support, for example, rapid and precise responses to enquiries.

k) Having realized professional hands-on materials, sector participants are the project is advised to directly contact/visit potential trade partners rather than using trade fairs or conferences as a location to meet potentially interested businesses. Quality of contact was weighted much more important than quantity.

l) In order to identify potential business partners, a thorough investigation needs to be done. Major players in the organic cotton market either already have built long-term relationships on a project level or prefer to continue their successful work with established suppliers. Therefore it is essential to knock on new doors, rather than established ones. Personal links from key people in fashion businesses to the region – e.g. those having relatives in one of the two countries, as mentioned by one interviewee – could help increase interest in the projects.

m) The sectors – conventional and organic - also need to better understand the market: what consumers wear and want, ethical concerns and trends, and the additional sustainability requirements: social, water, dyes and chemicals, and so on.

n) Despite the fact that Germany and Switzerland are among the more advanced markets for ethical textiles, the ethical textile sector is very constant and loyal to its suppliers. This has pros and cons for such small organic cotton projects. Once a partnership has been set up, companies stay committed for a long time, and try to solve problems rather than quit and look for new partners. On the other hand, it seems there are currently no companies immediately at hand or identified who are looking for these kinds of partnerships in our quick survey.

This leads to two possible conclusions: Either the Kyrgyz and Tajik organic cotton sectors invest in a thorough market analysis of new players that would suit to them. Or they focus on businesses in other countries with a more flexible mentality but less chance of long-term relations – with all the risks this entails.

Some respondents pointed out that spinners in Turkey could be interested in organic cotton supplies from Central Asia. There appears to be potential to build direct business links with them, as has already been done with conventional yarns. European retailers all seem very satisfied with organic cotton textiles made in Turkey. As the services provided by Turkish suppliers were commonly rated excellent, there seems to be an increasing trend to build organic cotton supply chains from Turkey to European mass markets. Projects The sectors in Tajikistan and Kyrgyzstan could benefit from this trend by doing contract farming for Turkish spinners, and even contract spinning in the case of Tajikistan, thereby increasing their overall organic cotton volumes.

8.1 Possible strategies for the future

The table below outlines some strategies which can be considered alone or preferably in combination for the future direction of organic cotton production and processing in Tajikistan. However, it is the conclusion of the study, endorsed at the round-table in February 2014, that option 3, that of focusing development
and scaling up of spinning (with continuation of fibre exports and some efforts around handicrafts) is the way forward.22

**Box 14: Possible strategies for the organic cotton sector**

<table>
<thead>
<tr>
<th>Option</th>
<th>Current status</th>
<th>Needs and limitations</th>
<th>Potential markets</th>
<th>Recommendation (1=low, 5=high)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fibre export</td>
<td>All organic fibre is currently exported.</td>
<td>Production remains low and while conversion is accelerating, it is not clear the buyer will be willing to absorb this. The government is promoting full value chain development over fibre export. The sector needs more information on certification and standards, as well as on markets. Expert opinion suggests this is not a good option to reach the volumes required for self-sufficient or break-even.</td>
<td>EU, Turkey, CIS</td>
<td>1</td>
</tr>
<tr>
<td>Fibre and local handicrafts</td>
<td>There is a local handicraft sector using cotton being backed both by ITC programmes and the Chamber of Commerce.</td>
<td>Like many such sectors, most workers are small groups or individuals, but there is now an association for the sector. Styles are popular and costs are low, making this a potential sector to explore with organic cotton for domestic, tourism and export markets. Absorbed volumes of organic cotton would however be small, e.g., 5 tonnes or so but value addition can be high.</td>
<td>Domestic tourism and gift markets; adapt products to uses in export markets: rugs, cushions, wall hangings, in traditional and modern styles, for export to the EU, CIS, US and Asia.</td>
<td>2 (only in concert with another value chain strategy)</td>
</tr>
<tr>
<td>Spinning</td>
<td>Spinning is developed and growing in Tajikistan, as part of the government's drive to create jobs and manufacturing.</td>
<td>All yarn is in the ranges below NE38 with a few exceptions, mostly carded and not combed. The limited range is suitable for many applications, but a growing sector might want to explore higher counts for example to produce high quality bedding and home textiles.</td>
<td>Turkey, CIS, EU (possibly) and perhaps further afield.</td>
<td>4</td>
</tr>
</tbody>
</table>

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22 A check list of areas to take into account when planning for organic cotton value chain development in business, and a calculator, are included under section 13.
Expert opinion suggests the industry should aim for more counts around NE40, as well as NE30, combed. This sector is cost-competitive and already finding conventional markets. This is certainly the best option in the short term for organic cotton.

| Development of weaving/sewing | This is the fastest growing sector as industry invests through the government tax relief programme | Weaving is being developed in many plants, including knitted fabrics. More is due to come on stream in others over the next 12-24 months. Dyeing and finishing is an important aspect to add to develop the next stage and understanding the market demand is also important. | EU, US, Turkey, CIS | 2 (or 4 if a partnership can be made with Kyrgyzstan for supply to the sewing industry there) |
| Development of full value chain | Some companies already producing finished products for export markets, including kimonos, socks, casual adult wear and jeans/trousers for the fashion industry. | Many companies do not yet have enough idea of what might be needed or attractive and cost effective in the market, with the exception of foreign owned companies and one local company. These products might well work in the outdoor niche for organic cotton, for example. Costs are a little above expected ranges in the market, and volumes are too small for larger retailers. If these issues can be resolved then this is the best long term option. | EU, Asia, Russia, US, CIS | 3 to 4 (costs to investigate, quality and market research to be strengthened) |

9. Appendix

9.1 Summary of stakeholder views

Box 15: The view from the Chamber of Commerce and Industry of the Republic of Tajikistan

The Chamber of Commerce (CCI) is a non-commercial, non-governmental organisation that aims to support all sectors in the economy. They are aware of organic cotton and interested.

Among their roles are the protection of members' interests, and helping them to find overseas partners.
Textiles & Clothing is one sector that needs such help. They also inform, for example government, or members on issues such as WTO accession.

The T&C sector is growing to include finished products, and the CCI provides certificates of origin, which now take only 20 minutes to issue. For organic textiles, CCI suggest that **it would be useful to organise seminars on organic cotton and textiles around the country**.

T&C, like other sectors, faces problems with transport through Uzbekistan. Otherwise, the country has links through China, Afghanistan, Kyrgyzstan and Iran. A new railway is planned but no completion date is yet fixed.

The policy environment includes a push for the development of full value chains in textiles instead of raw material exports. Companies developing these gain 12 year exemption from most taxes if they achieve this before December 2015. There is no VAT, and no duty on the imports of machinery that creates efficiency and jobs.

Finance however is a challenge, interest rates are very high. The country needs credit at lower interest rates. This could lead to faster growth. Rates in Tajikistan can be 28% or more. Maybe the situation will change after the 5 year transition period allowed for under WTO accession, when foreign banks can set up branches.

**Box 16: The agricultural expert view**

Until the second half of the 20th Century and again since independence, much of Tajik agriculture has been organic by default - no pesticides or fertilisers are used, and the crop is hand-picked. The exception was under the Soviet Union from the 1960s, when intensive agriculture was pushed by government. There can be much more organic cotton, but this needs financial assistance as harvests are falling. Overall, agriculture needs to use more organic fertilisers, and to manage soils well - healthy soils are essential. Infrastructure needs improving, which includes improved irrigation with clean water and no chemical residues.

Good access to finance is needed for farmers too. If all this is in place then organic can work. The quality of cotton is high; but processing capacity also needs to increase. A full value chain would equal 5 times as much export income as fibre alone.

Some cotton seeds are imported, and some places are managing purity, but they also import seed and this needs careful testing. They need to think about local seed breeding. There is a private, but government financed, research institute. Gins are private.

To achieve 100% processing really depends on the textiles sector. There are 300 to 350,000 tonnes of seed cotton, some 100,000 tonnes of fibre. There is also seed, oil processing, and cake, which can be used as animal feed. Increasing cotton yields would raise incomes which in turn would help food security. Crop rotation is also important to food security. Farmers know to do this. But farms are small, maximum 100ha and often much smaller, with fragmented plots, a range of crops and irrigation furrows as well as equipment meant for larger plots; it is impossible to manage cotton well in this situation. What would help is for farmers to organise in cooperatives, so that this fragmentation can be managed rationally. The chair of the coop should rotate annually to each farmer in turn. There are such cooperatives in Turkey.

They also need good agronomists, a good national policy and its implementation, and to avoid cheating, such as false certificates.

**Box 17: The view from the Light Industry Association**

In the past, Tajikistan used to produce over a million tonnes of cotton, in the Soviet era, but it now much reduced because of the transition from a planned to a liberalised economy. State farms have been broken
up into Dekhan, or peasant, farms, and technology is also lost. There was also civil war after independence. As a result yields have more or less halved, and there is a private cotton sector with no state involvement. The state can no longer dictate what to grow, there is ‘freedom to farm’.

Prices are based on Liverpool prices, and fluctuate. Some years cotton is unpredictable. Higher productivity per hectare could make it more profitable all the time and so the government is looking at improving productivity.

There is a state programme for cotton/textiles, aiming for job creation, targeting 200,000 to 220,000 new jobs annually. This is within the limitations set by joining the WTO, which is due this year. What is needed is a climate favourable for attracting FDI, for companies to be created.

Current production only yields some 110,000 tonnes of lint. This is low, and only 8-10% of this is processed in the country; the rest is exported. This justifies the government programme of tax breaks to 2015, to enable companies to acquire new equipment, and to begin to process. This begins with yarn and is now moving to finished garments. Yarn quality is world class, and selling this has not been a problem. Many companies have orders 1 year ahead, already paid for.

Now there is organic cotton. To grow, there is a need to educate dekhan farmers in the importance of organic cotton. They need to know the benefits. More information is also needed on the markets.

The cotton sector in Tajikistan includes little active R&D, but there is a structure formed of the Agricultural Academy and Agricultural University, plus departments on soil science, seed supply and research. There are experimental stations and plots. Identification of new seeds takes place, and there is testing also on adaptation to local areas. Successful seeds are then marketed. In the Soviet era there were large budgets. This now needs rebuilding, with government budgets. There is however no stable financial climate.

Previously, programmes like future funding increased farmer debt which has reached $250 million; this debt is currently frozen. Production has declined, as has the price of cotton, making it hard to get out of the trap. There are other factors, such as gins doubling the cost of inputs, though there is now a mandate for local banks to provide short term, affordable loans. This has improved the situation somewhat. Farmers are happier.

In 2004/5 prices collapsed to $1,000/tonne, and this caused many problems. The break-even point is $1,500; this can be profitable especially if yields went from an average 1.4 t/ha to 4 tonnes.

There are other problems to resolve including 1) information and awareness campaigns 2) TV shows giving examples of organic success in other countries 3) a full value chain from field to final product 4) long term partnerships with buyers and a state programme for cotton 5) access to finance.

**Box 18: The view from the gin (1)**

This gin is one of the largest in the country, with a 30,000 tonne capacity and new machinery. They supply seed to farmers, of different varieties and characteristics. They have processed BCI cotton. This is shipped to Belarus, while the other main client for cotton is Turkey. They do not have an in-house or partner trader, which would help them recoup the investment of the new plant.

Prices are paid based on Liverpool indices although they sometimes pay above the odds to secure supply, for example US$750/tonne of seed cotton instead of 700. Offers from buyers are around $1650 for lint, so the margins are tight. Some of their cotton is bought by local spinners, and they plan to add spinning next year.
This gin is purpose built for the BCI programme, and owned by an international trader. It is an integrated business: they work with farmers, provide finance, extension, they do not just gin the cotton. Farmers are contracted, with agreements outlining rights, obligations and debts.

The gin processes 80-100 tonnes per day (15,000 tonnes per year), and cotton is shipped to Turkey and Bangladesh mostly, but transport is difficult. Afghanistan is blocked, Uzbekistan is difficult, Iran is covered by sanctions. Out-turn is 31 to 32%.

Sustainability is now part of the cotton equation, and this is why they are in BCI here. BCI processing began in Tajikistan began in 2009/10, with an emphasis on exports. By 2010 production was 10,000 tonnes of cotton. In 2011 it was 12,000 MTs, making them one of the 3 largest cotton exporters in Tajikistan. The gin opened in 2012 and was certified BCI compliant in 2013. There is also a seed development project.

Cotton prices are relatively high in Tajikistan, as there is over-capacity in ginning and much competition for farmers. Last year seed cotton was bought at $520, while this year it has been $700 or more. Yield and area are also falling, and debt is high. Tajikistan land reform and cotton reform are ongoing, with the break-up of Dekhan farms. This aims to 1) diversify from cotton to seek food security and 2) to promote textiles rather than cotton lint exports.

Farmers are disorganised. Other problems are input quality (low quality, fake, or too expensive); increasing production costs (diesel/oil prices); access to reliable machinery (though high prices in the past 2 years did see some farmers buy new tractors); access to affordable finance (Interest rates are over 30%); degraded soils (over-irrigation, fertiliser); irrigation (no rational use, pricing per hectare at fixed rate not by cubic metre, and use cannot be measured).

Average yield in the country is 2.1 t/ha, on officially 200,000 ha.

Exporters face a 10-11% export tax as well as freight costs. Spinning mills and textiles get tax breaks on customs duties, VAT and taxes. This is unfair to ginners and farmers who still have taxes to pay.

Cotton contamination does occur due to storage in bags, poor harvesting (plastic, foreign materials, grass, etc.). Tajikistan has the advantage of generally low pest pressures, but this year there were a lot of aphids, which also affected yields and fibre quality. However, Tajik cotton is promoted as high quality.

This mill only spins at present, with 7 lines producing some 120 tonnes of yarn a month, up to NE30/1, combed. This volume will soon double, and allow them to produce 220 tonnes a month on 14 lines. They are adding knitting next year, and currently are doing market research to identify opportunities in finished products. They are under the government 12 year programme for tax exemption, but have to be fully running with finished goods by December 2015. They will be exempt from VAT and duties as well as land taxes, income tax and export taxes. Weaving and finishing will be on a separate site. Almost all yarn is currently exported, to Russia, Turkey, China, and Latvia. They sell directly to traders, who find them, they do not need to go looking for clients. Word of mouth works.

There are 150 staff including management, with 4 shifts working 7 days a week. The 4 shifts ensure all staff get regular 2 day breaks.

Financing is part credit and part capital. They are able to get interest at 22%. They hope that with WTO accession foreign banks will come, and reduce rates. To lend, foreign banks would require credit guarantees from the government.

There are no energy problems now, but there were voltage problems in the first year until they bought their
own transformer to stabilise current. So far, there are no major challenges except risks in electricity supply. They see clothing growing.

They also have OHR 8000 standard for first aid, with a centre and staff on site.

Box 21: The view from the textiles mill

This mill produces ring-spun, carded yarns (combing equipment is installed), from NE 8 to NE 40. The machinery is modern Italian equipment, with a daily capacity of 3.5 to 5 tonnes depending on the yarn. For NE20, they can do 150 tonnes per month, for NE7, 300 tonnes. The plant was built by Italians.

Knitting equipment is due to be installed - the capacity initially will be 50 tonnes of fabric, with dyeing and sewing. Initial products will be trousers and shirts. There will be 12 knitting frames, and Italian dyeing equipment. They still need to do market research to determine what products will be made. Volumes of finished product will expand.

Some yarn is already exported to Kyrgyzstan but 99% of current yarn is traded to Turkey who sell on to Europe, under their own label, after dyeing, and with big mark-ups. The rest goes to local companies. There are two lines in operation and this is due to double.

The knitting operation will include the manufacture of fabrics suitable for shirts and trousers, and dyeing will be on site. There is roughly 11% waste. This waste goes to open-ended or for stuffing.

There are supply problems in electricity, with voltage drops and cuts for the public. Voltage drops are not the company's problem, their supply is protected. The state is encouraging industry for exports and job creation.

Work is normally over 3 shifts with a backup to cover holidays and so on. Workers are mostly female, and receive training. Salaries are an average $110 a month, double the official minimum wage. There are 220 staff over 3 shifts, and there will be 660 for sewing.

The company also owns 2 saw gins. One is reserved for long staple. The company also has 4000 hectares of cotton. They plan to do a field to final product value chain: cotton, yarn, fabric, and sewing.

They have some knowledge of organic cotton from other visits and trade fairs. ICEA were here in 2008, and found high levels of chemicals when certifying another company.

They are supported by the government under an export promotion programme that gives 12 year relief on taxes such as on imported equipment, which lasts until December 2015, provided they install all equipment and start exporting, otherwise all taxes will be due.

The processing of cotton is growing in Tajikistan, it used to be only 1-2%, now it is 5-6%. But marketing and selling are the challenges, it is a very competitive market with India, Pakistan and Turkey. They need to find a competitive advantage. Their energy is cheap. They see their place in the low volume markets.

Box 22: The view from the mill

This mill produces carded yarn from NE8 to NE 30 for open ended, and NE10 to NE40 for ring-spun. They produce fabrics for shirts and trousers, and do dyeing, finishing and sewing. Products range from men, women's and children's casuals to uniforms.

For NE20, capacity is 4,000 tonnes per year. Fabric capacity is 5 million metres. They sell some yarn, but use most in the factory. Dyeing is done at both yarn and fabric stages. They use active and straight dyes, and follow some environmental standards. They are starting with the Oekotex standard and already have a Russian standard. Water is captured in ponds for filtering and treatment.
Nothing else is required so far even by Germans. They sell there and to Poland, Turkey as well as Russia. Garments go to Russia and CIS mainly. They do socks as well as garments. Production can reach 3.5 million pairs of socks, 100% cotton or blended with polyamide, lycra or bamboo.

For garments, they produce around 500,000 pieces a year. For home textiles, it could be 1 million. For home textiles, they use fabrics around 150g/m2, on average 12g/cm, to 240g.

There are 1,000 staff in total, working two 8 hour shifts on average, with a maximum 178 hours per month.

The challenges are selling at a good price. They participate in all trade fairs in order to find new clients.

They are under the government’s tax relief regime and 100% locally owned. Access to credit is very difficult, and expensive at 18 to 40%. The banking sector is regulated, and there are few foreign banks. Some funds exist with EBRD or the IFC, but they are slow to process and difficult to apply for. Only IT works for business.

They have a local shop, here in Khujand and also in Dushanbe, they are competitive in the local market.

**Box 23: The service provider, SAS Organic**

The service provider is an open joint stock company, providing training, services and marketing. For organic, they intervene in the Internal Control System, and marketing. The goals are 1) Organic farming promotion 2) organic production 3) certification to EU standards.

In Tajikistan, land title is a problem, as farms are Dekhan farms, with some being shareholder farms. There is also an issue with credit, as interest rates are high. There is no useful credit for organic farmers. Nonetheless, organic farming is developing, and production of 150 tonnes of organic cotton is expected this year. Cotton fibre so far is going to export, but they have looked at local value chains, to minimise costs for export.

By 2014 they will have 1500 farmers, and 4000 ha in production, of which 2000 under cotton; 500 will be fully organic and 1500 in conversion. This will give 170 tonnes of certified organic cotton fibre.

Finance to date comes largely from donors. They are however aware that funds are for limited periods and they need to become self-sufficient. Spreading costs through the whole value chain would help. Some costs are already passed to donors and producers. Expanding sales of rotation crops would also bring in more income.

Previous attempts to certify a local mill failed as no one really knew about GOTs requirements.

There has been no seed breeding since Soviet times. They are trying to do this, to avoid GMO contamination, which has been found in Tajikistan.

Certification costs 12-13,000 Euros. To break-even they need 6,000 hectares in production; current sales prices for organic cotton fibre are $1900-2000 (DAF) per tonne, which gives a 25% margin.

**Box 24: The service provider view**

This service provider focuses on agronomy, in Better Cotton. They have 250 agronomists in total. They are cotton centred but now also operate in Highland areas, in the South and the North. They use IPM methods, and work with BCI in 4 districts. They also use compost and crop rotation. A trader is the buyer for BCI and provides finance to buy the cotton.

The problems in cotton include poor quality seeds and poor quality pesticides. There are some good pesticides in the country, but many are false, or adulterated. These come from Uzbekistan and Russia. Biological control is better. Irrigation is also poor, the water table is decreasing, and there is growing salinity.
as well as erosion. The payment method does not encourage conservation, as farmers pay a flat fee per hectare however many times they irrigate.

There are seed multiplication farms, but the seed is of poor quality. Seeds are mixed at the gin, but better seed goes for oil. Cotton yields can be up to 6.57 tonnes/ha, although the average is 1.8–2.5 tonnes. There may be under-reporting of yields to avoid taxes.

They would be interested in organic cotton, because of the problems in the over-use of pesticides. They estimate they could get the same yield with good soil management, irrigation management and harvest management.

There is no more child labour, or forced labour, though family children may help after school or in holidays.

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**Box 25: The view from the farmer**

This farmer is very happy to be growing organic cotton. She has been in the programme 3 years; 6ha are now organic, producing 10 tonnes of organic seed cotton. There are 7 hectares in conversion with 13 tonnes expected. This makes 13ha under all cotton out of a farm of 28ha. She sells at $1350 per tonne for in conversion cotton. Other crops on the farm include wheat, rice, herbs (mint, basil), and livestock (sheep, cows as well as donkeys).

Organic cotton reduces costs as there are no pesticides and fertilisers. There is also the premium. For example, a bag of fertiliser costs TJS 150 for 50kg, and 500kg or 10 bags are needed per ha (TJS 1500), while organic compost costs TJS 300 for the 3 or 4 tonnes needed per hectare. There are 6 household members involved in working the farm, and 20 workers for the harvest. They are paid 50 dirhams per kg. Per hectare, for compost (5 tonnes), harvest labour, production costs are just under US$1000. She plants Khujand 67, this is good quality, and gives big bolls.

Seed breeding is developing and certified seed will be available in 3 years. Buyers want one seed of consistent quality so they need this.

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**Box 26: The view from the European-owned mill**

This mill manufactures for a European brand, and has one local store. It covers yarn to finished product in jeans and trousers with some children's ranges. Dyeing is in house. The company has been present in Tajikistan for 20 years.

Cotton is ring-spun and carded, and there is also some blending e.g., 3% spandex. Yarn counts range from NE6 to NE 30. They produce 1.5 million units per year, or 3.5 to 4.5 tonnes of yarn/day. Almost all yarn is consumed here.

There are two factory locations, one for garments and one for yarn. The factory produces 15 types of fabric including denim, velvet, corduroy, white denim, gabardine, satin, tailor, and poplin, all for trousers, according to demand.

Fabric machines are open ended, they have equipment for drying and ironing, and shrinking. There are 8 sewing lines, 3 for classic styles and 5 for fashion. There are 900 workers in this factory.

This mill has had discussions about organic cotton, and if orders were large enough, they would be very interested. They need an average 100 tonnes per month for a complete line.

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**Box 27: The view from the small, specialist niche producer**

This company has a diverse portfolio of activities, one of which is textiles. The company makes high quality
Kimonos for the competition market, which are exported to 22 countries including Russia, the CIS and Germany. They are a brand in this market, and one of the leaders in Russia. They are certified by the International Judo Federation (IJF), which is only held by companies in 10 countries. In the long term they would like nonetheless to be a direct trader to retailers.

For manufacture, they buy yarn, but do weaving, dyeing and CMT themselves. They produce 50,000 units annually and plan to add 5 to 10,000 each year. They have exhibited in Paris and in Brazil (during the judo championships). The direct certification with IJF is a step towards being more independent in dealing with buyers.

Yarn is sourced locally. The yarns they use include NE 8, 12 and 20. They have a wholesale operation and storage in Russia. Last month, they opened a new factory, with new equipment. They can also expand to other martial arts clothing: karate, etc. But they need to link to retailers and not distributors. They are keen to expand to the US, Brazil, Japan, Arabian countries after the CIS and Europe.

### 9.2 Useful contacts and addresses

#### 9.2.1 International

1. Helvetas Swiss Intercooperation, Weinbergstrasse 22a, PO Box 8021 Zurch, Switzerland, www.helvetas.org email: info@helvetas.org Tel: +41 44 368 65 00
3. International Federation of Organic Agriculture Movements, Charles de Gaulle Strasse 5, 53113 Bonn, Germany, www.ifoam.org, Tel: +49 228 92650 10 email: headoffice@ifoam.org
5. International Cotton Advisory Committee, 1629 K Street, N.W., Suite 702, Washington DC 20006-1636 USA, Tel: +1 202 463 6660, email: secretariat@icac.org www.icac.org
6. Textile Exchange, 822 Baldridge Street, O'Donnell, Texas, USA, Tel: +1 806 428 3411 email: www.textileexchange.org/contact, www.textileexchange.org
7. Istituto per la Certificazione Etica ed Ambientale (ICEA), Via Nazario Sauro 2, 40121 Bologna, Italy, Tel: +39 051 272986 email: icaa@icea.info, www.icea.info
8. Soil Association, South Plaza, Marlborough Street, Bristol BS1 3NX, UK Tel: +44 117 314 5000, www.soilassociation.org

#### 9.2.2 National

1. Biokishovarz Cooperative, Mr Akbar Mansurov, Manager, 753700 Khujand, 183a Lenin Str. Mob: +992 92 724 44 56
2. Khudayarov Abdusattor Khakimjanovich, Executive Director, Sugdagroserv 2 Baraka Boboeva Street, 735700 Khujand Tel: +992 3422 6 70 50 Mob: +992 92 777 02 88 email: akhaidarov_sas@mail.ru, sas@sas.tj
3. ITC, Saidmumin Kamolov, National Project Manager, Trade Cooperation Programme in Tajikistan, 32 Rudaki Ave, apt. 33, 734025 Dushanbe, Tel: +992 37 221 98 70 email: saidmumin_itc@tajnet.tj www.itcj.wordpress.com
4. Mr. Muhammadiev Abdullo, Deputy chairman, Light Industry Association, and Director on Commerce and Quality, Joint Stock Company Nafisa, 11 Academic Adhamov Str., Dushanbe, Tel: +992 37 221 19 91 or 227 71 63, Mob +992 93 580 96 00 email: nafisa@tajnet.tj www.nafisa.tj
5. Agribusiness Consulting International, Usmonkul Boturov, General Manager and Manager Agricultural Division, ABC-I Tajikistan, 32/1 Ainy Street, 734012 Dushanbe Tel: +992 935 75 90 16 email: u.boturov@abc-i.biz www.abc-i.biz
6. Mukhamadi Mumino, Director, CC 'Sarob' (BCI service provider), email: muminov01@gmail.com, Mobile +992 93 577 02 30
9.3 People and groups interviewed

9.3.1 In-country

1. Mr. Mansurov Akbar Manager Production Cooperative “Biokishovarz”
2. Mrs. Amonkulova Dona, Dekhkan farm “Bakht”, member of PC “Biokishovarz”
3. Mr. Muzaffar Iskandarov General Director, “Firuz” LLC
4. Mr. Khaidarov Abdusattor, Executive Director of OJSC SAS
5. Mr. Buzrukov Maksud, Director of PO CDOP SAS Organic
6. Mr. Abbosov Usmonjon, Director, PE Abboszoda
7. Mr. Bakoev Mirzokodir, Spitamen Textiles LLC
8. Mr. Karimov Nasim, General Director, Textile-City LLC
9. Mrs. Sayora, Head of Quality Management, JV Giavoni
10. Ismoil Qalandarov, Director, LLC Nassoji Khujand, Textiles City
11. Mr. Muhammadiyev Abdullo, Deputy chairman, Light Industry Association, and Director on
12. Mr Kamol Fattidinov, Chief Manager, CJSC Tajikistan, Wakefield Inspection Services,
13. Usmonkul Boturov, General Manager and Manager Agricultural Division, Agribusiness Consulting International Tajikistan
14. Karin Fueg and Mr Sherzod Abdurahmonov, Helvetas Tajikistan
15. Ms. Malika Ibrohimova National Programme Officer for Economic Affairs, Seco, Tajikistan
16. Antoine Buisson, Director of Operations and Sustainability, ECOM LLC
17. Yusupov Sobirjon, Director of ginnery, Nasimi Vakhsh LLC Tajikistan, Vakhsh gin
18. Larisa Pavlona Kislyakova, Deputy Chairman, Chamber of Commerce and Industry (CCI) of the Republic of Tajikistan
19. Mr Ibodullo Karimovich Kurbonov, Tajik Standard - Agency of standardization, metrology, certification and trade inspection under the government of the Republic of Tajikistan (“Tajikstandart”)
20. Mr Dehkonov Mizrobkhon, International Consultant to FAO
21. Mr Dustmurod Mahmadieovich, Director, Fayzi Istiqlol 2011 LLC

9.3.2 Internationally

1. Roland Stelzer, Elmertext
2. Christian Barthel, AbTF
3. Alois Bußhaus, Bimeco
4. Alexander Barberi, weba (Swiss Identity Fabrics)
5. Enrico Rima, Lebenskleidung
6. Nagy Bensid, Oxylane
7. Marco Baenninger, Reinhart
8. Abi Rushton, International Textile Expert
9. Paolo Foglia, ICEA
10. Tobias Meier, Helvetas Switzerland
11. Buhler Yarns
12. C&A
13. Bernd Mueller, Messe Frankfurt
14. Emmanuel Buchlin, Coop Switzerland
9.4 List of participants at the February 24, 2014 round table in Tajikistan

- Mr. Saidrahmon Nazriev, Deputy Minister Ministry of Economic Development and Trade
- Mr. Farukh Soliev, Head of Foreign Economic Cooperation Department Ministry of Economic Development & Trade
- Mr. Suhrab Odinaev, Main Specialist Ministry of Economic Development & Trade
- Mr. Djonmakhmadov M., Head of Agriculture Division Ministry of Economic Development & Trade
- Mr. Orzu Emomov, Main Specialist Ministry of Industry and New Technologies
- Mr. Mizrobkhon Dehkonov, WTO advisor, Ministry of Agriculture
- Mr. Ormonov Mahmadali, Head of Industrial Crops Department Ministry of Agriculture
- Mr. Safarov M., Deputy of Head of Cotton Inspection Agency of standardization, metrology, certification and trade inspection under the Government of the Republic of Tajikistan (Tajikstandart)
- Mr. Odinaev A.I., Main Specialist Center for Strategic Studies under the President of Tajikistan
- Ms. Kisyakova L.P., Deputy Chairman Chamber of Commerce and Industry
- Mr. Bahodur Ruziev, Expert Chamber of Commerce and Industry
- Abdullo Muhammadiev, Deputy Director, Deputy Chairman CJSC “Nafisa”, Association of Light Industry of Tajikistan
- Mr. Kamol Fattidinov, Chief Manager Tajikistan-Wakefield Inspection Services (WIS)
- Mr. Usmonkul Boturov, General Director, Manager of Agricultural Division, ABC-I AgriBusiness Consulting International, Tajikistan
- Mr. Laurie Kaeun, Agro Farming Expert AgriBusiness Consulting International, Tajikistan
- Mr. Maksud Buzrukov, Director Centre for Development of Organic Production “Sugdagroserv Organic” (SAS)
- Mr. Akbar Mansurov, Manager Production Cooperative “Biokishovarz”
- Mr. Ashurov A., Engineer Spitamen Textiles LLC
- Ms. Shahlo Abidjanova, Commercial Director Olim Textiles
- Mr. Kiyomiddin Sadrriddinov, Sales Manager “HIMA Textile” LLC
- Ms. Farzona Tilavova, Director Kamolot-1
- Mr. Bakhtiyor Najmiddinov, Senior Teacher Technological University of Tajikistan
- Mr. Bahodur Makhkamov, Senior Researcher Academy of Sciences of Tajikistan, Institute of Economics and Demography
- Ms. Nathalie Barbancho, Deputy Country Director Swiss Cooperation Office (SCO) Tajikistan
- Ms. Malika Ibrohimova National Programme Officer for Economic Affairs, Seco, Tajikistan
- Mr. Sherzod Abdurahmonov, Project Manager Helvetas Swiss Intercooperation, Organic Value Chain Development Project
- Ms. Yusupova Dj., Manager Helvetas Swiss Intercooperation
- Mr. Simon Ferrigno, ITC International Consultant on Organic Cotton ITC
- Mr. Saidmumin Kamolov, National Program Manager, ITC Tajikistan
- Mr. Ardasher Ibragimov, NC on T&C (Sogd region) ITC Tajikistan
- Mr. Nemat Makhmudov, NC on T&C (Dushanbe and Khatlon region)
9.5 Planning guide check list and sample cost calculator for businesses looking into organic cotton value chain development

These are attached separately

10. References

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