DESCRIPTIONS OF PRODUCTION PROGRAMS: ORGANIC, FAIR TRADE, COTTON MADE IN AFRICA, AND THE BETTER COTTON INITIATIVE

Introduction

Over the last decade, due to increased global awareness about rural poverty, climate change and sustainability, and an extended period of fast growth in income per capita, projects to improve agricultural practices in developing countries as well as the level of social and environmental responsibility in developed countries have mushroomed. In the cotton sector, four major initiatives are organic cotton, Fairtrade cotton, Cotton made in Africa, and the Better Cotton Initiative.[1] The article will review each initiative, compare them and comment on the challenges to specialty cottons.

Organic Cotton

According to the Textile Exchange (formerly the Organic Exchange, founded in 2002), "the term organic describes a method of farming without the use of toxic and persistent pesticides or fertilizers, sewage sludge, irradiation or genetic engineering, and are certified by an accredited independent organization. It is a system of farming that strives for a balance with nature, using methods and materials that are of low impact to the environment."[2] Table 1 summarizes the differences between organic and conventional cotton farming systems. It must be noted, however, that fiber properties of organic cotton (OC) are the same as those of conventional cotton grown in the same geographical region. Furthermore, in order for a product to be labeled as produced from OC, cotton produced "organically" requires a certification valid for the country where the product is to be sold. The certification is obtained from one of various accredited independent organization.

Table 1. Differences between the Organic and the Conventional Cotton Farming System[3]

	Conventional Cotton	Organic Cotton
Biotech Seeds	May be used	Cannot be used
Seed Preparation	May treat seeds with fungicides and insecticides	Uses untreated seeds
Fertilizer	May apply synthetic fertilizer	Uses organic matter as fertilizer
Crop rotation	Production may be mono-crop (no crop rotation)	Must rotate crops
Irrigation	May be irrigated	Focus on water retention rather than on irrigation
Weed Control	May apply herbicides (chemical destruction of weeds)	Physical removal of weeds: cultivation and hand hoeing
Pest Control	May use insecticides and pesticides. May use aerial spraying.	Uses beneficial insects, biological and cultural practices to control insects and weeds. May use trap crops to lure insects away from cotton.
Harvesting	May use chemical defoliants	Relies on the seasonal freeze for defoliation. May stimulate defoliation through water management.

[1] CottonConnect is a for-profit consulting company with offices in the United Kingdom and India that works with retailers and brands to make the world's cotton supply chains more sustainable from farm to finished garment. It is not a specialty cotton initiative by itself. CottonConnect claims to be standard neutral and to promote and work with Fairtrade, the Textile Exchange, Cotton Made in Africa, and Better Cotton Initiative. Source: http://www.cottonconnect.org/

[2] http://organicexchange.org.

[3] Adapted from "Organic Cotton: Growing Together" (http://organicexchange.org/Documents/ocsymbiosis.pdf).

Currently, a number of countries have issued government standards for organic farming production: the United States (USDA National Organic Program), Canada (Canada Organic Regime), the European Union (Nr. 834/2007), Japan (JAS), Australia (Australian Certified Organic), and India (India Organic - National Programme for Organic Production).

The general steps to obtain organic certification for cotton are:

- Submit an application to an accredited independent third party certifier[4]
- Develop a farm plan for ecosystem management
- Develop an internal control system, including record keeping
- Pass annual inspections by certifier
- Go through a transition period of 2-3 years depending on the standards

In the European Union, North America and Japan no government standards have been developed to certify the processing of organic fibers beyond the farm gate. The organic fiber must be segregated, labeled and processed on a cleaned out or dedicated line that is physically isolated. The processor must have a system in place to track the organic fiber as it moves through production.

The Organic Exchange (OE) 100 Standard certifies that products made with 100% organic fiber have been tracked through the production chain and segregated to prevent commingling with other fibers. The OE 100 Standard does not certify other claims dealing with processing, social or quality issues. The OE Blended Standard covers products made with less than 70% organic fiber. The remaining fiber can be synthetic or natural, organic or conventional.

The Global Organic Textile Standard (GOTS) covers the use and processing of organic fiber, as well as social, environmental and quality criteria. GOTS is a voluntary processing standard developed to work towards bringing global uniformity to sustainable textile processing.

The cost of certification is usually born by the company that is being certified (eg: spinner, fabric mill, etc.) They will contract directly with a certification body and make all arrangements to become certified. In some cases a brand or retailer may offer to pay for the certification costs of one or more suppliers.

In 2009/10, OC was grown in 23 countries by about 275,300 farmers on 461,000 ha, with the major producers being India (195,412 tons), Syria (20,000 tons), Turkey (11,599 tons), China (4,300 tons), the United States (2,808 tons), Tanzania (2,635 tons), Uganda (1,550 tons), and Peru (831 tons).[5] World OC production amounted to 241,697 tons in 2009/10, 15% higher than in 2008/09. OC represents about 1% of global cotton production.

The market for OC is limited by the cost of production of the fiber and the labeling costs throughout the supply chain on the supply side, and by competition with other fibers advertised as “green fibers”, “environmentally friendly” or “sustainable” fibers, such as recycled polyester or

[4] A non-exhaustive list of Certificating Agencies is: Associazione Suolo e Salute, Instituto Mediterraneo di Certificazione (IMC), and Instituto per la Certificazione Etica e Ambientale (ICEA) from Italy; Ecocert, and Qualité-France SA, from France; Institute for Market Ecology (IMO), and ProCert Safety from Switzerland; Naturland-Verband, BCS Öko-Garantie GmbH, and Demeter-International e.V. from Germany; Center for Organic Agriculture in Egypt (COAE), and Egyptian Center of Organic Agriculture (ECOA); Soil Association Certification Ltd from the UK; Indian Organic Certification Agency (Indocert); AGRIOR Ltd from Israel; Control Union Certifications from the Netherlands; Africert Ltd, and EnCert Ltd in Kenya; BDOCA from South Africa; Debio from Norway; and TanCert from Tanzania.

[5] Source:Textile Exchange 2010 Farm & Fiber Report.

fibers made out of recycled plastic bottles. Furthermore, promotional efforts and disposable income are critical variables in determining the size of the OC market.

OC is not contracted, i.e. cotton farmers gain access to the market for organic products by obtaining the organic certification, but there is no guarantee that they will actually be able to sell their OC and receive a price premium over conventional cotton.

Fairtrade Cotton

Fairtrade (FT) is promoted as an alternative approach to conventional trade and is based on a partnership between producers and consumers. FT is intended to offer producers a better deal and improved terms of trade, and consumers a way to reduce poverty through their every day shopping.[6]

The Fairtrade Labelling Organizations International (FLO) is the association that sets international FT standards and supports FT producers.[7] FLO is a non-profit, multi stakeholder body that is responsible for the strategic direction of FT, sets FT standards and supports producers. FLO-CERT is an independent certification company, owned by FLO. FLO-CERT inspects producers and traders to ensure they comply with FT standards. Fairtrade Labelling Initiatives (FLIs) are national organizations that market FT in their country. There are currently 19 FLIs covering 23 countries in Europe, North America, Japan, Australia and New Zealand. These organizations also license companies to use the FT Mark on products in their country. Fairtrade Producer Networks (FPNs) are associations that FT certified producer groups may join. There are currently three FPNs, representing producers in Africa, Asia and Latin America and the Caribbean. Through these networks, FT producers can influence decisions that affect their future. Fairtrade Marketing Organizations (FMOs) are national organizations that market and promote FT in their country, similar to FLIs. FLO directly licenses companies in these countries to use the FT Certification Mark. There are currently two FMOs, in South Africa and in the Czech Republic.

FLO members meet once a year at the General Assembly. The Assembly decides on membership issues, approves the annual accounts, and ratifies new Board directors. There are also annual assemblies for the FLIs and for the FPNs. The Board is elected by the General Assembly and includes: 5 representatives from the FLIs, 4 representatives from FT certified producer organizations (at least one from each of the regional FPNs), 2 representatives from FT certified traders, and 3 external independent experts. There are about 70 members of FLO staff at FLO offices in Bonn, Germany, plus a team of Liaison Officers who work around the world.

The FT system is mostly funded through license fees paid by brands and retailers who use the FT mark. An important part of the funding also comes from various donors, private or public (through grants associated with specific projects). FLO does not receive government support. Some FLIs may receive government support through international cooperation programs associated with specific projects (such as impact assessment studies, public awareness raising, etc), but no centralized data is available since the FLIs are independent organizations. FLO is actually owned by FLIs and FPNs (Sanfilippo 2011).

[6] Source: http://www.fairtrade.net/cotton.html

[7] Fairtrade is often confused with fair trade (two words) and ethical sourcing. The generic term fair trade has been used for many years and is used by many companies to define their way of working with suppliers and producers. Ethical trading companies such as People Tree, Gossypium and Bishopston guarantee that their products are sourced ethically. The FT Mark signals that the product has been sourced using FT cotton from a certified producer from a transparent supply chain.

Cotton was first introduced to the list of FT products in 2004. FT cotton producers are usually small family farms organized in cooperatives or associations which farmers own and govern democratically. The only exception is in India and Pakistan, where some cotton producing communities are not organized in cooperatives, but are selling to a Promoting Body, which is responsible for passing back to the individual farmers the extra benefits generated by FT sales. In 2008/09, there were 40 certified associations: 18 in India, 17 in West and Central Africa, and 5 in other countries.

By selling to the FT market (dominated by France, the UK and Switzerland), cotton farmers receive: (1) a minimum price which covers the costs of sustainable production, and (2) a FT Premium which allows them to invest in community projects, such as schools, roads or health care facilities. In the case of contract production (in India and Pakistan), the FT minimum price is the minimum price paid to the promoting body. The promoting body can deduct Direct FT Costs amount up to a maximum of EUR 0.04 per kg from the minimum price or market price, and pay at least the remaining amount to the individual farmers. Payment must be made upon receipt of the product. For contracts involving FT payers, producers and conveyors, conveyors must pay producers no later than 15 days after receipt of the payment from the FT payer.

The FT minimum prices for cotton are set at different levels depending on the producing region (see Table 2), and if the market price is higher than the FT minimum price, the market price applies. Additionally, pre-export lines of credit are given to the producer organizations if requested, of up to 60 % of the purchase price.

All cotton in FT cotton products must be sourced originally from certified producers. Where there is insufficient availability of FT cotton combers, it is permitted to make cotton wool pads out of up to 20% non-FT cotton combers, provided that the manufacturer subsequently purchases an equivalent volume of FT cotton and uses it in the manufacture of a non-FT product. Any such substitution must be clearly reported in the quarterly flow of goods report.

FT maintains environmental standards based on the international recommendations of the UN Environment Programme, such as the strict control of chemicals and reductions in pesticides on the Pesticide Action Network's Dirty Dozen list. FT also encourages sustainable farming so farmers establish their own environmental development plans to ensure that where possible, waste is managed, materials are recycled, and steps are taken to avoid soil erosion and water pollution. Biotech seeds are also forbidden. FT cotton can be organic but is not necessarily so. FT minimum prices for OC are set 20 percent higher than the FT conventional minimum prices. [8]

FLO introduced physical traceability as a requirement for FT certified producers, traders and licensees in the February 2009 Generic Trade Standard (GTS). Before this, traceability was implicit in the FT Standards and FLO-CERT reviewed documentation to track volumes of FT products through the supply chain. Physical traceability means that FT products must be marked and kept separate from non-FT products at each stage of production and processing. Producers and traders must comply with these requirements by May 2011.

Every operator in the supply chain that takes ownership of FT cotton and uses it in the processing and/or manufacturing of FT products until the point of licensing must demonstrate efforts to comply with the following ILO Conventions before it can be approved by the certification body to start processing and/or manufacturing FT cotton:

- 001 Hours of work [1919]
- 029 Forced Labor [1930]

[8] Source: http://www.fairtrade.org.uk/products/cotton/questions_answers.aspx

- 087 Freedom of Association and Protection of the Right to Organize [1948]
- 098 Right to Organize and Collective Bargaining [1949]
- 100 Equal remuneration [1951]
- 105 Abolition of Forced Labor [1957]
- 111 Discrimination (Employment and Occupation) [1958]
- 131 Minimum wage fixing [1970]
- 138 Minimum Age Convention [1973]
- 155 Occupational Safety and Health [1981]
- 182 Elimination of the Worst Forms of Child Labor [1999]

Where the operator is using a sub-contractor for processing and/or manufacturing of cotton products (including ginning, spinning, weaving, knitting, laundry, dyeing and/or embellishment), the operator must demonstrate how the sub-contractor has made progress towards compliance with the ILO conventions listed above before the sub-contractor can be approved by the certification body to start processing and/or manufacturing FT cotton. The operator must re-submit its demonstration of efforts every two years.

According to the 2009-10 FLO Annual Report, by the end of 2009 sold cotton items from FT cotton fiber amounted to 23.35 million items, down 15% from 2008. In 2008, sales of items made of FT certified cotton (27.6 million items) almost doubled the sales of 2007. In 2008/09, 93,000 smallholders produced 73,000 tons of seed cotton, from medium to extra- long staple length, of which 22,000 tons (30%) were also organic (Sanfilippo 2010). In 2009/10, the number of smallholders is estimated to have reduced by 9% to 85,000, due to the fact that a significant volume of FT cotton was not selling under Fairtrade terms since 2008, and some producer organizations have decided to reduce the size of their certified program to save costs, until market demand increases again (Sanfilippo 2011).

Similarly to the OC program described in the previous section, FT cotton does not guarantee that cotton growers will actually be able to sell their production. However, FT *does* guarantee a minimum price and a FT premium if certified cotton gets sold.

There are 33 FT cotton producer groups in India, Burkina Faso, Cameroon, Mali, Senegal, Brazil, Egypt, Peru and Kyrgyzstan. West Africa and India are the biggest cotton-producing areas. As a result of the global economic crisis and the lack of long-term contracts with buyers, some FT certified cotton producers in West Africa could not sell their production in 2008/09.

Table 2. FT Minimum Price and Premium for 1 Kilogram of Seed Cotton as of January 2011.

Country / Region	Quality	Form	Small Producers' Organizations or Contract Production	Price level	Special price terms	Currency	Fairtrade minimum price	Fairtrade premium	Date of validity
South America	Conventional	Gossypium Hirsutum	SPO	EXW		EUR	0.41	0.05	1/07/08
South America	Organic	Gossypium Hirsutum	SPO	EXW		EUR	0.49	0.05	1/07/08
Central America	Conventional	Gossypium Hirsutum	SPO	EXW		EUR	0.41	0.05	1/07/08
Central America	Organic	Gossypium Hirsutum	SPO	EXW		EUR	0.49	0.05	1/07/08
South America	Conventional	Gossypium Barbadense (e.g. PIMA)	SPO	EXW		EUR	0.45	0.05	1/07/08
South America	Organic	Gossypium Barbadense (e.g. PIMA)	SPO	EXW		EUR	0.54	0.05	1/07/08
Central America	Conventional	Gossypium Barbadense (e.g. PIMA)	SPO	EXW		EUR	0.45	0.05	1/07/08
Central America	Organic	Gossypium Barbadense (e.g. PIMA)	SPO	EXW		EUR	0.54	0.05	1/07/08
Northern Africa	Conventional	Gossypium Hirsutum	SPO	EXW		EUR	0.39	0.05	1/07/08
Northern Africa	Organic	Gossypium Hirsutum	SPO	EXW		EUR	0.47	0.05	1/07/08
Northern Africa	Conventional	Gossypium Barbadense (e.g. PIMA)	SPO	EXW		EUR	0.43	0.05	1/07/08
Northern Africa	Organic	Gossypium Barbadense (e.g. PIMA)	SPO	EXW		EUR	0.52	0.05	1/07/08
Eastern Africa	Conventional	Gossypium Hirsutum	SPO	EXW		EUR	0.36	0.05	1/07/08
Eastern Africa	Organic	Gossypium Hirsutum	SPO	EXW		EUR	0.43	0.05	1/07/08

Country / Region	Quality	Form	Small Producers' Organizations or Contract Production	Price level	Special price terms	Currency	Fairtrade minimum price	Fairtrade premium	Date of validity
Eastern Africa	Conventional	Gossypium Barbadense (e.g. PIMA)	SPO	EXW		EUR	0.40	0.05	1/07/08
Eastern Africa	Organic	Gossypium Barbadense (e.g. PIMA)	SPO	EXW		EUR	0.47	0.05	1/07/08
Western Africa	Conventional	Gossypium Hirsutum	SPO	EXW		EUR	0.42	0.05	1/07/08
Central Africa	Conventional	Gossypium Hirsutum	SPO	EXW		EUR	0.42	0.05	1/07/08
Western Africa	Organic	Gossypium Hirsutum	SPO	EXW		EUR	0.50	0.05	1/07/08
Central Africa	Organic	Gossypium Hirsutum	SPO	EXW		EUR	0.50	0.05	1/07/08
Western Africa	Conventional	Gossypium Barbadense (e.g. PIMA)	SPO	EXW		EUR	0.46	0.05	1/07/08
Central Africa	Conventional	Gossypium Barbadense (e.g. PIMA)	SPO	EXW		EUR	0.46	0.05	1/07/08
Western Africa	Organic	Gossypium Barbadense (e.g. PIMA)	SPO	EXW		EUR	0.55	0.05	1/07/08
Central Africa	Organic	Gossypium Barbadense (e.g. PIMA)	SPO	EXW		EUR	0.55	0.05	1/07/08
Southern Asia	Conventional	Gossypium Hirsutum	SPO/CP	EXW	*	EUR	0.38	0.05	1/07/08
Southern Asia	Organic	Gossypium Hirsutum	SPO/CP	EXW	*	EUR	0.46	0.05	1/07/08
Southern Asia	Conventional	Gossypium Barbadense (e.g. PIMA)	SPO/CP	EXW	*	EUR	0.42	0.05	1/07/08

Country / Region	Quality	Form	Small Producers' Organizations or Contract Production	Price level	Special price terms	Currency	Fairtrade minimum price	Fairtrade premium	Date of validity
Southern Asia	Organic	Gossypium Barbadense (e.g. PIMA)	SPO/CP	EXW	*	EUR	0.51	0.05	1/07/08
Kyrgyzstan	Conventional	Gossypium Hirsutum	SPO	EXW		EUR	0.46	0.05	1/07/08
Kyrgyzstan	Organic	Gossypium Hirsutum	SPO	EXW		EUR	0.55	0.05	1/07/08
Kyrgyzstan	Conventional	Gossypium Barbadense (e.g. PIMA)	SPO	EXW		EUR	0.51	0.05	1/07/08
Kyrgyzstan	Organic	Gossypium Barbadense (e.g. PIMA)	SPO	EXW		EUR	0.61	0.05	1/07/08

EXW: Ex Works means that delivery takes place when the seller places the goods at the disposal of the buyer at the premises of the seller or another named place (works, factory, warehouse, etc.) not cleared for export and not loaded on any collecting vehicle.

Cotton Made in Africa

Cotton Made in Africa (CmiA) intends to help smallholders and their families in Africa to improve their livelihood and their environment. The goals of the CmiA project are (1) to improve cotton growing, moving towards sustainable production, (2) to enhance the competitiveness of African cotton, and (3) to add a new dimension of corporate responsibility along the textile supply chain.[9]

The target population of cotton growers is small scale farmers in Africa that produce cotton in rain-fed areas and under crop rotation schemes with basic food crops. CmiA intends to promote sustainable[10] cotton growing by specifying, measuring and monitoring indicators for the percentage of children with primary school education, efficiency of water use, fertilizer and pesticide use, and providing access to markets. Two criteria that are pre-conditions for CmiA cotton are: no hazardous work or child labor should be used within the cotton production chain, and cotton should not be grown on land allocated to nature by national laws.

CmiA intends to enhance the competitiveness of African cotton by training farmers in optimal management practices at farmer field schools, organized by local cotton companies. Furthermore, local cotton companies provide micro-credits to finance inputs and, in return, farmers commit to sell their cotton to the supporting company.

CmiA intends to feed its cotton smoothly into the value-added chains of large trading companies with their global buying markets, thousands of suppliers and new fashion trends. The added dimension of corporate responsibility is expected to result in higher value-added to the final textile product. The targeted demand segment is price-conscious consumers interested in promoting African development through sustainable practices. This is a significant difference with FT and OC, which are certification schemes designed to access niche high-end markets.

The CmiA project was initiated in 2005 as a Public Private Partnership by the Aid by Trade Foundation. The project is supported by a broad alliance of partners, coordinated by a project advisory board. The CmiA strategic alliance includes partners in industry, the public sector, the research community, and non-governmental organizations. The following strategic partners contribute to the CmiA initiative both with their financial support and through general and technical consulting: 1888 Mills Inc., Accenture, Avery Dennison Information and Brand Management Division, Bill & Melinda Gates Foundation, the German Ministry for Economic Cooperation and Development (BMZ), the German Investment and Development Company (DEG), the German Famine Relief Organization Deutsche Welthungerhilfe, Faso Coton, the German Society for Technical Cooperation (GTZ), McCann Erickson, the Nature and Biodiversity Conservation Union (NABU), the North Rhine-Westphalian Foundation for the Environment and Development, the Otto Group, the REWE Group, Tchibo GmbH, Tom Tailor AG, Alterra-Universität Wageningen, Somdiaa, and the World Wildlife Fund.

CmiA is working to establish a demand alliance for African cotton. The following companies are already considered part of the demand alliance: 1888 Mills, Anson's, APART, Baur, Bierbaum Unternehmensgruppe, Bodet & Horst, Celio, Edgars (South Africa), Engelhorn, f.a.n. Frankenstolz Schlafkomfort, Frankonia, Heine, Hirmer, H.I.S. Jeans, Mattes & Ammann,

[9] Source: http://www.cotton-made-in-africa.com/

[10] "Sustainability" in the CmiA project stands for harmony between the economic, social and environmental components of cotton production.

Mustang Jeans, Monks (Belgium), OTTO, Peek&Cloppenburg, PKZ, Puma, QVC, REWE Group, Schwab, s.Oliver, Tchibo, Tisseray & Cie., Tom Tailor, 3suisses, and Witt Weiden.

Around 140,000 small farmers in Africa were involved in the project and about 29,000 tons of cotton were produced in 2008/09. The following season, the number of farmers increased to 171,433 and cotton production increased to 49,957 tons. Despite CmiA cotton production accounts for less than half a percentage point of world cotton production. Zambia, Benin, and Burkina Faso participate in the project since 2008/09, Malawi and Ivory Coast since 2009/10, and Mozambique will be integrated into the CmiA program in 2010/11. The Aid by Trade Foundation is also working with cotton spinning plants in Ethiopia, Egypt, and South Africa, as well as on the island of Mauritius. For the year 2010, about 10 million licensed pieces of garment of CmiA quality were marketed by over 20 retail companies in Europe and North America.

Besides the above cited difference between CmiA and FT regarding the targeted demand segment, the other major difference relies on the verification methods: while FT certifies cotton from developing countries according to a catalog of criteria developed by the FLO, the CmiA verification system was drafted at Wageningen University in the Netherlands and further developed by the consulting firm PriceWaterhouseCoopers, and each step of the supply chain (methods of cultivation, transport, ginning, and storage of raw cotton) is verified independently.

The first third party verifications started in February 2009 and focused on ginnery operations in Benin, Burkina Faso and Ivory Coast. The third party ginnery verifications in Malawi and Zambia followed during the ginning season in August/September 2009. The following table shows the results of the verifications:

Table 3. CmiA Verifications of Ginneries in 2009

Region	Ginneries	Lint (mt)	Permanent Staff	Temporary Staff
Western Africa	7	35,547	248	1,038
Southern Africa	5	14,410	194	1,536
Total	12	49,957	442	2,574

The first field verifications of CmiA (by Ecocert and AfriCert) took place in December 2009 in Burkina Faso, Benin and the Ivory Coast. No significant findings were recorded during field visits, nor was there any systematic non-compliance with CmiA exclusion criteria. The second round of field verifications started in March 2010 in Zambia and Malawi. The following table provides an overview on the number of farmers, hectares and yield per hectare. Since harvest was not completed in all CmiA regions during the time of data collection, numbers are estimates.

Table 4. CmiA Verifications of Cotton Farms in 2009/10

Region	Management Units	Hectares Planted	Number of Farmers	Yield (Kg/Ha)
Western Africa	3	88,253	55,801	967
Southern Africa	2	109,957	115,632	595
Total	5	198,210	171,433	781

CmiA is considered complementary to OC, since they target different market segments, and the CmiA project cooperates regularly with organizations like Organic Exchange that are devoted to

promoting the cultivation of OC in Africa and elsewhere. CmiA has imposed a three-year moratorium on the cultivation of biotech cotton. In 2011, the Aid by Trade Foundation will discuss the use of transgenic cotton.

The Better Cotton Initiative

The goal of the Better Cotton Initiative (BCI) is to make global cotton production better for the people who produce it, better for the environment it grows in and better for the sector's future. The long-term objectives of BCI are to demonstrate the inherent benefits of Better Cotton production, particularly the financial profitability for farmers; to reduce the impact of water and pesticide use on human and environmental health; to improve soil health and biodiversity; to promote Decent Work for farming communities and cotton farm workers; to facilitate global knowledge exchange on more sustainable cotton production; and to increase the traceability along the cotton supply chain.

The BCI was launched in 2005, as a result of a global multi-stakeholder consultative process. The BCI operates as a not-for-profit membership association and is open to any organization involved in, or with an interest in, the cotton supply chain, and that supports the BCI's mission. Current BCI members amount to 55 organizations which include associations of cotton producers (ABRAPA from Brazil, AProCA from Africa, Farmers Associates of Pakistan, and the International Federation of Agricultural Producers), retailers and brands (Adidas, Asda, Hemtex, H&M, IKEA, KappAhl, Levi Strauss & Co., Lindex, Marks & Spencer, Migros, Nike, and Sainsbury's Supermarkets Ltd.), suppliers and manufacturers (Chenab Ltd., Ecom Agroindustrial Corp, Ltd., and Sadaqat Ltd.), associate members (APTMA from Pakistan, and CottonConnect), and members from the civil society (Cotton Incorporated, Pesticide Action Network UK, Responsible Sourcing Network, Solidaridad, and the World Wildlife Fund).

The BCI is not about creating a premium product to attract a higher market price. Rather, the focus is on reducing costs at farm level (and therefore increasing farmers' profits) through better management practices and reduced input use. Participating farmers must meet the Minimum Production Criteria, based on pesticide use, health and safety, water use, fiber quality, habitat protection, freedom of association, child labor, forced labor, and non-discrimination. Furthermore, farmers need to set up a yearly plan to improve their practices to meet all of the Production Principles. BCI is not a labeling scheme, but it does involve some third party monitoring and verification.

The supply chain for Better Cotton will link Better Cotton to the market by segregating Better Cotton from non-Better Cotton ("other cotton") in the seed cotton segment of the supply chain. Once a bale of Better Cotton is formed, it will be given a unique identification that can then be used to track that cotton through the remainder of the supply chain using third-party track-and-trace systems. Thus, the supply chain for Better Cotton will enable end buyers to substantiate any claims they may make regarding their use of Better Cotton. BCI is not developing a labeling system whereby products containing Better Cotton can be labeled as such.

The elements of the supply chain for Better Cotton are underpinned by a number of important considerations:

- Additional cost burdens on the supply chain participants should be minimized.
- BCI will implement one general system, irrespective of where the cotton is grown.
- BCI will work to ensure that the supply chain for Better Cotton is flexible enough to take into account existing, regionally specific modes of operation regarding how cotton is

stored, transported and ginned, so that existing commercial quantities or lots can be maintained when handling Better Cotton.

- The BCI supply chain component will only operate up to the gin. Responsibility for tracking the bale of Better Cotton from the gin to the end consumer product will be the responsibility of the organization interested in sourcing Better Cotton.

During the start-up implementation phase, the BCI initiative has focused on Brazil, India, Pakistan and West & Central Africa (Benin, Burkina Faso, Cameroon, Mali, Senegal, and Togo). In 2010, 65,000 farmers participated in BCI and the first harvest of Better Cotton amounted to 30,000 tons of seed cotton (excluding Brazil, whose harvest will take place in 2011). In early 2011 BCI will start collecting field data to measure social, environmental and financial progress at farm level. The entire Better Cotton System will be externally reviewed at the end of 2012 to evaluate whether it has delivered the desired results and impacts.

During the course of 2009, a group of private and public players developed a strategy to speed up the implementation of the Better Cotton System: the Better Cotton Fast Track Program (BCFTP). The objectives of the BCFTP are: to create demand for Better Cotton through brand and retailer involvement; to create supply of Better Cotton through producer support programs and enabling access to finance for Better Cotton producers; to connect supply and demand through transparent supply chains; to support and strengthen the BCI; and to facilitate collaborative learning and reflection on the effectiveness of BCI implementation in coordination with the BCI. The BCFT Fund was established to facilitate initiatives of retailers, brands, traders and other actors in the cotton supply chain to support the production of Better Cotton. The Fund, founded by BCI, Ecom, ICCO, IDH, IKEA, H&M, Levi Strauss & Co., M&S, Rabobank, Solidaridad and WWF, matches up to 1:1 the monetary and in-kind contribution of the private sector to the project(s).

Comparison of the Initiatives

While OC focuses mainly on the farming system and environmental sustainability, FT, CmiA and BCI also focus on tackling rural poverty.

OC is regulated by national standards and rules vary depending on where the final cotton products will be sold. The other three initiatives are regulated by single organizations (FLO, Aid by Trade Foundation, and BCI) and therefore have uniform principles worldwide. End products made from OC and/or FT cotton or CmiA are labeled as such, whereas end products made from BCI cotton will not be labeled.

OC production started in the early 1990s while the three other initiatives are much more recent, dating from the mid-2000s. OC production expanded significantly in recent years. It reached 241,697 tons in 2009/10, or 1% of global cotton production, compared to less than 50,000 tons each for CmiA and FT cotton. The first BCI crop is being harvested in 2010/11 and amounts to about 10,000 tons of lint.

OC is also the initiative with the largest geographical focus: OC was produced in 23 countries in 2009/10, compared to 5 for CmiA in the same season and 9 for FT cotton in 2008/09. BCI is currently being implemented in 9 countries. Organic and BCI cotton can be cultivated in any producing country, while FT cotton production is localized in developing countries and CmiA focuses on African countries (Table 5).

Some of the initiatives may overlap. Cotton can be both organic and FT. However, BCI is focusing on conventional cotton. CmiA is considered complementary to OC, since they target different market segments.

A FT minimum price and an additional premium are paid to FT cotton producers; the premium is invested in social or economic development projects. However, the FT minimum price and premium are guaranteed only if the cotton is sold as FT and not as conventional. OC usually receives a premium over the conventional price, but this premium is the result of negotiations between producers and merchants and varies depending on supply and use. CmiA does not guarantee a higher price paid to producers, but collects a small licensing fee from retailers. The resulting income helps to finance small-holder training programs to increase yields, pay direct dividends to farmers, and support social projects in farming communities. BCI does not guarantee a higher cotton price paid to producers, but aims to improve farm management practices and increase productivity.

Table 5: Characteristics of Four Alternatives to Conventional Cotton

	Organic Cotton	**Fairtrade cotton**	**Cotton made in Africa**	**The Better Cotton Initiative**
Start Year	Early 1990s	2004	2005	2005
Program specific to cotton	No	No	Yes	Yes
Regulating Organization	National organizations	Fair Trade Labeling Organization (FLO)	Aid by Trade Foundation	Better Cotton Initiative (BCI)
Geographical focus	Global	Developing countries	Africa	Global
Countries	23	9	5	9
Cotton area	461,000 ha (2009/10)	75,000 ha * (2008/09)	198,210 ha (2009/10)	241,200 ha in 2010/11
Cotton production	241,697 tons (2009/10)	28,300 tons** (2008/09)	49,957 tons (2009/10)	10,000 tons 2010/11 until December 2010
Top producing countries	India and Syria	West Africa and India	Zambia	Expected to be Pakistan
Number of farmers	275,300 (2009/10)	85,000 (2009/10)	171,433 (2009/10)	65,000 (2010/11)
Certification/verification	Third-party verifiers	FLO-Cert (separate certification body owned by FLO)	Third-party verifiers	Third-party verifiers
Price paid to cotton producers	No minimum price	Minimum price + premium	No minimum price	No minimum price
Guarantee for farmers to sell their cotton	No	No	No	No

Source: Updated from Gruère and Plastina 2010.

* Estimate of planned planted area for 2008/09, which may differ from actual planted area and cannot be used to calculate average yields.

** Secretariat's calculation for 2008/09 based on estimates of seed cotton production provided by FLO.

Challenges to Specialty Cottons

The ICAC is strongly supportive of the various specialty programs and has allocated significant amounts of time at meetings, space in publications and Secretariat research to topics associated with specialty cotton production in order to expand knowledge about these programs. Nevertheless, while the rates of growth from small beginnings for production of specialty cottons have been impressive in recent years, there are inherent limits to large-scale participation in such programs (Townsend 2009).

A major drawback of these four initiatives is that while farmers are required to learn new crop management techniques and, in most cases, to face additional costs, demand for their cotton is not guaranteed. In addition, no premium or minimum price is guaranteed to farmers (except if they produce FT cotton). Specialty cottons, as conventional cotton, are vulnerable to supply and demand fluctuations.

Information on prices of OC, CmiA and BCI cotton is not publicly available. This makes it difficult for incumbent farmers to plan ahead, and for other farmers to decide whether to participate in these initiatives.

FT cotton, OC and CmiA face two extra challenges, both adding to the difficulties of segregation within the farm-to-apparel pipeline: the lack of an invariant marker for the cotton fiber to use in traceability systems, and the need of the textile industry to blend fibers to achieve uniformity in yarn and fabric production. Furthermore, certification itself entails expenses that might be prohibitive in some smallholder systems.

Other challenges to large scale adoption of OC is that many regions do not produce sufficient biomass to use as green manure because cotton is often grown in water-scarce regions. Organic production systems require more labor than conventional systems because of the need to collect and compost fertilizers. Protecting cotton from insects and maintaining soil fertility in an organic production system is as technically complex as non-OC, meaning that the research and extension systems necessary to support OC production must be at least as well developed as for non-OC.

In addition, the ICAC Secretariat believes that the underlying premise for OC is that conventional production systems are damaging to workers or the environment is less valid than in the past because of ongoing improvements in cotton technology and increased understanding of the dangers of misuse of agrochemicals. Based on surveys of production practices, the Secretariat believes that the majority of all cotton production each season is produced safely and in ways that are socially and environmentally benign.

Conclusion

The four initiatives reviewed in this article have all gained in importance over the last few years, as consumers' sensitivity to the origin and manufacturing process of textile products has increased. While OC focuses mainly on the farming system and environmental sustainability, FT, BCI and CmiA also focus on tackling rural poverty. However, none of these alternatives targets income volatility for cotton producers, nor the risks associated with cotton price volatility, except for the FT initiative that determines a minimum price for FT cotton (although FT cotton producers are not guaranteed to sell their cotton at FT minimum prices). Specialty cottons, as conventional cotton, are vulnerable to supply and demand fluctuations.

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Descriptions of Production Programs: Organic, Fair Trade, Cotton Made in Africa, and The Better Cotton Initiative

509th SCM of the ICAC
Embassy of Brussels
Washington, DC
February 3, 2011

Discover Natural Fibres Initiative

Social and Environmental Responsibility

- Increased awareness about
  - rural poverty
  - climate change
  - Sustainability
- + Extended period of fast growth in income/capita

➡ Emergence of initiatives to improve 1) agricultural practices in developing countries and 2) the level of social and environmental responsibility in developed countries.

Outline

1. Organic Cotton (from the early 1990s)
2. Fair Trade Cotton (from 2004)
3. Cotton made in Africa (from 2005)
4. The Better Cotton Initiative (from 2005)

Organic Cotton

"*The term organic describes a method of farming without the use of toxic and persistent pesticides or fertilizers, sewage sludge, irradiation or genetic engineering, and are certified by an accredited independent organization. It is a system of farming that strives for a balance with nature, using methods and materials that are of low impact to the environment.*"

(Source: Textile Exchange)

Organic Cotton

For a product to be labeled as produced from organic cotton, cotton requires a **certification** valid in the country where the product is sold. The certification is obtained from an accredited independent organization.

National standards for organic farming production: the US, the EU, Japan, Australia, and India.

Organic vs. Conventional Cotton

	Conventional Cotton	Organic Cotton
Biotech Seeds	May be used	Cannot be used
Seed Preparation	May treat seeds with fungicides and insecticides	Uses untreated seeds
Fertilizer	May apply synthetic fertilizer	Uses organic matter as fertilizer
Crop rotation	Production may be mono-crop (no crop rotation)	Must rotate organic crops
Weed Control	May apply herbicides	Physical removal of weeds: cultivation and hand hoeing
Pest Control	May use insecticides and pesticides.	Uses beneficial insects, biological and cultural practices to control pests.
Harvesting	May use chemical defoliants	Relies on natural defoliation.

Organic Cotton: Facts

- Grown in 23 countries by 275,300 farmers
- Top producers: India, Syria, Turkey, China, United States, Tanzania, Uganda, and Peru.
- 2009/10 organic cotton production: 241,697 tons, or about 1% of total cotton production.

Fairtrade Cotton

Alternative approach to conventional trade

Offers:

- Producers: a better deal and improved terms of trade
- Consumers: a way to reduce poverty through their everyday shopping

Fairtrade Labeling Organization International (FLO) sets international standards and supports producers

Certification through FLO-Cert

Fairtrade Cotton: Facts

By selling FT cotton, farmers receive:

- A minimum price which covers the cost of sustainable production (revised periodically), and
- A premium (social premium) which allows them to invest in community projects, such as schools, roads or health care facilities.

Farmers organizations usually manage the income from the premium.

Cotton can be both organic and Fairtrade

Fairtrade Cotton: Facts (cont'd)

- Fairtrade maintains environmental standards.
- Biotech seeds are banned.
- Every operator in the supply chain must demonstrate efforts to comply with ILO Conventions
- 85,000 farmers in 33 cotton producer groups in India, Burkina Faso, Cameroon, Mali, Senegal, Brazil, Egypt, Peru and Kyrgyzstan.
- West Africa and India are the biggest FT cotton-producing areas.

Cotton made in Africa

- CmiA is intended to help smallholders and their families in Africa to improve their livelihood and the environment.
- Goals:
  - to improve cotton growing, moving towards sustainable production,
  - to enhance the competitiveness of African cotton, and
  - to add a new dimension of corporate responsibility along the textile supply chain.

Cotton made in Africa: Facts

- Cotton growers are small scale farmers in rain-fed areas, rotate cotton basic food crops.
- CmiA monitors indicators: % of children with primary school education, efficiency of water use, fertilizer and pesticide use.
- CmiA provides access to markets at a higher price
- No hazardous work or child labor should be used within the cotton production chain, and cotton should not be grown on land allocated to nature by national laws.
- CmiA uses Farmer Field Schools
- CmiA targets large retail chains for price-conscious consumers

Cotton made in Africa: Facts (cont'd)

- Zambia, Benin, and Burkina Faso, Malawi and Ivory Coast participate in the project, and Mozambique will be integrated into the CmiA program in 2010/11.
- 171,433 farmers and 49,957 tons cotton production in 2009/10.
- 10 million licensed pieces of garment of CmiA marketed 2010
- Also working with cotton spinning plants in Ethiopia, Egypt, and South Africa, as well as on the island of Mauritius.

The Better Cotton Initiative

- Goal : to make global cotton production better for the people who produce it, better for the environment it grows in and better for the sector's future.

The Better Cotton Initiative: Long Term Objectives

- to demonstrate the inherent benefits of Better Cotton production, particularly the financial profitability for farmers;
- to reduce the impact of water and pesticide use on human and environmental health;
- to improve soil health and biodiversity;
- to promote Decent Work for farming communities and cotton farm workers;
- to facilitate global knowledge exchange on more sustainable cotton production;
- and to increase the traceability along the cotton supply chain.

The Better Cotton Initiative

- The BCI is not about creating a premium product to attract a higher market price. Rather, the focus is on reducing costs at farm level (and therefore increasing farmers' profits) through better management practices and reduced input use.
- BCI is not a labeling scheme, but it does involve some third party monitoring and verification.
- PSAP concerned about forced segmentation of the market by BCI

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Price paid to cotton producers	No minimum price	Minimum price + premium	No minimum price	No minimum price
Guarantee for farmers to sell their cotton	No	No	No	No

Specialty Cottons

- Cotton production from OC, FT, the BCI and CmiA adds to less than 2% of world cotton production
- Main barriers to expansion: costly certification, lower than regional average yields, and NO guarantee of selling the certified production.