Feature Articles

Comparing organic and conventional cotton systems in Benin

Bioinsecticides management in organic cotton

India, the Cotton Export Ban and Thereafter

About Farm Engagement

The Textile Exchange Farm Engagement program helps organic cotton producers build business capacity, access sustainable textile markets, and link to our network of brands, retailers and manufacturers seeking organic cotton.

Letter from Liesl

Our February - March Issue of Engage is bursting with news and views.

Over the next few months a number of important organic focused conferences will be held. In April we will be in Izmir, Turkey and in May Lusaka, Zambia. Both conferences will bring an interesting mix of corporates, producers, and non governmental officers together to discuss and debate the roles and responsibility of organic value chains.

The Farm Hub is even more lively this month as we introduce two new series of case studies. First, our Future Shapers series, brings 10 of Textile Exchanges leading brands up-close-and personal revealing their drivers, motivations, challenges, and achievements. We also bring stories from the farm in our Organic In Action series. Here we will include special feature on organic cotton co-operatives, tying in nicely with the UN International Year of Co-operatives. This year we are introducing a new approach to sharing our stories... more precisely our members stories. Our plan is to post each story online in a rolling fashion over the next six months or so leading up to our annual conference in Hong Kong in October. As part of our 10 year celebrations, we will be producing a special compilation of these stories in our Decade of Textile Exchange hard-copy publications.

Speaking of publications, our 6th Farm & Fiber Report will be sent out to members (which includes all producer groups registered with us) mid month. We look forward to sharing our data and analysis with you. This year we have collaborated with colleagues to bring together a snapshot of Fairtrade, Cotton made in Africa, and the Better Cotton Initiative to our annual reporting.

Also this month we continue to draw on the strengths of the farm
team. True to character we have a scientific update from our 'bugman' Alfonso, preliminary findings from the socio-economic research being undertaken by Silvere in Benin, and a political update on export bans from Prabha in India.

So plenty of meetings, readings, and opportunities for all to share and participate. We hope you enjoy this Issue of Engage.

My very best wishes!
Liesl Truscott
Director, Farm Engagement

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**News on the Farm Hub**

Visit the [Organic Cotton Farm Hub](#) for the latest news and to browse our growing learning zone for information and learning materials on organic cotton.

New features on the hub include:

**Future Shapers**

We started life in 2002 wanting to transform the way the world grew and traded cotton. We did this by promoting and supporting organic cotton. Thankfully others wanted to do this as well! Without the commitment and passion of some of the world's most progressive and ethical retailers and brands it would not be impossible for organic cotton - and indeed the grower communities - to flourish.

To help us celebrate 10 years of Textile Exchange we have asked ten of our member companies to take us on their journey; to share their stories of support to people and planet through their procurement of organic cotton and their wider sustainability agendas. We are limiting our numbers to 10 Future Shapers to celebrate our 10 years. Ten companies that have driven the industry to appreciate the value of growing cotton organically, and are applying their values and expertise beyond organic cotton to other aspects of their business as well.

We are sure you will be intrigued and inspired by our Future Shapers! Follow our Future Shaper series online. A commemorative booklet, compiling all 10 Future Shapers, will be published and launched at our 2012 Annual Conference in Hong Kong.

Look out for the first posting coming soon to the Farm Hub.
This year at Textile Exchange we are celebrating our 10 year anniversary. Among other activities, we will be using our birthday to celebrate the pioneers and leaders in organic cotton; including farmers, manufacturers, brands, retailers, and other 'champions' working to progress more sustainable textiles.

Click here to view our gallery entries to date. The entry for March 'The Right Price' was submitted by Niranjan Pattni, Managing Director of bioRe Tanzania Ltd.

We will be growing our gallery of 'Inspiring Moment' snapshots each month, with the pick of the crop gracing our 2013 calendar - a first for TE! To submit an entry, please send your favourite photo and the story behind it (download template here) to farm@textileexchange.org

News

Anvil Knitwear sponsors the Farm Hub and launches organic garden programme with schools

The Textile Exchange Farm Engagement team are delighted to announce that Anvil has joined ICCO and Remei as a sponsor of our work. Anvil's financial contribution means that we will be able to do more work to secure the future of organic cotton, including further develop the Farm Hub to provide even more useful information and services for the whole organic cotton community. Whether you grow it, sell it, wear it or are interested in the role organic cotton plays in global sustainability there will be something for you on the Farm Hub!

In addition to supporting the work of Textile Exchange, Anvil is also providing sponsorship for the Earth Day Organic Indoor Learning Garden program in partnership with Earth Day New York. The program provides organic container gardens to classrooms in public schools in New York City. Anvil's goal is to equip 10% of the city's schools with an organic garden by next year's Earth Day 2013 Celebration.
GOTS publishes first newsletter - sign up now!

Ten years have passed since the launch of the initiative to harmonize various organic textile standards into one truly global application. The Global Standard was ready for usage in 2006, and the first companies and products were certified in that year. The GOTS logo was introduced in 2008. Today, with about three thousand textile production facilities around the world, GOTS has become what leading publications have called the "Gold Standard" in sustainable textile production. Read the February Issue Subscribe here

Global Organic Cotton Community Platform online dialogue on economic benefits of organic farming

If you are not already a member of the Global Organic Cotton Community Platform, managed by the Organic & Fairtrade Competence Centre of Helvetas and by Textile Exchange, sign up now to participate in the latest dialogue which will address the topic of economic benefits of organic and sustainable farming. The dialogue will run from March 26 to April 9, 2012 and is facilitated by Tobias Bandel, co-founder of Soil and More International.

Commercially capitalizing on sustainable farming - Introduction and starting question:
Organic and sustainable farming practices are not just a way of farming, responding to a growing consumer demand for greener products but are actually the more profitable farming system. Profitable not because of higher market prices but due to more efficient use and management of the natural resources. An agricultural system that uses biomass, sequesters carbon, saves water through better soil structure etc has a competitive advantage in a world of water scarcity, soil erosion, carbon taxes etc. How to tab available incentive schemes such as carbon credits and others in order to internalize the economic benefits of organic and sustainable farming? How to commercially capitalize on sustainable farming practices?

Register here to join the discussion.

Cotton Conversations

Cotton Conversations is a learning and choice-support process to improve collaboration and business efficiency, while achieving shared values around sustainability, equity and profitability. The Cotton Conversation Cycle is a combination of facilitated chain-wide learning combined with innovations from SenseMaker software in data gathering and analysis. A Cotton Conversation Workshop was held in Auroville (India), from December 1-3, 2011. Read the full report here

Whether you are a company, NGO, farmers' organisation, government agency or otherwise involved in some part of a cotton value chain, you could initiate a Cotton Conversation. For more information please get in touch with:
Gijs Spoor (India) gijs@cottonconversations.com
Joost Guijt (Netherlands) joost@cottonconversations.com
Cotton Futures: Visioning workshop

A workshop was held on the 29th of March in Berlin to develop scenarios for the future of cotton. The workshop forms part of different activities jointly initiated and conducted by Initiatives for Sustainable Cotton (Cotton Made in Africa, Transfair e.V. (Fairtrade Germany), and Future for Cotton) to strengthen cooperation between the Initiatives and stakeholders in the cotton sector, and to promote sustainable cotton effectively targeting both the general public and relevant stakeholders.

The workshop was facilitated by Forum for the Future, a British NGO working globally with businesses and governments to create a sustainable future, and used the scenarios developed for Fashion Futures 2025 as a starting point.

The Cotton Futures scenarios and the joint vision developed will be launched during Fashion Week in Berlin in July.

To find out more contact Alexandra Perschau at info@initiatives-for-sustainable-cotton.net

Insiders Guide to Cotton and Sustainability - now published

The Insiders Guide to Cotton and Sustainability is a 136 page A5 that booklet covers the ecological impact of cotton production and the environmental challenges that this presents. The guidebook primarily focuses on the details of the systems and standards of sustainable cotton and the importance of research and development into the growth of the organic cotton sector. The book also includes:

* The social and environmentally problematic over-use of pesticides
* Cotton production data 2010-11
* Biotechnology and genetically-engineered cotton
* The importance of research and development
* Mapping the way forward - recommendations
* The evolution of IPM and agro-ecology.

The book is written by Simon Ferrigno and edited by John Mowbray and was published on March 14th 2012. Click here to purchase a copy for £25.

Feature: Organic in action - Bio Kishovarz Cooperative, Tajikistan - Achieving Independence

Textile Exchange will be bringing you inspiring and personalised stories from the organic cotton cooperatives we work with.

What better way to open than to share news from the Republic of Tajikistan, where the newly
formalised 'Bio Kishovarz Co-operative' celebrates its new official 'co-operative' status.

Tajikistan, officially the Republic of Tajikistan, claimed independence in 1997. Since then the country has grown in stability and is building a trade economy, partly with the help of foreign aid. Mr Sherzod Abdurakhmano, Helvetas Swiss Intercooperation, tells us how a group of organic farmers have undergone their own 'independence' and moved from NGO dependency (and donor funding) in their early days to establishing their own stand-alone co-operative. Read more on the Farm Hub. We will be regularly posting our stories in the Textile Exchange Farm Hub and at Stories.coop

Stories.coop is a section of the IYC website dedicated to storytelling. It aims at sharing the diversity of the co-operative enterprise model and to telling stories of successful co-operatives around the world. This global digital campaign provides an insight into a large cross-section of co-operative stories from around the globe. During each day of 2012 the IYC will feature a Story of the Day on their Homepage.

The 4th International conference on the organic sector development in Central/Eastern European and Central Asian countries

The event is the 4th of a series of conferences focussing on the organic sector development in Central/Eastern, Central Asian and neighbouring countries. The conference is meant as a place to network, to meet new partners and trade contacts in a region not easy to access. It presents an excellent opportunity to learn about recent developments, to promote companies activities and to increase recognition. It is an ideal meeting point for all important stakeholders active in the organic sector in the targeted region. It offers the opportunity to learn from each other by reaching out to the leading personalities of the organic sector internationally and in the region.

In the countries of Central and Eastern Europe, Central Asia and the Caucasus agriculture plays an important role. Most of the inhabitants live in rural areas. Huge farms contrast with small scale subsistence farming. Some of the best soils worldwide are located in the region, but also areas of heavily degraded agricultural land. The countries have to cope with effects of intensive use of agrochemicals, soil salinity, desertification and water scarcity.

It is organic agriculture that offers the most sustainable solution for developing the agricultural sector and provides food security with least negative impacts on the environment. Organic farming offers solutions for sound rural development. It provides healthy food, maintains and creates jobs. High quality organic foods are market openers for both national and international markets. This is especially viable for rural areas disadvantaged by policy, technology and globalisation.

The Textile Exchange Farm Engagement team are supporting the sustainable textile strand of the conference. For more information and to register, visit the conference website.
The Africa organic conference (AOC) taking place between 2 - 4 May 2012 in Lusaka is the second African Organic Conference (AOC2) whose objective is to report and further promote mainstreaming of organic agriculture in African Government policies, in African intergovernmental organizations as well as among development partners. The objectives of the conference are to:

- present successful small-scale organic agriculture projects and case studies in organic production including biodiversity and seed production, livestock, climate mitigation, demonstrating impacts on food security;
- present successful organic agriculture projects and case studies in marketing and trade of organic products, including how organic guarantee systems can be shaped to be supportive of both local, regional and external trade;
- highlight successful initiatives and case studies in public policy, research and sector development. Based on this it will propose ways ahead for organic agriculture to reach its full potential and contribute substantially to the African Agriculture and development agenda.

There has been an overwhelming response to the call for papers, the full conference programme, including details of excursions and side events are now available on the conference website.

**Feature - Assessing achievements of cotton production initiatives aimed at improving sustainability: Using quantitative key performance indicators (KPI) as a tool**

Textile Exchange has been developing Key Performance Indicators over the past four years. The initial KPI scorecard aimed to provide organic cotton production farm groups (FG) with a tool to assist them in self-evaluation. With this tool, FGs can identify areas for development, where they have made progress, and areas where improvements are still needed. The indicators set up are related to six development domains such as: agronomy, environment, economy, social, education and health.
As part of the evolution of our scorecards, TE has been piloting a number of quantitative KPIs in West Africa. Quantitative indicators are in relation to: living conditions, environment, food security, and water management. The table below shows the indicators for living conditions, the method of calculation and their meaning.

<table>
<thead>
<tr>
<th>INDICATORS</th>
<th>Calculation</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIVING CONDITION</td>
<td>Household Coefficient of Dependency on Cotton (HCDC in %)</td>
<td>100*Cotton Income/Total household Income</td>
</tr>
<tr>
<td></td>
<td>Cotton Index of Living Condition (CILC)</td>
<td>Household income per capita/Country income per capita (from UNDP data base)</td>
</tr>
</tbody>
</table>

The methodology of collecting these data is based on interviews with the FGs. The FG selects three farmers (one from a large group, one medium, and one smaller) taking into account criteria such as wealth and extend of farming activities. For each FG, data are collected from these three farmers and an average is calculated for each indicator, representing the situation of the FG.

A trial has been made for two conventional FGs and two organic FGs in the region of Aklamkpa in the center of Benin. Results for Living Condition indicators are mentioned in the table below.

<table>
<thead>
<tr>
<th>INDICATORS</th>
<th>AVERAGE ORGANIC FG</th>
<th>CONVENTIONAL FG</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIVING CONDITION</td>
<td>Household Coefficient of Dependency on Cotton (HCDC in %)</td>
<td>20.975</td>
</tr>
<tr>
<td>Cotton Index of Living Condition (CILC)</td>
<td>0.62</td>
<td>0.60</td>
</tr>
</tbody>
</table>

The results related to HCDC suggest that organic FGs obtain about 21% of their income from cotton, whereas conventional FGs obtain 16% of their income from cotton. Therefore, in terms of income organic FGs are more dependent on cotton than the conventional FGs.

The results for CILC have to be compared to 1. If this indicator is for a FG, it means that the FG concerned has a living condition of an average citizen of Benin (GDP per capita is 739 in 2010, according to UNDP data). This indicator for organic FGs is 0.62 and the one for conventional FGs is 0.60, meaning that none of the FGs has a living condition of an average citizen. The living condition of the organic FGs is slightly higher than the one of the conventional FGs. Even if the difference between the two initiatives is very small, it gives some evidence that it is not worthwhile using environmental and human health damaging inputs for the impact as the one induced by organic farming.

For a real quantitative analysis, just two FGs for each initiative are not enough, one may need at least 30 FGs for each initiative to allow
statistical comparison. The results presented here are from a trial with two FGs of each initiative. This methodology will provide the best results with third party data collection instead of FGs or projects collecting themselves their own data. The score card for the quantitative KPI is available on request.

Reported by Silvere Tovignan
Director for Africa
Textile Exchange

Regional Focus : Latin America

Feature - Bioinsecticides management in organic cotton

By Waldo Dávila [1] and Alfonso Lizárraga [2]

Bacillus thurigiensis (Bt) and action

Bioinsecticides are made with natural substances (extract of plants, insects, or material of mineral origin) that can regulate, control or kill a pest insect population of a crop. Grouped within bioinsecticides are microbial insecticides (bacteria, fungi, viruses) which produce diseases in pest insects (FAO, 2010). A familiar microbial insecticide is Bacillus thurigiensis, or Bt, that is used for control insects worm or larvae. It is a Gram positive bacteria and makes proteinaceous parasporal crystals (near and external to spore), called Cry (Sauka et al. 2008). These crystals are toxic for many invertebrates, especially for coleoptera, diptera and lepidoptera larvaees (WHO, 1999).

When these insects consume the "toxic crystals", the crystals adhere to the intestine and make cellular lisys avoiding the correctly assimilation of nutritive substances for the insect. The insect eventually dies of starvation (Alonso et al, 2007). As Bt does not rapidly kill the insect, many people mistakenly believe it is not useful (Cranshaw, 2008).

Bt and cotton pest

There are many experiences that ascertain Bt use and effectiveness in Latin America in the control of cotton pest; in Perú against "bollworm" (Heliothis virescens), in Nicaragua eventual application against Spodoptera spp. Larvae (Lizárraga, 2008) and Paraguay for "yso karu" (Alabama argillacea) control (Lizárraga, 2008; Silvie et al., 2010). In China, Bt has been used against Anomis flava and Trichoplusia ni (Waterhouse, 1998), In Africa, Botswana, it has been used for control of Helicoverpa armigera (Ovolipe, 2007).

Bt type allowed in organic cotton production

Commercial bioinsecticide makes with Bt can be first, second or third generation. The first generation use Bt bacteria in its natural state for spore and crystal production. But spores and crystals produced in the second and third generation use biotechnology, manipulating transgenic bacteria (Sauka y Beinteinde, 2008).

According to NOP-USDA norm (Title 7, Part 205, Subpart C, Article 205.206, letter d.2), only biological and botanic pest control is allowed and no synthetic substances. Bt products of second
and third generation are therefore excluded in organic production for having been manipulated (NOP, 2012).

**Advantage of Bt**

Among the advantages of the use of Bt for control pest are high specificity, it is safe for mammals, vertebrates, plants and other beneficial insect (Cranshew, 2008; Ochoa and Arrivillaga, 2009), a high insecticide potential (Sanahuja et al.; 2011), and low output resistance due to the large variety of genes encoding protein. (Carrera, 2009; Ochoa and Arrivillaga, 2009).

**Conditions for effective use of Bt pest management of organic cotton**

For effective use of Bt it is necessary to know and test the biology and behavior of the pest population to detect the first larval stage (Lizárraga, 2008; Carrera, 2009), because Bt have a low persistence in the environment and is removed by the rain and is degraded by proteases present on the leaf of plants. Water pH is important in product application and 6.5 is the ideal value (Lizárraga, 2008). Intensity luminosity is also important, application when the intensity luminosity is lower (Cranshew, 2008), because UV (Organic Exchange, 2009; Sanahuja et al., 2011) and high temperature, affects its efficiency (Lizárraga, 2008; Ochoa y Arrivillaga, 2009).

**Likely effect of application of Bt in areas near to transgenic cotton (Bt cotton)**

There is a possibility that areas with transgenic plants produce insect resistance to the Bt toxin(Díaz, 2006; Sanchis y Bourguet, 2008), this would harm the areas where Bt as a bioinsecticide is being used for pest control because it would not have the same efficiency on the pest insects in the area.

**Literature**


del 2012).


[1] Biologist, Universidad Nacional Federico Villarreal (UNFV)
[2] Textile Exchange, Regional Director Latin America & Entomology Professor UNFV

Alfonso Lizárraga
Regional Director
Latin America
Textile Exchange
Feature - CORSEDA: the first organic silk product project in Latin America

CORSEDA (Corporation for Development of Sericulture of Cauca) is an organization of 200 farming families and artisan cocoon silk producers from Colombia (Cauca valley), whose activity is based in organic mulberry production, mass rearing of silkworm, cocoon production and yarn and woven fabrics production. The regional office of Textile Exchange in Latin America, Alfonso Lizárraga, helped coordinate the travel plan of CORSEDA.

This group visited Peru (6 - 11 February) to exchange experiences about organic production and the GOTS certification process. Dayse Delgado, the manager of CORSEDA, commented on the importance of the exchange of experiences, with the participation of farmers and technicians supporting the projects. A large group comprising of 26 people participated in various activities (11 farmers, 7 woman artisans, and 8 technicians). The introduction was made by Alfonso and tips on GOTS and certified organic by Aldo Rodriguez of Control Union.

During the trip, CORSEDA exchanged experiences with organic cotton farmers of "Oro Blanco" in Chinchavalley, with the managers of Oro Blanco (Oscar Mallqui), New Expo (Javier Otoya Jr.) companies. They also visited the store of Michell company in Lima, specialist in clothes made with alpaca and vicuna fibers; and the Miraflores Organic market.

For more information on CORSEDA, click [here](#).

Regional Focus : India

Feature - India, the Cotton Export Ban and Thereafter

Cotton farmers and the textile sector in India were completely taken by surprise when the Ministry of Commerce announced a ban on exports of cotton with immediate effect, even against Registration Certificates issued, on the 5th of March 2012. The ban was only for fibre and did not cover yarns. India reportedly exceeded the targeted volume of 8.4 million bales for the fiscal year 2011/2012.

One of the main reasons cited for the lack of a synchronised policy approach for cotton is the fact that cotton comes under the control of at least three major ministries; the Ministry of Agriculture, the Ministry of Commerce and the Ministry of Bio Technology which handles policy with reference to Bt cotton. Not surprisingly this sometimes leads to situations where the approach of one ministry may find another in a spot. A recent example of this conflict of interest was the ban by the Ministry of Commerce which saw the Ministry of Agriculture up in arms, even going to the extent of saying they were not consulted and that cotton farmers interests were severely compromised. The ban also demonstrated the lack of a raw material policy that prioritised the farmers.
At the time of the ban many farmers were still bringing cotton to the Mandis or markets and the first fall out was the lack of buying interest. The Cotton Corporation of India, a Govt of India body, had to step in and provide price support, especially in Andhra Pradesh. In states like Maharashtra farmers staged demonstrations and protests, and sought immediate intervention to reverse the decision.

Though the ban aimed to protect the interest of the textile mills in India, they were clearly not in a position of viable financial health to buy the cotton despite the fall in prices that followed the ban. Yet another expected fallout was the drop in cotton acreage in the ensuing planting year, as farmers were bound to feel a strong sense of insecurity with reference to their marketing of cotton.

Countries like Bangladesh, which imports almost 30% of its cotton needs from India protested loudly. According to the Indian Express, a leading newspaper, the ban was aimed at curbing supplies to China, which has reportedly bought 80% of the 94 lakh bales exported so far as against a targeted 85 lakh bales. China has been buying aggressively and building a government reserve to ward off price volatility.

The Cotton Association of India said it expected Indian exporters to face a barrage of claims and arbitration cases for reneging on contracts. The Cotton Association of India said the ban would seriously undermine India as a reliable trading partner. Though it was difficult to get an accurate estimate of the effect of the ban on organic cotton exports, it is fair to assume that the ban did affect this sector as well.

Because of the strong criticism, the decision came up for review on the 9th of March. The meeting was headed by the Minister of Finance, with the Minister of Agriculture participating. As anticipated by many the decision to ban export was reversed, though only partially. Fresh cotton exports were not to be allowed, but quantities already registered but not shipped were to be allowed. However, the damage was done as the Ministry of Commerce came under ridicule for its flip flop actions that resulted in market uncertainty in both domestic and international markets.

note: one bale equals 170 kg of lint
one lakh is equal to 100000

A report by
Prabha Nagarajan
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Please visit our website: http://farmhub.textileexchange.org/

We hope you enjoy reading Engage. Please feel free to contact any of the team, we welcome your feedback and ideas for improvement.
Sprinkle tapioca or flour and, depending on the amount of rhubarb and the degree of your sweet tooth, about one cup sugar over the cut rhubarb. Streusel topping directions: Mix melted butter, oats, remaining sugar, nuts and flour together so it is a crumbly mixture. Set a heavy weight on the base to hold it in place. Use a 3 rod wale to stabilize the base. Here’s how to do this weave. The Hub Farm is a 30 acre farm and outdoor learning lab for Durham... BIG NEWS!! Thanks to all the votes from y’all, we got the Honey Flow grant! Here’s a thumbnail from a little video we sent Honey Flow describing our project. We are so grateful to Honey Flow and to all of you for your support. Bee on the lookout for the bee yard improvements to come! See all. See more.