“IF YOU CAN’T HEAR THE FARMER’S VOICE IN EVERYTHING YOU DO, THEN WHAT YOU ARE DOING IS WRONG”

Dame Anita Roddick, human rights activist and founder of The Body Shop
WELCOME to your conference guide to organic cotton. Part one provides a quick and easy read about the issues facing the cotton sector and the benefits of organic. Part two introduces you to farm leaders visiting with us in Barcelona.

Alongside food, how the world grows its fiber is fundamental to sustainable development. Textile Exchange, through its Farm Engagement program, and connection to the world’s most progressive textile brands, retailers and manufacturers is committed to improving the lives of cotton growers by supporting the adoption of, or transition to, organic agriculture.

Over the years various concerns about cotton growing have been brought to the world’s attention ranging from the misuse of toxic and persistent chemicals, to the poverty trap experienced by cotton farmers in developing countries, abuses of labour rights (including child labour), and overuse and diversion of vital water supplies.

Our ambition is to see more cotton farmers move towards organic agriculture and for the markets to reward and incentivise organic – as the ‘gold star’ for sustainable agriculture. Growing cotton organically holds the solution to many of the world’s most entrenched and challenging problems facing smallholder cotton farmers in developing countries.

There are clearly lessons to be learned from organic production, particularly in an age of climate change, and not only for fully organic practitioners. There are a growing number of initiatives working alongside organic, aimed at improving the impacts of cotton growing and supporting the transition to organic, including Fair Trade, Cotton Made in Africa (CMiA), and most recently the Better Cotton Initiative (BCI).

Please join us at the Textile Exchange Farm Engagement exhibition area. We look forward to meeting you!

The Farm Engagement Team

Africa

Silvere Tovignan
Regional Director Africa, Benin
Silvere@TextileExchange.org

India

Prabha Nagarajan
Regional Director India, Chennai
Prabha@TextileExchange.org

Latin America

Alfonso Lizarraga
Regional Director Latin America, Peru
Alfonso@TextileExchange.org

United Kingdom

Liesl Truscott
Farm Engagement Director
Liesl@TextileExchange.org

Hanna Denes
Program Development Manager
Hanna@TextileExchange.org

United States of America

LaRhea Pepper
Managing Director, Texas
LaRhea@TextileExchange.org
PART ONE:
IMPACTS OF COTTON GROWING & ADVANTAGES OF ORGANIC

Part I of ‘The Guide’ takes a look at the impacts of cotton growing and the advantages of organic through the following lenses:

• Health & Safety
• Biodiversity
• Soil
• Water
• Climate Change

• Rural Development
• Country of Origin
• Trade Relations
• Market Growth
• Consumer Awareness
WHAT’S SO SPECIAL ABOUT ORGANIC COTTON?

A total of 33.8 million hectares of cotton were grown globally in 2010/11. There are approx. 50 countries growing cotton today and around 100 million cotton farming families, almost 99 percent of them live in developing countries. Most cotton growers are small scale and resource-poor with 2 hectares or less of land.

A little over one percent of the world’s cotton is now organically certified and much more is grown under agro-ecological conditions or using more sustainable techniques such as biodynamic, Integrated Pest Management (IPM) and Best Management Practices (BMP). There are 23 countries engaged in organic cotton agriculture and there are approximately 275,500 farmers. Alongside the cotton an average of 6 food crops are grown within the organic farm system. Farm system crops contribute to farming communities’ food security and secondary incomes.

There are 4 commercial species of cotton; with Upland (*Gossypium hirsutum*) now the dominant species; having spread to over 45 countries and accounting for over 90 percent of all cotton produced. These days, around 43 percent of cotton is produced from genetically modified (GM) seed which is patented by a small number of consolidated seed companies. Whilst GM cotton is increasing it is not permitted to be grown in some parts of the world. The agricultural, ecological and socio-economic advantages of GM are still hotly debated and there tends to be a polarised view of the benefits.

There are between 40 and 50 species of cotton (500 known varieties) around the world although commercially viable or available seed is much more limited. Many organic cotton ‘projects’ are located in marginalised or under-resourced rural areas; here it is more likely that local, indigenous or wild cotton is cultivated (such as within the Amazonian rainforest). Yields of native or wild cotton tend to be much lower however the contribution to biodiversity and keeping alive traditional farming is valuable in other ways. Organic cotton producers are not permitted to use genetically modified seed and they tend to source a more varied seed source, or self-save their seed. However, access to non-GM seed is an ever increasing issue for organic farmers.

Cotton is ranked 3rd behind corn and soybeans in the total amount of pesticides applied (United States Dept. of Agriculture) and is also the 4th most heavily synthetic fertilized crop after corn, winter wheat, and soybeans. Three of the most acutely hazardous insecticides to human health as determined by the World Health Organization, rank in the top ten most commonly used in cotton production.

Organic cotton is produced without the use of toxic or persistent chemicals thus protecting the health and safety of grower communities and the risk to ecological health if not applied correctly.

Conventional cotton relies on chemical fertilizers for plant growth. Because chemical fertilizers are composed of high concentrations of mineral salts, they are capable of killing off many of the soil organisms that are responsible for decomposition, and soil formation. If only chemicals are added, the soil gradually loses its organic matter and microbiotic activity. As this material is used up, the soil structure breaks
down, becomes compact and less able to hold water and nutrients.

Organic fertilizers build the soil’s structure. Organic agriculture tends to improve the natural fertility and resilience of the soil over time potentially resulting in higher yields. Organic soils hold between 4-6 percent more organic content than non-organic soils when organic matter is well maintained6.

Cotton is a thirsty crop and is often grown under irrigation. Ecological degradation in some growing areas is a direct result of diverting water for cotton agriculture. Further, the excessive use of fertilisers or pesticides, can contaminate land, waterways, and kill aquatic life.

Up to 80 percent of organic cotton is rainfed7. Farmers use watersheds to collect and hold rainwater, and other conservation techniques, instead of diverting water through irrigation. Furthermore, organic soils have approx. 40 percent better water retention than non-organic soils thus making the need for water less critical (research by Soils and More).

Unpredictable weather patterns (climate change) are affecting cotton growing in some countries. The impact of climate change on cotton growing is, on balance, expected to be detrimental. The negative effect of water limitation will be greater than the beneficial effects of moderate temperature and elevated CO₂ and so cotton yield is expected to decrease under climate change8.

There is scientific evidence that organic agriculture can sequester more carbon than conventional agricultural practices or inhibit the carbon release. All available studies showed higher carbon stocks in organic systems as compared to conventionally farmed sides9. Organic agriculture is proven to be more resilient under climatic stresses and when conditions are not favourable organic yields tend to be higher than non-organic10.

Most of us do not know where the cotton in our garments was grown and under what conditions. Conventional cotton is bought and sold on the commodity market. For years prices have been low – that is sometimes lower than the cost of production (with the use of subsidies and competition). The current, relatively high prices on the commodity exchange at the moment reflect the low supply in relation to demand11.

All products made using organic cotton can be traced back to their country of origin through the organic certification process. Organic cotton farmers tend to receive a higher price for their efforts. Agreements and longer-term commitments between producer groups and buyers are still rare but becoming increasingly common. Ultimately, both grower and retailer are less vulnerable to the highs and lows of commodity prices if under contract. Further farmers tend to grow other marketable crops as part of the organic system resulting in better business prospects, food, and income security12.
What are the concerns?

Pesticide use is a threat to the health of farmers, their families, and rural communities. It’s not only the farmers at risk of exposure but others through the ingestion of food crops, spray drift, and mistaking a pesticide solution for something else if not securely stored.

The circumstances leading to heavy dependency on some of agriculture’s most toxic chemicals (some of them banned in developed countries) by the world’s poorest, often illiterate farmers makes conventional cotton farming a moral issue as well as a health and safety one.

According to the Pesticide Action Network (PAN), mainstream cotton production consumes around 11 percent of the world’s agrochemicals (including pesticides, fertilisers, defoliants etc). Cotton covers 2.5 percent of the world’s cultivated land yet uses over 15 percent of the world’s insecticides (i.e. the chemicals targeting bugs), more than any other single major crop.

And official statistics suggest it’s getting worse... From around 500,000 incidents of pesticide poisoning and 5,000 fatalities in the 1970s to 5 million incidents and more than 200,000 fatalities occurring every year, most of them in developing countries (PAN, 2005). It is safe to assume that many of them are cotton farmers. Further, many health experts consider these figures a huge underestimate since only a tiny proportion of cases are actually reported and enter the official statistics on which the estimates are based.

Genetically modified (GM) cotton seeds have been produced with the objective of reducing the need for pesticides. However, some studies are showing that over time the ability of the GM crop to ward off pests is reducing (see Cotton Briefings, Textile Exchange) and pesticide use is maintained, or even on the increase.

Organic production relies on natural, biological and physical or manual techniques for pest control, soil health, and for meeting other agronomic requirements. Toxic and persistent chemicals are excluded. Organic cotton production requires special skills and knowledge to be held by the farmer, and a higher degree of manual labour to be carried out (this is not necessarily a bad thing when unemployment, urban migration, and loss of agronomic skills are threatening rural communities).

Where chemical based techniques are risky and ‘lonely’, requiring an individual (usually a male) to be out spraying crops in isolation, organic field work calls on team effort and is reportedly more agreeable to women. Thus organic brings a gender balance to the farming profile and the economic decision-making within a household. Debt traps are not as common and there have been no reported suicides.

Knowledge intensive, appropriate-level technology, and farming methods, are the objectives of organic agriculture, often combining the latest in scientific understanding with traditional and sometimes culturally-specific ways of farming.
WHO’S DOING WHAT...

Organic (including biodynamic) agriculture holds the key to eliminating pesticides from farming practices, people’s lives, and the environment. Experienced organic cotton producers hold vast amounts of knowledge and skills in pesticide-free production and how to work with local conditions to control pests. In addition, organisations such as Helvetas Intercooperation and Textile Exchange among others specialise in providing field advice to organic cotton growers.

One organisation leading in the area of reducing pesticide use through organic and integrated pest management is the Pesticide Action Network (PAN). One of PAN Germany’s current projects is advising farmers how to phase in alternatives to endosulfan.

Endosulfan is an off-patent organochlorine insecticide that is being phased out globally. Endosulfan became a highly controversial agrichemical due to its acute toxicity, potential for bioaccumulation, and role as an endocrine disrupter. Because of its threats to human health and the environment, a global ban on the manufacture and use of endosulfan was negotiated under the Stockholm Convention in April 2011. The ban will take effect in mid 2012. PAN reports the following successes among cotton growers:

INDIA:
While conventional cotton farmers use endosulfan to combat cotton bollworms and other pests, Indian organic farmers manage these with a non-chemical pest management system, based primarily on preventive measures. These include planting robust cotton varieties, maintaining a diverse crop rotation, intercropping with maize and pigeon peas as trap crops and with flowering plants like marigold and sunflowers to attract beneficial insects, and the use of ‘Trichocards’ containing eggs of the parasitic wasp Trichogramma. Trichogramma parasitizes the eggs of the bollworm moth, one of the key pests of cotton. In addition, Indian farmers prepare and apply repellents and botanical pesticides from plants that grow locally.

BENIN:
Since 1996 a growing number of Beninese cotton farmers have proven that cotton can be grown without endosulfan. Training in alternative pest management strategies, integrating indigenous techniques, and the use of plant extracts and trap crops enable the farmers to successfully grow cotton without pesticides.

There is now considerable experience in using a range of non-chemical strategies for pest management, including: encouraging natural predators; selection of resistant varieties; planting early maturing varieties which reduce the risk of pest attacks; use of rotation and trap crops; and the use of food sprays for predators to improve the balance between useful insects and pests.

The use of food sprays has helped to manage caterpillar pests in general and Helicoverpa bollworm in particular, and has shown to be a useful tool to combat pests without using endosulfan. In Benin, the area under organic cotton grew from 500 hectares in 2003 to an estimated 1,800 hectares in 2008. The production of seed cotton went up in the same period from 200 tonnes to more than 750 tonnes seed cotton and the number of organic cotton farmers rose from 500 in 2003 to 900 farmers in 2006/7. The organic cotton experience has convinced many farmers in the cotton sector in Benin and conventional farmers are now copying some of the organic pest management techniques, even if they do not adopt the entire strategy.
KEY INDICATOR: BIODIVERSITY

WHAT ARE THE CONCERNS?

Biodiversity in cotton is an important indicator of sustainability due to many factors, not least geographical suitability and climate change. There are about 500 known varieties of cotton which have evolved to suit geographical conditions etc; and include many intriguing characteristics and traits such as ‘colored’ cotton, extremely long and fine stapled cotton, and native indigenous or ‘wild’ cotton.

Over the years commercial cotton has become increasingly homogenised and research and development has focussed, not surprisingly, on performance-related improvements, such as yield, fiber quality, and speed of maturation. These days, the major seed companies pour their research dollars into genetic modification (GM). As a result the cotton seed on the market is increasingly transgenic. Over 90 percent of cotton grown in India and the US is genetically modified (note: GMOs are banned from use in a number of countries).

It can be argued that the control of cotton seed development and distribution by a small number of multinational companies, often government backed, is impacting the biodiversity of our cotton. It also threatens the survival of rare breeds, and reduces seed sovereignty (ownership rights and the option to save seeds for own use) for cotton growers.

Chemically-treated or GM seeds cannot be used in organic agriculture (or in Fair Trade Certified). Obtaining non-GM cotton seed (in countries where GM has been introduced) is becoming increasingly difficult for organic and Fair Trade cotton farmers and is now considered a key limitation to growth. The risk of contamination of organic crops by GM cotton is also of great concern.

Non-GM seed scarcity is also an issue for conventional cotton growers wishing to convert to organic or simply use an alternative.

WHO’S DOING WHAT...

There are a number of organisations and companies around the world supporting the availability and viability of non-GM cotton seed supply, species diversification and organic cotton research.

Collaborative work is now underway in India; between leading producer groups, academics, companies, and NGOs. At a recent workshop organised by FiBL (the Research Institute of Organic Agriculture, Switzerland), bioRe India, and the University of Agricultural Sciences: ‘the Dharwad Declaration’ was signed by over 20 key collaborators, including Textile Exchange.

In terms of seed breeding Texas AgriLife Research, Lubbock, TX, USA are looking at traits of non-GM seed. Dr. Jane Dever, Seed Breeder at AgriLife writes us the following report:

“Grand plans for a clean planet and healthy lifestyle usually start with the seed of an idea; dynamic organic agricultural systems literally start with a seed. Domestication of cotton, Gossypium species, results in a narrow genetic
range in existing varieties that complement conventional, large-scale production. Much of what is available for planting seed in the USA has been converted to transgenic varieties with the addition of biotechnology traits through recombinant DNA.

Large collections of wild species and ancestral lines within cultivated species are available in cotton, but their rich allelic (genetic) diversity is rarely exploited for commercial planting seed. Mining existing genetic variation in cotton for natural traits important to organic cotton production is a major objective of my (Dr. Jane Dever’s) classical cotton breeding program at Texas AgriLife Research in Lubbock, USA. In collaboration with Dr. Megha Parajulee, cotton entomologist; Mark Arnold, entomology research associate; and David Kerns, cotton extension entomologist, a breeding program specifically for organic cotton production has been underway since September 2010.

Goals and objectives of the program were developed with the input of the Texas Organic Cotton Marketing Cooperative, and field trials will be conducted on the organic farms of cooperative members. A few existing breeding lines will be evaluated during the growing season of 2011, while segregating populations specifically for insect (thrips) tolerance will be ready for potential variety selection in 2012.

Organic cotton farmers in Texas have established excellent production methods that address soil fertility and health as well as disease avoidance. The cotton breeding program expects to address some additional production constraints starting with insect tolerance through natural host plant resistance; plant architecture to improve weed competition and harvest index; and improved fiber processing quality. Ideas from farmers and stewardship of our natural genetic resources work together for seeds of the future.

Non-GM cotton seed availability in India is now critical. India is the largest producer of organic cotton in the World, but the availability of good quality non Bt. seeds is a major challenge. There is minimal interest from large professional companies, and seed companies are mostly producing Bt. seeds.

Organic integrity is essential to the success and growth of organic cotton, and obtaining non Bt. and uncontaminated seeds, making sure they are not mixed with Bt. seeds, is an essential first step.”
C&A and CottonConnect are developing a source of organic cotton seeds for farmers in India. The international clothing retailer, C&A, started using certified organic cotton in 2006, and since then has grown from 2.5 million pieces to 26 million pieces in 2010, making it the biggest retail buyer globally. As C&A continues to scale up the use of organic cotton in their products, the long term availability of good quality organic seeds is vital to their future success.

C&A are seeing that part of the solution is to create the source of good quality organic seeds and this led to them working with CottonConnect, a pioneering company with a social purpose, that delivers business benefits to retailers and brands by creating more sustainable cotton supply chains.

C&A, working with CottonConnect, has co-invested with two large reputed organic farm groups, EcoFarms and Pratibha, Vasudha Organic in Madhya Pradesh and Maharashtra in India, to develop a three year organic cotton seed programme.

The seed programme uses organic breeder seeds, which are converted to foundation seed and then to commercial seeds. This programme is currently in the early stages and more information will be available as results are collated and analysed.

Philip Chamberlain, Head of Sustainable Business Development at C&A, said “Organic cotton is key to our commitment to supporting sustainable agriculture, and we felt it important to support our supply chain partners with the availability of good quality organic seed, ultimately benefiting the organic cotton community at large.”

The Child Labour Free Seed Project AOFG (Agriculture and Organic Farming Group) India is a network of grass root level farmers organizations and farmer limited companies. AOFG India organic and fair trade cotton is one of the projects supported by AOFG India and is being implemented in the poorest districts of Andhra Pradesh and Maharashtra. As part of the organic and fair trade cotton program the Child Labor Free project was initiated two years ago. It is supported by Pi Foundation - a charity set up by Pants to Poverty to develop social businesses in textile value chains.

All the seed producers are women farmers, who are members of AOFG organic cotton producer’s organizations. These women farmers are small holders and belong to scheduled castes and tribes.

The goal of the project is to eradicate child labour in cotton seed production and to produce hybrid, organic and non-Bt (non-genetically modified) cotton seed. It plans to do this by piloting and showcasing to other seed industries that cotton seed can be produced without child labour and to raise awareness among small and marginal farmers of children’s and women’s rights. The project also aims to provide AOFG organic cotton farmers with organic cotton seed at an affordable price whilst also generating income for the farmer organizations involved.

The Child Labour Free (CLF) seed project is in its early stages. Within another two to three years the project aims to supply organic, Hybrid and non-GMO seed to all AOFG India organic cotton growers.
WHAT ARE THE CONCERNS?

At least a quarter of the Earth’s biodiversity can be found in the soil\textsuperscript{21}. Successful agriculture depends on the quality of the soil and just as importantly how it is conserved. According to the latest United Nations Food & Agriculture Organization (FAO) reports, on a worldwide average the area of arable land per capita shrank from 4,307 m\textsuperscript{2} per person in 1961 to 2,137 m\textsuperscript{2} in 2007. The reason is simple: due to non-sustainable farming practices such as over fertilization by mineral fertilizers and related soil erosion, annually about 12 million hectares of arable land is lost globally while the world population tripled in the last 100 years\textsuperscript{22}.

Taking into consideration deforestation and land-use change due to the expansion of agricultural land, the agriculture sector contributes up to 30 percent of global greenhouse gas emissions\textsuperscript{23}. Apart from the animal husbandry based methane emissions, the majority of these emissions are so called soil emissions, which are related predominantly to biomass, crop residue as well as fertilizer management. Alongside its impact on climate change\textsuperscript{24}, the agricultural sector consumes about 70 percent of the world’s available water — in the world’s fastest growing emerging economies even up to 80 percent\textsuperscript{25}, \textsuperscript{26}. Apart from this, the agricultural sector is still one of the largest employers worldwide and, most importantly, is the only provider of food — therefore its sustainability is of critical importance.

Cotton is a cash crop; this means it is usually grown by the farmer to be sold directly to marketers, traders or textile manufacturers to take the fiber to the next level of production and beyond. A typical cotton production line goes from harvesting to ginning (removing the seed) to spinning, weaving or knitting, dyeing, cutting and sewing, and final garment/product finishing. The objective for most cotton farmers is to grow as much cotton as possible on the amount of land available. Monoculture (or near monoculture) is tough on the soil and tends to deplete nutrients over time. The use of synthetic fertilizer provides a quick-fix but is not designed to build organic content or keep soil fertile over time. The use of insecticides and herbicides can lead to chemical contamination, reduce the number of ‘friendly’ bugs living in the soil and leach into groundwater where it goes on to do more damage to aquatic life and migrate off the original site.

What is also important is farmer ‘know-how’ and a knowledge-intensive approach to cotton production rather than a dependence on chemicals and fossil fuels. Over the past 20-30 years farmers have become dependent upon agrichemical companies and their products. What organic agriculture offers is the opportunity to understand the agroecological conditions and use local renewable inputs to achieve a longer-lasting and more economically advantageous way of maintaining soil fertility.

WHO’S DOING WHAT...

Soil & More International BV is a company based in the Netherlands, active in the setting-up and management of large-scale composting sites in developing countries as well as CO\textsubscript{2} emission reduction and carbon assessment projects. Soil & More was founded in 2007 on the principle that economy and ecology are inextricably linked. The company’s corporate mission is to create
commercial value through ecological and ethical innovation.

Collecting agricultural biomass and transforming it to high quality compost is the key objective of Soil & More International, a company with subsidiaries in Egypt, Ethiopia, India, Mexico, Netherlands and South Africa. This not only minimizes green waste going to landfill, but also contributes to sustainable soil fertility and improved water holding capacity through organic matter enriched soil management as well as greenhouse gas emission reduction.

At its composting facilities, which are operated with local partners, Soil & More produces over 240,000 MT of compost annually and reduces about 200,000 MT of CO$_2$e (Carbon dioxide equivalent) per year through methane avoidance during the composting process. Applying the compost to the fields, further carbons are sequestered and due to the enhanced soil structure up to 40 percent water is saved. This composting technology is applicable at both large and small-scale farming level where recently tea- and coffee grower cooperatives in India and Kenya realized a 20-30 percent increase in productivity through using their crop residues for composting.

“We are convinced that in 5 to 10 years from now, sustainable agricultural practices will provide more cost effective food products and other commodities than goods produced by conventional farming systems. We cannot afford anything else than becoming more sustainable in an environment with growing demand and shrinking resources.” says Tobias Bandel, co-founder and managing partner of Soil & More International.

SEKEM (Egypt) uses biodynamic agriculture to build soil fertility and increase yield. SEKEM was founded in 1977 by the Egyptian pharmacologist and social entrepreneur Dr Ibrahim Abouleish.

The name SEKEM is the transliteration of a hieroglyph, meaning “vitality from the sun”. SEKEM’s goals are to “restore and maintain the vitality of the soil and food as well as the biodiversity of nature” through sustainable, organic agriculture and to support social and cultural development in Egypt. Through its diverse community of businesses and organisations SEKEM has been able to demonstrate that organic farming practices can be undertaken on a commercial scale and that improving the local environment can be done at the same time as opening up lucrative export markets for local farmers and their families.
WHAT ARE THE CONCERNS?

Water in terms of its scarcity, availability, access, ownership, and quality is essential to life, and is an increasingly important indicator of sustainability. Further, the diversion of water for agriculture (sometimes up to 80 percent of a country’s water supply), makes water a politically as well as economically, socially and ecologically sensitive topic.

The current lack of sustainable water use for agriculture harms the environment by sucking rivers, lakes and underground water sources dry, increasing soil salinity and thereby destroying its quality, and by washing pollutants and pesticides into rivers that in turn destroy downstream ecosystems such as corals and breeding grounds for fish in coastal areas.

Cotton (along with sugar and rice) is notorious as one of the thirstiest plants on earth. It takes 7,000 to 9,000 litres of water to produce one tonne of fiber. The high dependency on water also makes cotton production vulnerable to climate change.

Because organic cotton tends to be grown in more marginal farming areas it is more likely to be rain-fed than grown under irrigation. It is estimated that around 70-80 percent of organic cotton is rain fed; although there is irrigated organic cotton (such as in parts of Turkey, India, Texas, Egypt, and the province of Xinjiang in China). Further, not all irrigation is equally demanding; drip irrigation (which can be applied directly to the roots), whilst more expensive to set up, is far more efficient than flooding or spray techniques.

Organic agriculture offers a solution to reviving the land and reversing the damage done. Because it requires knowledge in low impact techniques, not only will the condition of land and water be improved but the investment in upskilling farmers will have an ongoing positive effect.

Innovative farmers are using techniques such as rain water harvesting, watersheds, good composting to build up organic matter in the soil (which holds moisture) and drip irrigation to maximise water efficiency.

The Aral Sea is the most famous example of the effects of water abstraction for irrigation. Between 1960-2000, the Aral Sea lost approximately 60 percent of its area and 80 percent of its volume. Its salinity has risen by almost 600 percent and all native fish have disappeared. The decline of the Aral Sea is closely linked to Uzbekistan’s cotton irrigation system which draws water from the region’s two major rivers: the Amu Darya and Syr Darya and is an illustration of the negative impact cotton production can have on water supply.

Another example of a country in crisis over water used for cotton agriculture is Honduras, Central America. Shrimp farming has played an historical role in the economy of southern Honduras, and was once a thriving industry for indigenous fishermen (and textiles). Over the years competition and pressure on the industry has caused both native land right disputes and ecological degradation to the coastal area. The further development of large scale cotton, sugar cane and beef farming has pushed the region into further decline, drawing on fresh water and polluting the waterways. Degraded water quality is affecting not only the sustainability of the shrimp...
farms and the livelihoods of artisan estuarine fishers but all aquatic life. Today, Southern Honduras is a “critically endangered region,” designated by the United Nations as an area where basic life support systems, including water and soils, are in jeopardy. Deforestation, erosion, deterioration of watersheds, the indiscriminate use of agricultural pesticides, and overgrazing has transformed the southern Honduran landscape. Early work is being carried out by SOCiLA, a German non profit initiative, on the feasibility of growing organic cotton in Honduras - with an ambition to resurrect the textile industry... sustainably.

**WHO’S DOING WHAT...**

GAP is an acronym in Turkish for the Southeastern Anatolian Project. The GAP region today is poised to undergo a transformation from a region of low productivity, unemployment, migration, and relative underdevelopment to a region based on new competitive advantages. The transformation will be based on sustainable production, involving a realignment of key productive sectors (agriculture, tourism and textiles) around a common strategy – featuring organic products, produced by largely renewable energy resources, under fair labour, and supporting entrepreneurship. The region wants to carve out a leading position among emerging regions worldwide.

The GAP Project pays particular attention to the sustainable use of natural resources, especially water. Public and private institutions such as water users associations give training to farmers on water use efficiency. At the same time, modern pressurized systems such as drip and sprinkler irrigation are being introduced. The government offers incentives such as grants or low interest credits to farmers to encourage implementation.

The GAP Region produces 80 percent of Turkey’s cotton. Currently 360 farms produce 8,000 MT of lint in 5,000 ha of land in the Region. Around 300,000 ha is being irrigated, and is expected to reach 1 million ha by the end of 2012. This indicates that vast areas will open up to irrigated farming in a very short period of time. It is expected that cotton will still be the dominant crop in the newly irrigated areas. The target of the GAP Organic Farming Cluster Development Project is to produce 160,000 MT of lint on 100,000 ha of land. Thus, the GAP Region will become one of the most important organic cotton providers in the world. The project also aims to develop the textile industry in the GAP Region, so that, the region will be an important center for organic textiles.

Productivity of any crop, and the livelihoods of farming communities, is dependent on two natural resources: soil and water. Therefore the conservation of these natural resources is essential for the sustainability of rain fed agriculture. All cultivation at Chetna Organic is rain fed. Hence, great importance is placed on water and soil conservation. Comprehensive measures have been implemented by Chetna to conserve soil and water (such as the formation of water bodies to conserve the water and bunds, trenches, plantation of the forest, fruit and other plants based on the land slope) and improve productivity (through crop diversification, seed conservation, better cropping practices etc) and utilize the common property resources available in the area such as water bodies, vegetation, forests, grazing lands etc for the benefit of all the inhabitants in the area.

Chetna is currently implementing a watershed program over 3000 hectares of land. (A watershed is a river basin, the basis for collecting rainwater run-off). The watershed program also enables the local community to start up fisheries collectively, which now yields them 4 MTs of fish every six months. This is an additional opportunity for the local community created by Chetna.
PHOTO: Girls collecting water, bioRe (Tanzania)
WHAT ARE THE CONCERNS?

It is becoming increasingly clear that climate change will result in entirely new weather patterns and that these will have a profound influence on agriculture at all scales. Therefore adaptability and resilience in production systems will become increasingly important to enable farmers to cope with climate change and more extreme climate variability.

Agriculture Organisation Helvetas Intercooperation has explored the data available for both conventional and organic cotton production and compared the CO₂e for each stage of cotton production. Results indicated that organic cotton production has a significantly lower impact, generating approximately 0.3 kg CO₂e/kg lint compared to 5.3 kg CO₂e/kg lint for conventionally grown cotton.

According to CABI (a non-profit science-based development and information organization), the overall effect of climate change on cotton growth and development is, on balance, going to be detrimental. The negative effect of water limitation will be greater than the beneficial effects of moderate temperature and elevated CO₂ and so cotton yield is expected to decrease under climate change. Future climate change scenarios for the Mississippi Delta, USA, for example, estimate a 9 percent mean loss in fiber yield. Important cotton producing areas such as China, India and Pakistan are becoming increasingly water limited leading to potential conflicts and loss of production.

Early studies by the Natural Resources Management and Environment Department (FAO) suggest that an important potential contribution of organically managed systems to the mitigation of climate change is the careful management of nutrients and the subsequent reduction of N₂O emissions from the soil. These early studies are showing a potential 20 percent reduction of emission simply by not using mineral fertilisers and a compensation potential by carbon sequestration of about 40-72 percent of the world's current annual agricultural greenhouse gas emissions.

Adapting to climate change is a common approach to managing climate modification. While scientists are busy experimenting with different adaptive-farming techniques, several hypotheses have suggested organic farming could be a feasible response to climate change.

WHO’S DOING WHAT...

Experiences of OBEPAB in Benin suggest organic agriculture is offering resilience and adaption to climate change. There has been a debate in Benin for years about the impact of climate change on agriculture. The more arid north was hit by a series of droughts in the 1970s and 1980s. The north has one rainy season, running from May to October. The south has two - from April to July and from August to October, allowing farmers to produce crops twice.
Nevertheless, anecdotal and real-life experiences reveal the adaptation capacity of organic farming; such as the two incidents of OBEPAB (a Beninese NGO-partnered organic cotton producer group) described below.

The torrential rainfall in Benin in late 2010 combined with record-high water levels on all the major rivers caused severe flooding throughout the country, which resulted in extensive damages to dwellings, livestock, crops, and social and economic infrastructure. Last year’s floods, which hit 55 of Benin’s 77 communes, from north to south, reached even areas previously considered immune.40

However, reports from OBEPAB and Pesticide Action Network (PAN) revealed that organic farmers were more resilient to the flooding due to the variety of crops planted and to some extent the greater tolerance for stress demonstrated by organically grown plants (including cotton). Where many farmers lost entire crops, organic farmers managed to salvage enough to maintain a level of food security and even had product available for sale to local markets.

The second is related to the resilience to pest shock. During the season 2008-09, there was a very severe pest attack on cotton in the cotton basin of northern Benin. As a consequence, yields were drastically affected. Pesticide vendors and politicians were accused of having delivered fake pesticides to cotton farmers. This situation led to the resignation of the Minister of Agriculture.

However, during the same time and in the same cotton basin, organic cotton farmers did not face the same high pest pressures and their yields were among the best in their history of organic cotton production.

These two instances, even if they are far from conclusive scientific proof, suggest at least that organic farming has some potential in absorbing the impacts of climate change. There is certainly a need for more systematic monitoring of the capacity of organic farming to adapt to climate change.
WHAT ARE THE CONCERNS?

Conventional cotton is sold as an export commodity (similar to minerals, grain and oil) on the world cotton market; usually resulting in a ‘raw material’ with no lasting connection to its place of origin, let alone the people who grew it, and the conditions under which it was grown. Small scale producers as well as being ‘invisible’, are particularly vulnerable to the fluctuations of the market price and to the impact of subsidies paid in some countries but not others. The volatility of the market and dependence on one crop can result in fragile economic situations for many of the world’s poorest communities. But it doesn’t have to be that way...

WHO’S DOING WHAT...


Ninety-four percent of Meatu’s households depend on rainfed agriculture for their livelihood. Each family has about 32 ha of land. On 4–5 ha they grow cotton, yielding 80 percent of their income. On another 2-4 ha they grow sorghum, maize and legumes, mainly for home consumption. The rest of the land is left fallow for grazing. Sixty percent of Meatu’s population live in poverty, and one-third of the children suffer from malnutrition.

The cotton season starts in September with the registration and contracting of farmers who want to grow cotton for BioRe. The contract obliges the farmer to use only organic production methods, follow the advice of BioRe’s staff, and deliver the entire output to BioRe. The company, in turn, undertakes to purchase the entire crop, provide seeds and bio-pesticides, and offer training and technical assistance. The contract is for 5 years, but the farmer can terminate it earlier if he or she wishes. BioRe can annul the contract only if the farmer violates the contract, for example by spraying chemical pesticides.

BioRe encourages farmers to work together. The company sets up farmer field schools in each location, where farmers learn about cultivation techniques, pest control, and other matters. One farmer is appointed as location leader. He or she is regularly trained on BioRe’s demonstration farm, and is expected to transfer this knowledge on to the other farmers in his location. The company also supplies implements such as ox-drawn weaders for the farmer groups to use collectively.

The actors in the cotton chain rely heavily on BioRe to finance their business operations. The farmers have very little capital. Cotton is their only cash crop, so by the time it is harvested they urgently need money. Remei AG’s vision is that BioRe should have the opportunity to become independent, so it decided to help the Tanzanian firm build direct relations with financiers.
There are three key strengths in the BioRe/ Remei AG chain:

(1) BioRe’s management capacity: Over the years BioRe has shown it can deal effectively with the problems and risks of cotton production and export. Field officers pay monthly visits to the farms, so the company has realistic forecasts of expected yields. BioRe has close relationships with the farmers, offering 5-year contracts, inputs, training, and technical assistance. And BioRe builds in an assumed default rate of 12 percent into its yearly plans in case of possible setbacks.

(2) Partnership between BioRe and Remei AG: The companies have a sales contract with fixed prices and volumes. So the risk of market fluctuations is eliminated for BioRe and the farmers. Beyond the contract, there is strong commitment and interdependence between the two companies. Any issue will be resolved in close partnership.

(3) The integrated textile chain: All companies in the BioRe chain are partners who have been working together for many years. They are committed to each other and cooperate smoothly to solve problems. As chain manager, Remei AG ensures compliance with quality standards, open communication and efficient coordination in the chain.

BioRe’s farmers not only receive a price premium; as organic producers they also avoid the costs of chemicals, while their yields are similar to those of conventional cotton farmers. That gives them an income higher than conventional farmers. In addition, thanks to the training and advice from BioRe, farmers have learned to produce more efficiently, and they are now able to produce larger amounts of cotton. As a result, their income has boomed. BioRe’s farmers also report other benefits.

They obtain higher yields in other crops. Their soil is in a better condition since they started rotating cotton with other crops. The soil has more organic matter, which increases its capacity to retain humidity. So a period without rainfall is not as fatal for them as it is for other farmers in the district. Finally the farmers have saved a lot of time for their family, as they have learnt to use oxen for ploughing and weeding.

BioRe now employs 66 staff, most from local villages. It is the only employer in Meatu district which provides such attractive salaries and education opportunities. BioRe’s training centre is developing as a regional centre of competence. In times of need the company supports the local community. During the drought of 2006 the company provided daily lunches to 7,000 schoolchildren for 3 months.

BioRe is a key part of a chain that maintains high social, environmental and quality standards. The chain has grown markedly; outperforming conventional cotton chains, and generates profits for all actors.

Remei AG and its downstream partners enjoy significant growth and sound profit margins. In the last decade Remei AG has switched fully to organic cotton. Its turnover has remained more or less stable at $25 million. Note: BioRe Foundation is based in India and Tanzania41.

In 2005, Nordstrom set a goal of introducing 5 percent organic cotton and worked to educate buyers and suppliers about the value of this choice and how to implement it. Nordstrom reached its goal in 2006, and began to take the next step in their organic journey. A supply chain training workshop was held to support implementation and strategic planning around expansion. Africa became a focus area, specifically Eastern Africa, as a part of reviewing regional sourcing strategies, and looking at areas where Nordstrom could have high-impact.
Eastern Africa and specifically Uganda has a long history of cotton and food production. The soil is fertile and the farming is rain-fed making it an area with a lower footprint in regards to water utilization and potential for higher quality cotton due to climatic conditions. However, Uganda, and the region are not without challenges - civil war and strife caused a dramatic reduction in farming activity for much of the past twenty years.

During the past few years, as peace has returned to Northern Uganda, farmers have returned to work the land, typically without the use of synthetic fertilizers and pesticides. Most of the residents of this area are involved in agriculture and are extremely poor, with more than 70 percent of the inhabitants of Northern Uganda below the national poverty line.

Farmers in Uganda earn less than $200 per year from their farming operations. Most organic farmers are farming “organically by default” and have relatively low yields from their fields. Education is the key to future success for organic cotton farming in Africa.

A key partner on-the-ground for Nordstrom is the National Organic Agriculture Movement of Uganda (NOGAMU)\textsuperscript{42} implementing training and disseminating educational materials. NOGAMU understand the local issues and politics and have been strong leaders in the organic food movement. By Nordstrom supporting Ugandan farmers to be “Organic by Design” by increasing their knowledge of organic farming practices and helping put them into practice, it is expected that yields can be significantly increased.

Higher yields in combination with the ability to secure a fair price for their organic cotton, is expected to double farmer incomes. Additional income earned from the sale of crops grown in rotation with cotton could increase their incomes by an additional 100 to 200 percent. This would provide a massive boost to a continent plagued by perceptions of inefficiency, high costs and lack of industrial capacity\textsuperscript{43}.
WHAT ARE THE CONCERNS?

It is uncommon for textile brands and retailers to know where their cotton is spun or knitted let alone where it was originally grown. With organic cotton the organic certification needs to accompany the fiber every step of the way.

Depending on a company’s business model, trade transactions can take place between a number of different actors within the supply chain. At the very least the organic transaction certificate will follow the cotton through its transformation from plant to garment. In these cases, whilst the certificate of the cotton is traceable, the end-customer (e.g. brand or retailer) will not necessarily know details of production beyond legal requirements. It’s also not necessarily clear who is benefiting from the ‘price premium’ and by how much. This model may have many players or middlemen in the chain. The deal between players will depend almost entirely on market conditions at the time, or the urgency of the grower to sell his or her cotton.

How is organic priced? There is no formalised mechanism for arriving at a price for organic cotton. The rule-of-thumb is to take the commodity price (this is usually the price quoted in the country of origin on the commodity market at a set time) and add a percentage increase (often called a ‘premium’ but should be seen as a ‘fair price’). This premium commonly sits between 10 and 30 percent, but can range from 5 to 50 percent (and beyond) over the commodity price depending on a number of factors; such as market conditions, arrangements between supply chain players, and product quality. The ‘fair price’ is supposed to cover, for example, cost of production (for farmers), investment in farming operations, organic certification, and training and extension services. It’s also meant to be enough for broader socio-economic development of the community – schooling, health and housing. We call it a fair price because it is more likely to reflect the cost of production and the ongoing viability of the farmer’s business.

An increasingly attractive option is a value chain model which allows the brand/retailer or the manufacturer to develop closer and longer-term business arrangements with the producer groups. Agreements and contractual conditions made earlier in the cotton cycle can provide mutual benefit and satisfaction for both parties. Some brands, retailers or end-product manufacturers are moving towards ‘vertically integrated’ value chains, and working directly with spinners (who often have the closest working relationship with the producer groups), some even integrate their growing and ginning into the partnership.

Benefits to the producers might include prefinancing (for biological inputs, etc), guaranteed price and guaranteed purchase of product. Benefits for brands can include security of supply and thus the ability to preplan and improved quality due to focussed farm investment.

With more established partnerships we are also seeing profit-sharing, board representation, and shared investment in community projects such as schools, health centres, infrastructure, and support of local entrepreneurship. The beauty of this sort of economic development is that it
is based on ‘trade not aid’ and usually involves more autonomy for the producers and a more equitable distribution of influence.

**WHO’S DOING WHAT...**

There are a growing number of brands and retailers working more closely with their organic cotton growers. One of the best examples is Anvil Knitwear and the Texas Organic Cotton Marketing Coop who, together, have pioneered organic in the US. Anvil’s journey into organic cotton started in 2007 when it first launched its AnvilOrganic® line of t-shirts. Anvil attributes its success to the fact that it turned its supply chain into a partnership. Anvil works closely with The Texas Organic Cotton Marketing Cooperative (TOCMC), which currently grows most of the organic cotton in the United States, to help develop and promote the US organic fiber market. Anvil customers such as Billabong® have used transitional cotton in their t-shirts and Disney Stores® has used organic cotton for its graphic t-shirt line.

Anvil’s support for organic cotton is based on its belief that organic cotton has less impact on the environment and evidence of this is Anvil’s comparative ‘cradle-to-grave’ greenhouse gas (GHG) life cycle analyses comparing its AnvilOrganic® t-shirt and AnvilSustainable™ t-shirt to its Anvil® Basic Cotton t-shirt.

Anvil evaluated the reduction of chemical pesticide and fertilizer use resulting from organic cotton farming and, based on data provided by TOCMC, for every pound of cotton lint produced using organic farming methods, an estimated 0.0104 pounds of herbicide, insecticide, growth regulator and defoliant active ingredients and 0.3855 pounds of chemical fertilizer are not used. In addition, TOCMC evaluated the amount of water used to grow its organic cotton. It estimated that approximately 60% of their organic cotton acres are dryland. Based on TOCMC calculations, they estimated that their 2009 crop used approximately 250 gallons of irrigation water per pound of lint when you combine the irrigated and the dryland.

More recently, Anvil made a commitment to TOCMC to double the amount of U.S organic cotton acreage through both consumer and farmer education. The launch of Double It! included a video short titled “Message From Earth: Organic Matters” which Anvil released at Farm Aid in 2010.
WHAT ARE THE CONCERNS?

‘Country of Origin’ is a legal requirement for apparel and other textile labelling. However, ‘origin’ in terms of customer information only goes as far back as the country where the final product was assembled. And with textile supply chains being as long, complicated and global as they are it’s little wonder no one knows every detail of their supply chain.

In some cases, a brand or retailer could tell you where their cotton was spun or knitted but the actual origin of the cotton is not as easy to identify. The reason for this is that most baled cotton (ginned) is sold and bought on the world commodity market. By the time it enters a specific supply chain it may have travelled a great distance from the fields where it was originally grown, changed hands a couple of times and mixed with cotton from other countries. Only very recently when forced and child labour in the cotton fields of Uzbekistan was exposed were brands and retailers questioned about the origin of their cotton. In fact, it’s still not uncommon for the general public to have no idea that cotton comes from a plant and grows in a field.

Organic cotton traceability offers an opportunity for brands and retailers to educate and inform their customers. Cotton grown and certified as organic and/or Fairtrade can be traced back to not only the country but even the very farm it was grown on, using the organic transaction certificate. This process is important mainly for its organic integrity. An additional benefit of certification tracking systems is that stories of origin can be told - and not only about the fiber but also about the farmers and the benefits of organic to the rural communities they source from.

Equating the story of origin with a quality product is something coffee companies (for example) have got particularly good at... and it’s happening with clothes through design, innovation and sustainability agendas.

The Fairtrade cotton label and Cotton Made in Africa (CMiA) have been very effective at connecting product to country of origin, but in general, brands and retailers are only just waking up to this huge product differentiating opportunity for their organic collections.

It’s not only at a product level either; the reputation of the entire company can be vastly improved if presented with a human face. And of course it works both ways – the opportunity for individuals within a retail company or brand to discover more about the people behind their products can be the start of something life-changing for themselves as well as the producer communities. This was something Eileen Fisher and staff discovered after travelling to Peru to find out more about the origin of their organic cotton.

KEY INDICATOR: COUNTRY OF ORIGIN
PHOTO: Farmer with colored cotton, Bergman Rivera (Peru)
Organic cotton growers tend to rely on the characteristics of the land, their culture, and sometimes spiritual life. Here are two examples of this connection in Latin America.

**Bergman Rivera** was created in 2007 as the result of the merger of Bergman Sweden and Cortextil’s organic cotton projects. Since 1986, they have produced organic cotton under the White Cotton brand in southern Peru, in cooperation with small farmers.

Bergman Rivera is the first company in Latin America to be fully certified under the Global Organic Textile Standard (GOTS), from field to garment. This certification guarantees not only the traceability of the organic cotton, but also fair labour standards.

The **White Cotton Project** is the founding stone of Bergman Rivera. In 1986, the President of the Board, Mr Stephan Bergman, together with a small number of farmers, began experimenting with various cotton varieties and growing methods in order to find viable alternatives to conventional farming. After some years, the White Cotton Project became a reality and now works with 390 farmers.

This project is now managed by one of Bergman Rivera’s partner companies: Ecotton. It oversees 870 hectares of certified land in the valleys of Cañete, Chinchá, Ica, Santa and Lambayeque, producing both Tanguis and Pima (Extra Long Staple) cotton varieties.

The **Wild Cotton Project** began in 1994, when the Peruvian government decided to promote the substitution of coca leaf plantations for alternative products in the rainforest. It came to Bergman Rivera’s attention that brown colored cotton had been grown in the area for many centuries and in a completely natural way. They certified a small group of farmers and began to promote the product with their clients around the world.

Today, Bergman Rivera works with 45 farmers and their families and has established a market for this cotton in Japan and Europe. Their main clients (including Eileen Fisher and Indigenous Designs) are involved with this community and visit them periodically. During 2010, with donations from Panoco Trading from Japan and The Rotary Club of Borås Sweden, Bergman Rivera built a computer lab for the Shanao community. The purpose of this project is to provide the farmers’ children with more opportunities, giving them access to the rest of the world.

**Aratex Organica** coordinates and controls the whole cotton supply chain, from seed production, through ginning, carding, bleaching, dyeing, and manufacturing. Eight hundred small farmer families, benefit from the support and assistance Aratex provide. Production is being carried out in several Paraguayan counties: Guairá, Caaguazú, Caazapá, Paraguari, Misiones, Itapúa and Ñeembucú.

Aratex is currently working on debugging a very suitable seed for the organic crop – the seed REBA ARATEX. This comes from the mother seed REBA P279, a variety that adapts quite well to the Paraguayan microclimate, offering a middle/long staple of very high quality, very resistant to pest and climate change, as well as providing better performance and high yields.

‘Ara’ means “sky, weather, creation” in Guarani, an indigenous language predominant in the rural areas of Paraguay. “We are the story behind each of our products. We want to unite the producer with the consumer, giving soul to a product.” says Olga Segovia, manager, Aratex Organica.
WHAT ARE THE CONCERNS?

Conventional cotton is mostly traded on the commodity market. It is bought and sold as a raw material, with virtually no connection between the product and the people behind its production. Typically, the cotton price is at the whim of ‘supply-demand’ cycles and, until recently, prices for cotton fiber (lint) have not been much different to the cost of production, sometimes dipping lower. Spot market trading, volatile fiber prices, producer powerlessness, and lack of supply chain integration have kept farmers invisible and small-scale farmers or contract farmers in particular, poor.

Organic cotton is very different – it offers an incentivised alternative. Not only is the practice of organic agriculture beneficial to the health and safety of people and planet, but the model for trade is based on ‘rewarding’ growers of organic for their good stewardship, through better financial returns. The model is still based on the commodity pricing system, but usually results in a 10-30 percent organic ‘value-addition’ over commodity prices44. Ideally, other favourable terms and conditions are built into the trade of organic, such as forward contracting, prefinancing, and long-term agreements. However, value chains operating this way are still far and few between. There is still a preference to ‘see what the market does’, and little understanding or confidence that trade agreements can work for those involved.

For organic cotton to make a viable contribution to environmental degradation and socio-economic despair there is much work to be done to improve the way it is traded, particularly at the farm gate. One area of concern is the inclination for buyers to use the same system as conventional cotton. Not only does this put pressure on the organic producers to ‘accurately guess’ the market’s appetite for their organic (and that they will get a ‘good price’) but it results in business-as-usual for all concerned inevitably leading to price squeezing which can put pressure on the integrity of the organic production system. Further, it results in a step back from building longer term trade agreements, or connecting the price of the cotton fiber to the actual cost of its production. For brands and retailers, they miss the opportunity to ‘walk the talk’, build loyal supplier relationships, and give their organic products a story from which they could share with staff, shareholders, and customers. The good news is there are stakeholders out there committed to organic cotton for social, market, and ecological reasons, and who see this commitment as good business strategy in the long run. They include:

• A growing number of brands and retailers with well-established trade relationships, or beginning to move that way. Some are combining with Fair Trade, and investing in in-conversion cotton, and more sustainable cotton, to help bring organic production along, or further improve the credentials of their non-organic cotton consumption.

• Socially and environmentally-oriented financial institutions which can provide credit to suppliers and in the process, strengthen, and make more resilient the value chain.

• Expert and experienced NGOs, government agencies, consultants and extension service providers supporting knowledge-intensification on the ground.
• Academic, social, and scientific researchers proving the benefits of organic agriculture for addressing global concerns such as poverty, food security, gender equality, soil fertility, water scarcity, and climate change.

• A growing consumer base wanting to purchase organically and ethically produced products. In regards to consumers, more and more people understand the broader definition of a ‘quality’ product, which includes the social and environmental aspects as well as the direct product appeal.

Price volatility (spikes and troughs) in the cotton commodity market only reinforce the need to better support alternative approaches to business that address externalities such as climate change, clean water, and workplace health and safety.

Textile Exchange is expecting to see progressive market leaders (such as Anvil, C&A, Egedeniz, H&M, Nike, Nordstrom, Patagonia, Remei AG, Sanko, and many others) become increasingly influential through their commitment to organic cotton and other more sustainable fibers and textile production.

WHO’S DOING WHAT...

The organic textiles market continues to grow. This in itself is a positive sign that there is support within the textile industry. In fact, the organic textiles industry grew 20 percent to an estimated $5.61 billion in 2010. The Top ten organic cotton-using brands and retailers globally were H&M (Sweden), C&A (Belgium), Nike, Inc. (Oregon, USA), Inditex (Zara) (Spain), adidas (Germany), Greensource (Washington, USA), Anvil (New York, USA), Target (Minnesota, USA), Disney Consumer Products (California, USA) and Otto Group (Germany).

The number one user of organic cotton in 2010, H&M, has been using certified organic cotton since 2004 and has since then gradually increased the amounts used. “The intention is to gradually use more organic cotton as part of our target to only use more sustainable cotton by 2020. We want to further contribute towards increased demand for organic cotton and motivate farmers for sustainable cotton cultivation” says Henrik Lampa, CSR Manager Product at H&M. “We want to further contribute towards increased demand for organic cotton and motivate farmers for sustainable cotton cultivation.”

In respect to manufacturing, Egedeniz part of the Kadioglu Group of Companies, based in Turkey, was one of the pioneers. The company started business in the early 20th Century with cotton trading and ginning as well as supplying dried fruit to exporters. Exporting grew in the 1950s. Later in the 1980s business diversified into wheat flour milling and animal feed milling. Then in the 1990s the Company started specialising in organics such as dried fruit and cereal as well as cotton. Garment manufacturing from both organic and conventional cotton also grew around this time.

Today Egedeniz, the first certified organic textile company in Turkey, sells organic cotton at most stages of processing... as fiber, yarns, knitted and woven fabrics, and final garments. Egedeniz work closely with their contracted producer groups through the Kadioglu Group. Kadioglu provides technical support for the farmers and handles sales administration. There are over 100 organic cotton farmers working on 600 ha of land – plus seasonal workers during busy times. All organic agricultural practices are in accordance with European Union organic agricultural regulations and NOP of USDA (National Organic Program of USA Dept of Agriculture) and certified by Control Union. Much of the organic fiber coming off these fields goes into Egedeniz’s own manufacturing but some of it is exported to other manufacturing centres around the world.

In addition, all processes right up to the end product are in accordance with the rules of the Sustainable
Textile Standards of Control Union and GOTS (Global Organic Textile Standards). Egedeniz follow the 3Q system through all stages; social Quality, product Quality and service Quality.

All Egedeniz production operations from cotton fields through ginning, spinning and all textile processes are almost local within a radius of 250 km. This and other activities of educating farmers and its workers to care about their environment, annual tree planting events are part of carbon footprint minimization and environmental awareness policy.

Egedeniz is proud to be developing new qualities of sustainable textile products and apparel for its existing (and potential) clients.

Nike is one of the world’s leading brands to pioneer organic cotton. They took a significant risk in investing heavily in organic cotton and sustainable practices in the mid-1990s when sustainability was considered either activism or granola. Nike was also a founding member of Organic Exchange, now Textile Exchange.

Nike believes that using organic cotton is a ‘natural fit’ for them and aligns with their drive to find ways to integrate innovative approaches to environmental responsibility into their products. The use of organic cotton is embedded in Nike’s sustainable materials strategy and linked to their commitment to create innovative performance products. The Nike Considered Mission and Vision is rooted in the tradition of Nike innovation; Considered is the Nike commitment to create extraordinary performance products for athletes while managing their business within nature’s limits.

Since 1997, when Nike first purchased 250,000 pounds of certified organic cotton for use in their fall 1998 apparel products, they have steadily increased their use of organic cotton. In 2004 Nike shared their company-wide drive towards incorporating environmental sustainability into their business practices and product design. This new approach focused on a number of key areas: Nike’s overall sustainability goals include targets related to water, waste reduction, chemistry, climate change, packaging, business processes, and incorporating sustainable materials into product design.

Nike’s original goal was to blend a minimum of 3 percent organic cotton, later increased to 5 percent into all of their cotton-containing apparel materials by 2010, while steadily expanding their offering of 100 percent certified organic cotton products. By 2010 estimates showed that more than 10 percent of the cotton Nike used globally was organic, representing approximately 15,700,000 pounds of organic cotton fiber.

Since Textile Exchange started reporting, Nike has remained amongst the top 2-3 retail users of organic cotton in the world. Nike has now increased its blending target to 10 percent by 2015.

Nike currently sources organic cotton fiber primarily from the United States, India, Turkey and China. Nike is piloting a new traceability process that will provide better visibility to their organic cotton back to its place of origin, which confirms organic certification, and enables Nike to more efficiently manage their cotton value chains.
CONSIDERED DESIGN

PHOTO: Nike Inc
WHAT ARE THE CONCERNS?

Neither recessions nor unstable economies seem to have put a damper on the fast-growing organic textiles industry.49

Experts are acknowledging a ‘maturity’ emerging in the industry, with more brands and retailers possessing the confidence to talk about the work they initially kept low-key due to fear of ‘getting it wrong’ or raising their heads too far above the parapet.50

More people want to know about the social and environmental credentials of what they buy, and that their dollar really does count. ‘Telling the story’ of organic cotton and bringing consumers closer to the producers is an exciting, relatively untapped, opportunity to help make this happen.

WHO’S DOING WHAT...

A powerful way to win hearts and minds is through story telling. The following ‘story of discovery’ told by the founder of the outdoor retailer Patagonia requires no further introduction...

After a trip into the San Joaquin Valley, California to see where his cotton was coming from Yvon Chouinard, founder of Patagonia was shocked at the lunar landscape of the cotton fields, the amount of toxic pesticides used in agriculture and the effect it was having on soil, water and human health; describing the cotton belt he witnessed as a ‘killing field’.

Yvon soon realised that out of all the textiles they used at Patagonia, cotton was probably the biggest villain – and it didn’t have to be. Hadn’t farmers grown cotton organically, without pesticides, for thousands of years? Indeed, only after World War II did the chemicals originally developed as nerve gases become available for commercial use as pesticides and weedicides.

This first-hand experience was a turning point for Yvon. “How could we continue to make products that lay waste to the earth this way?” In the fall of 1994, Patagonia made the decision to make all cotton sportswear 100 percent organic by 1996.

They had eighteen months to make the switch for 66 products – and only four months to line up the fabric. They found that there simply wasn’t enough organic cotton commercially available to buy through brokers... “So we went direct to the farmers who had gone back to organic methods. And then we went to the ginners and spinners and persuaded them to clean their equipment after running what would be for them very low quantities. We had to talk to the certifiers so that all the fiber could be traced back to the bale”.

And they succeeded. Every Patagonia garment made of cotton in 1996 was organic, and has been ever since.

“Although we first intended Patagonia as a way to free ourselves from the limitations of the original climbing business, precisely those limitations have kept us on our toes and helped us thrive. We still pursue climbing and surfing, activities that entail risk, require soul, and invite reflection. We favour informal travels with friends – doing what we love to do – to the camera-covered event. We can’t bring ourselves to knowingly make a mediocre product. And we cannot avert our eyes from the harm done, by all of us, to our one and only home.”
Organic cultivation involves the use of natural fertilizers, natural pest control, and crop rotation. This is subject to regular checks by the company’s organic inspector. Organic cultivation is certified according to EU Regulation 834/2007 and the United States National Organic Program (NOP).

The first step is preparing the cotton for processing. Humane and fair working standards are confirmed by the certification SA8000.

Next, the ginned cotton is transformed into yarn. As in all stages of production, great emphasis is placed on the safety of textile workers.

At this stage, yarns are made into fabrics by means of knitting and weaving. Workplace conditions including health and safety are standards of paramount importance.

"Treating mankind and nature with respect is the key to sustained economic success". This is the Remei business philosophy that has taken what started as a private initiative in 1991 to become one of the largest organic cotton production systems worldwide. Featuring the label bioRe®, the Swiss textile specialists Remei AG produce high-quality yarns and textiles within an ecologically and socially sustainable process chain. More than 8,300 small-holder farmers have joined the bioRe® companies in India and Tanzania and have adopted the ecologically sound principles of organic farming.

Internationally recognized certification confirms Remei’s adherence to these principles, including social standards BSCI and SA8000 and organic agriculture standards EU 834/2007 and NOP. In addition, the bioRe® Foundation has been established to initiate and promote social projects in producer countries, such as mobile health units and community schools.

The bioRe® label stands for Remei AG’s quality, as well as its socially and ecologically sensitive chain of production, featuring organic cotton processed into fashionable high-quality clothing for brands and trading companies. Remei services include the making of collections and complete production management in:
- clothing for all the family - jersey and french fabrics including elastane blends
- all colours, embroidery and prints, including screen-printing and rotary printing
Remei AG coordinates the whole bioRe® supply chain... from farmer to brands and retailers

At Remei, ethical responsibility and corporate thinking are aligned through five fundamental principles:

• organic cotton farming, including advising and training farmers and guaranteed purchase of organic cotton from the bioRe® farmers;
• ecologically sound garment production;
• fairness with respect to farmers and textile workers through social projects and farmer visibility Initiatives;
• transparency through supply chain tracking right back to the field;
• and innovation with CO2 neutral bioRe® production.

If you interested in having your textiles produced to bioRe® quality contact Remei AG: info@remei.ch or visit the Remei website: www.remei.ch
PHOTO: Harvest time, Chetna (India)
PART TWO: MEET THE FARMERS

We would like to introduce you to the organic cotton farm leaders sponsored by us to be in Barcelona for the conference. Not only will you learn more about some of the people behind our organic cotton production but you will get an idea of the knowledge and passion they have for their work. We know you will enjoy reading the following snapshots of our farm leader’s lives and their commitment to organic cotton ‘in their own words...’ and whilst in Barcelona we hope you get the chance to meet them in person!
Simplice Davo VODOUHE  
Coordinator, OBEPAB, Benin

email: dsvodouhe@yahoo.com  
website: obepab@intnet.bj

I have been involved in organic farming:  
for 20 years.

Production area:  
2000 ha.

Number of farmers:  
We have 1900 farmers among which 700 are women.

Our cotton:  
500 tons of seed cotton on average each year.

Our other crops:  
We also grow cashew nut, maize, sorghum, cow pea, ground nut, yam, shea nut, and cassava.

Water management:  
Till now, organic matter helps us in keeping water longer than in conventional production.

Soil management:  
Promotion of the use of available natural organic matter through composting, the use of cow manure, the guano, rotation of crops and association of crops with different nutriment value for the soil (legume vs cereals; trees vs arable crops).
What I like about organic:
Fewer expenses on medical care compared to conventional agriculture, more revenue, healthy soil and better environment. There is a feeling of ownership of the farms.

Some of the challenges:
How to increase the value of the products in rotation in organic agriculture and how to lower the cost of certification.

My hopes for Barcelona:
To get in touch with other producers groups and share and learn from experiences from others in order to improve and promote organic agriculture. This will help in finding solutions to constraints we are facing in this type of production in our country.
Sidi El’Moctar N’guiro  
Agronomic Engineer, MOBIOM, Mali

email: mobiom_mali@yahoo.fr  
website: http://mobiom.org/

About my family:  
I am married with one child.

Where I live:  
The home of my organisation is Bougouni.  
Bougouni is a city and community in Mali, in the Sikasso district.  
Bougouni has a climate similar to Soudan.  
It covers 700 hectares; and has 30,000 inhabitants mainly from the Peuls and the Bambaras tribes.  
Bourgouni is the capital city of the Banimonotie community.  
Banimonotie can be translated literally as in between rivers.  
And indeed, this community is situated between two rivers Baoulé and Mônô.

Where I work:  
MOBIOM.  
Fair-trade and organic cotton are the major products of our organisation as it represents more than 60% of our production.

My role:  
I am an agronomical engineer.  
From 2000-02, I was involved in the introduction of organic cotton in Mali.  
In 2004 I took part in the promotion of fair trade.  
In 2005 I was recruited as a Director of the Organic Movement of the Mali Federation of Organic Producing Cooperatives.  
I am a member of the West African Fairtrade Network (WAFN) administrative board.  
Mobiom, as a member of IFOAM, has made me a focal point of IFOAM in Mali since 2008.

I have been involved in organic farming:  
I have 10 years experience in making organic cotton accessible to everyone, and in supporting the management of organic cotton producing cooperatives.  
I also have 7 years experience in fair-trade cotton in Mali.

Production area:  
is 5372 ha from which 1274.75 ha are looked after by women.

Number of farmers:  
7249 organic cotton producers, of which 1922 are women.

Our cotton:  
The cotton cultured is from Gossypium huristum species; the length of the fiber is 1 3/32 (27.8 mm; medium) and 1 1/8 (28.6 mm; medium to long) on average.
**Our other crops:**
We also produce sesame (250 T), almonds and shea butter (350 and 35 T respectively), mangoes (75 T), fonio (30 T) which are sold locally. Food crops include sorghum, mil, maize, onions, okra etc.

**Water management:**
The cotton agriculture used in Mali is rain fed. Therefore the members of Mobiom are very dependent on the rainfalls. For a better management of the rain water the producers use techniques such as scratching, barrier building and contour ploughing etc.

**Some of the challenges:**
Sustainable use of wood and control of bush fires. The pollution created by the use of chemical pesticides, and the management of the use of natural resources (water, air, soil and human health). The level of technical equipment, especially amongst the women. Adaptation to climate change. The introduction of GMO in West Africa.

**My hopes for Barcelona:**
I am taking part in the workshop in Barcelona to learn about everyone else’s experience and to share my modest experience.
Niranjan Pattni
Managing Director, BioRe Meatu Limited, Tanzania

email: niranjan.pattni@biore-tanzania.com

About my family:
I am married with four children. My wife Priscilla is working with me as Personal Assistant since last two years. We have three daughters Ninu, Prinita and Tanya and Son Abhishek. Our eldest daughter Ninu is studying ACCA and dreams of one day to work under me. Prinita is doing Business Management and wants to specialize in HR. Tanya just completed Diploma in IT – Software engineering. The girls are living and studying in Dar es Salaam. Tanya is currently living with us in Meatu, helping us to set up a data bank of our farmers. Abhishek is doing O Levels in Shinyanga.

Where I live:
I was born in Pemba, Tanzania and after completion of higher education in Zanzibar; I moved to mainland and settled down in city called Tanga. I then worked for an integrated textile mill in Tanga for 24 years before joining bioRe Tanzania Limited. For 12 years I was the General Manager of the mill. This textile mill was already producing yarn for Remei AG.

Where I work:
My wife and I live in a village called Mwamishali, Meatu District, Shinyanga. We have our Training Centre, offices, residential quarters and Demo Farm on 30 acre land. Meatu District is one of the 8 rural districts of Shinyanga Region. It lies between latitude 2057’ and 4 09S’; and longitude 340 8’ and 34049E. Shinyanga Region produces 60% of the 80% cotton grown in West Lake Zone area in Tanzania.

My role:
I am the Managing Director of BioRe Tanzania and I am involved right from the beginning in setting up the company to work with small holder cotton grower farmers in Meatu District to produce Organic Cotton.

I have been involved in organic farming:

Production area:
We work in 15 villages in Meatu District within the radius of 30 km from our Training Centre in Mwamishali. In addition to our contract farming we are since the last three years collaborating with farmers group in a neighboring District namely Maswa. There are four villages involved there. Total area cultivated this season 14’140 hectares.
**Number of farmers:**
Currently we have 2656 registered contract farmers.

**Our cotton:**
Tanzanian cotton is medium staple, with a micronaire between 3.5 & 4.5.

**Our other crops:**
Mung beans, a leguminous crop were introduced by us and now more and more farmers have adopted this cash crop. Maize sorghum & sweet potatoes are grown mainly for their own consumption.

**Water management:**
Water is very scarce in our area. We have on an average 500-800 mm rainfall per annum varying from area to area. We have seasonal rivers, during dry period the surface water dries out. Irrigation is not practical. The constructions of the dwellings of the farmers are mostly with thatched roof so rainwater collection is also not possible. BioRe Tanzania supports schools with rainwater collection tanks, and shallow wells in several villages mainly for human consumption and not agriculture.

**Soil Management:**
We have continuous training programs for farmers on improving the soil fertility. Previous to our arrival our farmers were practicing mono culture agriculture but after training majority of our contract farmers have adopted crop rotation, including legume crops. Our farmers also apply farm yard manure as it is conditional for them to be organic farmer. Since 2009 with the support from FAO we have taken up training of lead farmers in soil management who in turn disseminate knowledge to their fellow farmers.

**What I like about organic:**
It is a discipline way of life. I believe that organic farming is sustainable, good health for humans, cattle and soil; less expensive than the conventional farming.

**Some of the challenges:**
Quality of seeds, only one variety for a continuous length of period; and the biggest challenge is Tanzania wants to introduce BT cotton in next 3 to 5 years’ time.

**My hopes for Barcelona:**
Looking forward to meet and interact with various experts in the field and learn from them, their experiences, how they mitigate various obstacles. Also would like to share our work.
Riyaz Haider  
Managing Director, BioSustain Tanzania Limited, Tanzania

email: haider@biosustain.de  
website: www.biosustain.de/

About my family:  
I have a family; my wife Farha and our children Nasreen (girl) 3 years and Aariz (boy) 10 months old.

Where I live:  
Due to education purposes for the kids we live in Daressalaam but I spend most of the time in Singida Region where we do the project and I travel every third week to visit the family. This makes our life difficult but we try to manage as best we can.

Where I work:  
BioSustain Tanzania Limited.

My role:  
I am the Managing Director.

I have been involved in organic farming:  
Since 2006.

Production area:  
Approximately 10,000 Hectares. Extension possibilities in the production volume of 1500 - 3000 MT.

Number of farmers:  
We have 3500 farmers among which 1000 are women. Extension possibility of up to 10,000 farmers.

Our cotton:  
Good middling Type I, II, III.

Our other crops:  
We also grow sesame seeds (export to China, Japan and South Korea), mung beans (local market and export to India), ground nuts (local market and export to India) and maize (local market).

Water management:  
No irrigation, water conservation is in our strategy but extension services are challenged as the project becomes bigger.
Soil management:
Soil management is integrated into our training strategy. We are using more manure as the farmers have this in good supply. Improvement is needed in composting so that it can be better integrated, and increased training of extension staff.

What I like about organic:
Cleaner production for the environment as well as protection of health.

Some of the challenges:
No sustainable market, extension difficulties, no sufficient value addition in Africa.

My hopes for Barcelona:
My hope is to find a sustainable market partner. BioSustain can extend its production but we are very uncertain about the market. We are still searching for a committed buyer or value chain partner.
Jane Nalunga  
Senior Training Officer, NOGAMU, Uganda  
email: jnalunga@nogamu.org.ug  
website: www.nogamu.org.ug/

About my family:  
I am married. My husband is Joseph Kasasa. We have 4 children, 2 girls and 2 boys.

Where I live:  
I live in a village near the shores of Lake Victoria, called Ggaba near the capital city (Kampala). The people in this village are very friendly and most of them have home gardens. I have a small garden at our home where there is 1 mango tree, 2 avocado trees, 1 papaya tree, 1 jackfruit tree, 40 banana stools and I grow an assortment of vegetables including cabbage, broccoli, cauliflower, egg plants, tomatoes, peppers, amaranthus, black nightshade, carrots, onions, spring onions, ginger, turmeric, beans and various herbs. I practice intercropping and crop rotation. What I like most is living near the lake. I can see water any time I decide.

Where I work:  
I work with the National Organic Agricultural Movement of Uganda (NOGAMU), a membership non-governmental organization which promotes and coordinates organic agriculture development in Uganda. Our members are spread out over all regions of Uganda.

My role:  
I am the Senior Training Officer. My major role is to assess training needs of the different producer groups, develop relevant training materials and organize training for the producer groups.

I have been involved in organic farming:  
I have practiced organic agriculture for 10 years.

Production area:  
Currently, the certified area under organic cotton is about 10,866 acres and about 8,000 acres under conversion. The potential for expansion is high. The general cotton production in Northern Uganda is based on organic principles and practices. Such practices are observed by both the certified and non-certified producers. Non-certified organic cotton is sold as conventional cotton. Major Farmer organizations and companies participating in organic cotton production include West Nile Organic Farmers Association (WOFA), Lango organic farming promotion (LOFP), Gulu Agricultural Development Limited, and the North Bukedi Cotton Company. Phenix Logistics is the only company processing organic cotton in Uganda. It produces finished organic cotton products for the local and export market.
Number of farmers:
There are over 30,000 smallholder farmers growing organic cotton on a regular basis on an average of 0.5 ha to 1.0 ha each. Not all organic cotton producers are certified. About 8,000 farmers are certified organic and over 5,000 farmers are under conversion. Farmers groups are composed of both men and women.

Our cotton:
Cotton in Uganda is entirely rain fed. About 97 percent of the cotton crop produced in Uganda is BPA, which is a medium length staple. During the crop year 2009/2010 Uganda exported 1,689.46 metric tons of organic cotton and 81,153 pieces of organic cotton garments.

Our other crops:
African highland bananas, apple bananas, pineapples for the local market and beans, onions, amaranth, cabbage, kale, spring onions, gooseberries, etc. for our own needs. Organic cotton farmers also produce in their rotation system, cassava, beans, maize, sesame, sunflower, sorghum, groundnuts, millet, soybean, chilli and vegetables.

Water management:
In the Northern region where organic cotton is produced, the land is mostly flat, with sandy loamy soils. Water management is mainly through cover-cropping with legumes like the velvet bean and jack beans to protect the soil from the strong sun rays. In a few areas that are prone to flooding, NOGAMU has trained farmers to construct diversion channels and distribute the water evenly through the fields.

Soil Management:
NOGAMU is working with 40 organic cotton groups (each with an average of 30 members) in Northern Uganda to increase the scale of cover cropping and green manuring to encourage continuous improvement of soil management so that even farm families without livestock can participate in soil improvement.

What I like about organic:
I like using my own knowledge and acquired experience to design relevant programs to overcome a constraint, rather than following instructions from someone else, who may not be conversant with the prevailing conditions in my area of operation. Even resource-poor farmers can participate by using the limited resources available around their farms.

Some of the challenges:
Lack of government policy on organic agriculture in Uganda, and limited formal research to validate solutions to production challenges, especially pest and soil management.

My hopes for Barcelona:
I am looking forward to share experiences with organic cotton practitioners so that I can find new practical solutions that are relevant to organic cotton production and marketing in Uganda.
Shaknoza Kurbanalieva
Manager, bioService Organic Cotton, Kyrgyzstan
email: shaknoza.kurbanalieva@helvetas.kg
website: www.organicfarming.kg

Where I live:
I live in the small town of Jalalabat, southern Kyrgyzstan. Our region is too cold for planting cotton but very rich in beautiful forests and mountains.

Where I work:
The Bio Cotton Project in Jalalabat town.

My role:
To support the organic value chain and facilitate business relations between Kyrgyz organic producers and potential trade partners.

I have been involved in organic farming:
since 2008

Production area:
Currently the organic area covers around 2500ha, and the average cotton yield per hectare is 2 tons.

Number of farmers:
the project has reached 1000 farmers, up from 34 pilot farmers in the beginning.

Our cotton:
Kyrgyz – 5 variety, 32-34mm staple length, Organic and Fairtrade and Inconversion and Fairtrade.

Our other crops:
Medicinal and aromatic plants, chickpeas, beans and peas, fruits and vegetables.

Water management:
Helvetas introduced on farm water management project in 2009.

Soil management:
Integrated soil management training for farmers.

What I like about organic:
Clean and pure organic products. The organic movement brings honest people together!

Some of the challenges:
Lack of modern technologies, public awareness, empowering farmer groups.

My hopes for Barcelona:
Exchanging experiences in cotton pricing, establishing contacts for future collaboration, and potential buyers for in conversion cotton. Contributing to the organic movement!
Mahesh Ramakrishnan  
Head of Agribusiness, Arvind Organic Project  

email: Mahesh.R@arvind.in  
website: www.arvindmills.com

About my family:
I live with my spouse Purnima, she is a homemaker and we have a son named Kalidas who is 6 years old and is studying in 1st standard of Delhi Public School, Ahmedabad. My father Dr. P.K. Ramakrishnan Nair is a retired Dean from Jawaharlal Nehru Agricultural University, Jabalpur which is located in central India and my mother Suseela Ramakrishnan is a home maker. Since 1993 after retirement my parents have settled down in our ancestral home in Kerala the place is known as Perumbavoor, where they manage our family farm; rubber plantations, spices such as pepper, nutmeg, cocoa, coconut, areca nut, paddy, etc. I am the eldest followed by my brother Madhavan and a sister Madhavi, both of them are married and living with their spouse in the USA, perusing their careers in the IT industry.

Where I live:
I live in Ahmedabad (also known as Amdavad) which is located on the banks of the River Sabarmati, 32 kms from the Gujarat State capital Gandhinagar. It is the largest city in Gujarat having a population of about 50 lakhs and is one of the major industrial cities in India. It has been called the ‘Manchester of the East’ due to its many textile industries and its smokestacks. From 1915, it became famous as the site of Gandhi’s ashram and the place where he launched his celebrated march against the Salt Law during the British Raj. Ahmedabad enjoys a thriving cultural tradition, being the centre of Gujarati cultural activities and diverse traditions of different ethnic and religious communities. Popular celebrations and observances include Uttarayan an annual kite-flying day on 14th and 15th of January. The nine nights of Navratri are celebrated with people performing Garba the folk dance of Gujarat at venues across the city. The festival of lights Deepavali is celebrated with the lighting of lamps in every house, decorating the floors with the rangoli and the bursting of firecrackers.

Where I work:
I started working with Arvind Limited in 2007. Arvind is a leading vertically integrated textile apparel manufacturer and the world’s largest denim producer with an annual capacity of 90 million meters of fabric per annum. Arvind also manufactures shirting fabric, knits, bottoms and technical textiles. In 2007, Arvind forayed into contract farming of cotton (organic, fair-trade and since 2010 into Better Cotton Initiative (BCI)). Our farm projects are located in Akola district of Maharashtra and Tapi district of Gujarat. Backward integration has helped to secure our sustainable supply chain which, in the process, is helping small and marginal cotton farmers of the Vidharbha region of Maharashtra and Nizar Taluka of Tapi district in Gujarat.
**My role:**
I am the Head of Agribusiness Division of Arvind Limited and have designed and laid the organic, fair trade and BCI farm initiatives of Arvind. In total 150 staff report to me which includes the project team, core team, extension team and office team.

**I have been involved in organic farming:**
I have been involved with the organic movement for the last ten years. It started with the research work that I did with FiBL Switzerland (2001 - 03), the first ever research study on organic cotton in collaboration with IWMI and Maikaal bioRe (P) Ltd in the Khargone district of Madhya Pradesh.

**Production area:**
Today in Akola our producers have 26,395 acres of certified organic farm land.

**Number of farmers:**
Our organic farm project has 3538 farmers; of which 488 are women.

**Our cotton:**
90% of the organic cotton grown in our project area is under rain fed condition, which is ideal to cultivate medium staple (27 to 29 mm) cotton fiber. Our project farmers use non –gm cotton seeds supplied by six seed companies.

**Our other crops:**
Soyabean; pigeon pea; chick pea; wheat; sunflower; safflower; castor; green gram; black gram; sesame; onion; gooseberry; papaya and vegetables for own consumption. At present all these harvests are sold in the local market without any premium.

**Water management:**
Arvind in collaboration with Sir Ratan Tata Trust (SRTT) is implementing a rainwater harvesting project. The project is entitled ‘Enhancing Agriculture Development through rain water harvesting mechanisms in Akola district of Vidharbha.’ The project is being implemented for the small and medium organic farmers of Arvind organic cotton in Akola. The overall aim of the project is to evolve a sustainable and community centric model for enhancing the water harvesting capacities through construction of community and individual farm ponds for improving the availability of irrigation water; complementing it with sprinkler and drip irrigation systems for economical use and ensuring water availability for longer period and thereby enhancing the income of the agrarian economy of the region.
The main objectives of the project are to:

- Enhance the water storage as well as recharge capacity of small and medium farm land through the construction of farm pond.
- Ensuring water conservation practices by promoting micro irrigation system.
- Enhancing the economic returns for farmer from agriculture through increase in agricultural productivity as well as reduction in input costs.
- Enhancing people’s knowledge and attitude towards improved water management strategies and creating mass awareness about the use of water saving technologies.
- Carrying out soil and moisture conservation activities to enhance the quality of land holding.

**Soil Management:**
Cotton requires the full range of nutrients in a well balanced composition. The cotton plant requires 2/3 of these nutrients during the first two months. To ensure sufficient nutrient supply (especially of nitrogen) during this phase, Arvind recommends that a basal dose of well decomposed compost or FYM manure be applied at the start of the growing season, and be complemented with one or two head applications of enriched compost and an organic manure rich in nitrogen (e.g. oil cakes). Head applications of manure are recommended to be applied 2 – 3 weeks before the start of square bud formation, as the nutrients are not instantly available but only get released once the manure decomposes. Crop rotation and intercropping with legumes, recycling of crop residues and the application of farm-produced organic manure (and enriched compost) form the basis of nutrient management in our producer groups in Akola.

**What I like about organic:**
Organic teaches us to work closely with nature and how effectively and efficiently you can do recycling of bio-waste and add value to it.

**Some of the challenges:**
Availability of good quality non-GM seed is a major challenge that organic farmers are facing and also the shortage of labor for doing farm operations such as composting, weeding, picking of cotton, etc.

**My hopes for Barcelona:**
Barcelona – 2011 Sustainable Textiles Conference will help me gain valuable global insights on sustainable/organic cotton value-chains that in turn will help me play a much larger role in contributing towards sustainable cotton growing.
Rajeev Baruah  
Managing Director, bioRe India

email: rajeev.baruah@gmail.com  
website: www.bioreindia.com/

About my family:  
Married since the past 26 years, we have a daughter who is just finishing her masters. Ritu (my wife) has been work with the bioRe Association since its inception.

Where I live:  
Mhow (Central India)

Where I work:  
bioRe

My role:  
Development of Cotton Seed Chain (non GMO) Extension services to farmers, Procurement of Organic Cotton, Ginning and Spinning of Yarn.

I have been involved in organic farming:  
Since the past 19 years

Production area:  
Central India – Madhya Pradesh & Orissa (collaboration with Chetna)

Number of farmers:  
Approx. 5000 in MP and approx. 1000 farmers in Orissa

Our cotton:  
Largely Medium Staple with small quantities of Long Staple.

Our other crops:  
maize, sorghum, soybeans, green gram, wheat.

Water management:  
Mainly flood, small number of farmers with drip, we encourage mulching, keeping the ground covered so that irrigation needs are reduced.

Soil Management:  
use of compost and farm yard manure, use of green manuring techniques.
What I like about organic:
It is the only way of preserving Soils, it is social and because of this it gives a new approach to work with farmers and the land.

Some of the challenges:
Non availability of NON GMO seeds, the fact that almost 95% of cotton in India has been engulfed by GMO, convincing farmers to grow organic cotton is becoming a daunting challenge.

My hopes for Barcelona:
We put farmers in the centre of everything that we do, we need to strengthen our extension work that we do with farmers, and we need to get the seed breeding going on a far footing. We need to re look at our certification systems and see if they are delivering what they intended to. I hope that these issues will get their due attention.
About my family:
I live with my wife (Yamuna, L.S) an electronics and communications engineer.

Where I live:
I am from a very remote village called Byatappanapalya, Gubbi (taluk), Tumkur (district), Karnataka (state), India. It is 110 kms away from silicon city Bangalore. My village is totally rainfed. We ourselves have 08 acres of rainfed land. We grow coconut + arecanut with lemons, papaya, guava, mango (Alfanso), 500 Teak, Silver oak, biomass plants, Ragi with pulses (redgram, cowpea, greengram, blackgram, cowpea etc), 1 HF:Yielding 20 litres of milk every day, and 3 sheep: local breeds. This year I am planning for banana as an intercrop in the coconut orchard and also backyard poultry.

My wife and I stay at Basaveshwarnagar in Bangalore. It is quite calm and cool place to live in with very good access to supermarkets, railway station, and bus station. Nowadays road widening for flyovers is on which in a way is responsible for felling lot of trees in Bangalore. So Bangalore is on the verge of losing its name as the Garden city.

Where I work:
Chetna Organic Farmers Association based at Tarnaka, Secunderabad in Andhrapradesh.

My role:
I am currently carrying out research to standardise the package of practices for organic cotton production. As a part of extension I have designed demonstration plots (serves as learning ground for farmers and staff), developed communication materials on cotton and other crops, carrying out study to compare the organic and Bt cotton production, and designed various strategies to ensure the implementation of technical activities by farmers

I have been involved in organic farming:
Myself, basically a son of a farmer (B. Gangadhariah) from Tumkur District in Karnataka state. We are organic farmers by default. Because we come from dry region in Karnataka with limited access to irrigation thus with very less scope for heavy use of chemical fertilisers and pesticides.
Professionally I have been engaged in organic farming since 2003 when I joined an organisation called Agriculture Man Ecology Foundation based ay Bangalore in Karnataka state, India. That was the beginning of my journey which is still continuing in my present organisation COFA.

**What I like about organic:**
Being involved in a national project called Revitalising Rainfed Agriculture network and anchoring soil node with main objective of identifying the suitable support systems for farmers to ensure generation and application of enough organic manures. The data will be submitted to planning commission to work out the possibility of a special scheme on soil fertility improvement.

**My hopes for Barcelona:**
I wish to share our experiences and also learn as much as I can within the limited time available. I also wish to have collaborations with all like minded organisations with common goals and objectives.
Rama Krishna Yarlagadda (people call me Rama)
Executive Director, Chetna Organic

e-mail: rkrishnay@gmail.com
website: www.chetnaorganic.org.in/

About my family:
I live with my wife Sukanya and two children along with my in-laws in Hyderabad. My parents are in my native village in south coastal Andhra Pradesh, India to look after our small landholding of 1 hectare where we cultivate rice and lentils.

Where I live:
I live in Hyderabad, capital city of Andhra Pradesh with a population of over 6.3 million. Hyderabad is famous for a wide array of food (biryani, haleem) and pearls in addition to Information Technology and a pharmaceutical industry. Head office of Chetna is located here. But, I am originally from the small village in south coastal India in Andhra Pradesh. I love to be in my village whenever possible to expose my children to the realities of farming.

Where I work:
I work for Chetna Organic, a producer owned initiative to improve the livelihoods of smallholder farmers from the rain fed regions covering over 10,000 in the states of Andhra Pradesh, Maharashtra and Orissa. Environment....Ethics....Equilibrium is the tagline for Chetna.

My role:
I recently taken over as Executive Director for the Chetna Organic Farmers Association. My role in Chetna is to diversify the program portfolio to improve the livelihoods and wellbeing of the small and marginal farmers associated with Chetna and to deepen the socio-technical extension services to optimize the productivity in a more sustainable way.

I have been involved in organic farming:
My parents in search of fortunes from the cultivation of cash crops such as cotton and sugar cane lost their meagre savings of over one decade during 1990s from the rice and lentils. That was the good lesson for my family as well as for me to venture into organic farming on our own and promote among other farmers.

Production area:
Over 35,000 acres of organic area with over 10,000 Chetna farmers.

Number of farmers:
Over 10,000 farmers spread across Andhra Pradesh, Maharashtra and Orissa. Out of that 1128 are women farmers.
Our cotton:
Chetna farmers produce wide variety of cotton from short staple to long staple ranging from 22 – 34 mm. Chetna farmers use American hybrids (Bunny, Super Bunny and Mallika etc) widely and Arboreum and Herbaceum to limited extent in few areas. General characteristics of the Chetna cotton is;
Micronaire: 3.3 – 5.2, Bundle strength (G/tex):21 to 26 mm at 3.2 mm gauge, G.P%: 33.7% to 35.2%.

Our other crops:
Chetna farmers produce different varieties of cereals (rice, wheat and maize), legumes (pigeon pea, chickpea, blackgram and green gram), oil seeds (sun flower, soya and ground nut), spices (turmeric, Trachyspermum copticum) and wild forest honey. Apart from the cotton, all other products go into the domestic markets after keeping adequate quantities for household consumption.

Water management:
All the cultivation in Chetna is rainfed. Hence, a major emphasis of Chetna is on water and soil conservation with integrated watershed management techniques in order to ensure judicious use of all the resources i.e. land, water, vegetation in an area for providing an answer to alleviate drought, moderate floods, prevent soil erosion, improve water availability and increase food, fodder and fuel on a sustained basis.

Soil Management:
Chetna applies the following main principles of watershed management based on resource conservation, resource generation and resource utilization:
• Utilizing the land based on its capability
• Protecting fertile top soil and replenish the fertility through diverse composting techniques
• Minimizing silting up of tanks, reservoirs and lower fertile lands
• Protecting vegetative cover throughout the year
• In situ conservation of rain water and water harvesting for supplemental irrigation
• Safe diversion of gullies and construction of dams for increasing ground water recharge
• Increasing cropping intensity through inter and sequence cropping
• Alternate land use systems for efficient use of marginal lands

What I like about organic:
Organic farming insulates the cotton farmers in rain fed regions from risks of climate change, dependency on hostile markets, exposure to hazardous pesticides, and make them self reliant.

Some of the challenges:
How to increase the value of the products in rotation in organic agriculture and how to lower the cost of certification.

My hopes for Barcelona:
I am looking forward to participating in the conference, sharing the Chetna experience in organic farming and how collaboration with brands strengthens our efforts in improving the livelihoods of the smallholder farmers.
About my family:
I live with my wife and 2 daughters aged 16 years and 13 years old.

Where I live:
I come from an agriculture family background and my family still do farming by leasing the land to farmers who are from the village and need support, we support the farmers by giving them the money for inputs and the farmer repays us after harvest, most of the crop is paddy and the farmers give back part money and part paddy where we consume some and yearly my family donates the paddy to the village orphanage. This activity is done by my mother as we strongly believe in giving back something to the village where we have agricultural land.

Where I work:
Zameen Organic Pvt Ltd

My role:
Founder Director, looking into value chain development for the project. I am on constant look out for reliable and trust worthy long term buyer as partner who relives in sharing the long term association and benefits from the project where the farmers own 51% of the company and 20% owned by the employees who work for the farmers benefits in the project.

I have been involved in organic farming:
for the past five years.

Production area:
15000 acres.

Number of farmers:
6000 farmers out of which 20% are women farmers.

Our cotton:
We use untreated and child labour free “Bunny” Variety seed. 50,000 quintals of the seed cotton is the output of the project. 15,000 quintals will be certified organic & Fair-trade and 35000 quintals will be fair-trade certified. The fiber length will be 29 to 30 mm, Moisture will be below 10, Trash contain will be 2 to 2.5. Micronaire will be 4.5.
Our other crops:
Soya, black gram, yellow dahl, (local market). Part of the output is consumed by the farmers themselves. We are proposing herbal cash crops with an understanding of the reputed Indian herbal products brand for the coming season.

Water management:
Our farms are rainfed. Watershed proposals need to be implemented.

Soil Management:
Farmer clusters have invested in collective vermicompost unit and the output is been used within the clusters and also sell the excess to other farmer clusters.

What I like about organic:
The input cost of farming is reduced, health of the farmers improved, intercropping helped farmer with cash flow, women are empowered and participation in agriculture and in decision making has improved the living conditions of the farmer families.

Some of the challenges:
No guarantee that a buyer will buy the certified organic cotton at a feasible price. There are no long term associated buyers who are treated as farmer partners.

My hopes for Barcelona:
My focus is to pitch to buyers who are interested in long term associations with producers and explain how that will bring them benefits in the short and long term. Explain the importance and benefits for all the supply chain and why brand/buyer commitments are essential to building a strong supply chain partnership to scale up organic cotton farming for the future.
Thomas Favennec
Director, Tudo Bom?, Brazil

About my family:
No official family for the moment! A long time girlfriend – Judy is Colombian, she is a lawyer in Human Rights and lives in Bogota.

Where I live:
My official residence is in Rio de Janeiro, but I spend a lot of time travelling, especially in the 5 states of Brazil where the Network is present. So my house looks a lot like a plane / bus / small inland hotel / farmer’s house…

Where I work:
Tudo Bom?, Veja, and Brazilian Network of Organic Cotton.

My role:
Director of Tudo Bom? in Brazil, Coordinator of cotton supply chains for Veja, member of the Executive Coordination of the Brazilian Network of Organic Cotton.

I have been involved in organic farming:
I have worked with organic agriculture since 2003.

Production area:
The farmers in the Network are producing on around 700 ha. On the same land they cultivate cotton, beans, corn and sesame (and sometimes other crops as well).

Number of farmers:
There are around 850 families who are planting within the Network.

Our cotton:
The farmers plant herbaceous cotton, in 3 different varieties developed by Embrapa Algodão (the national research agency on cotton) – 8H, 7MH, Aroeira. The varieties have medium to long lengths, and good resistance to the semi-arid conditions of the region.

Our other crops:
On the same land the farmers often grow sesame and peanuts. For the moment, there is still little commercialisation – when there is, it is in local markets (including institutional markets).
Water management:
Almost no farmer has irrigation, due to costs and the unavailability of water sources.

Soil Management:
Soil management is a key issue for the farmers involved in the Network, because the lands in the semi-arid region is very deteriorated, the rain is scarce, and the sun is very strong. Farmers follow agroecological techniques: crop diversification, level curves, mulch,…

What I like about organic:
I believe organic farming, and especially smallholder organic farming, is the only sustainable way to feed and dress the planet. I am happy and proud to be able to participate in this movement, even at a limited scale – by the visibility it gets, I believe organic and fair trade fashion is an excellent way to raise awareness on global issues.

Some of the challenges:
I see a big challenge in increasing productivity and production – in order to secure farmer income and to reach economies of scale in the production chain.

My hopes for Barcelona:
It will be the opportunity to see how farmers in other countries managed to grow, and how this can inspire us. We have a very high potential in Brazil, and we are determined to realize it. We will also be seeking new partnerships and funding for the Network, to continue developing organic cotton production and commercialisation in Brazil.
Javier Otoya  
Director, New Expo, Peru

email: javier@new-expo.com  
website: www.new-expo.com/

About my family:  
I live with my parents, my sister, her husband and their son. We also all work together in the family business.

Where I live:  
I live in Lima the capital city of Peru. We have a big house with a large garden (my mom loves gardening) and 3 dogs. I like that there’s lots of green around where we live and it’s pretty quiet, and what I find challenging, well, that will be getting anywhere on time because of the traffic!

Where I work:  
New Expo in the Organic Cotton Division.

My role:  
Since it is a family business my official title is Director and shareholder, but I am in charge of the Organic Cotton Division, so basically everything that has to do with organic cotton is my responsibility.

I have been involved in organic farming:  
We started farming organically around 7 years ago mostly thanks to my father’s (brilliant) idea/dream of growing our own organic cotton.

Production area:  
We have 12 Hectares in the city of Pisco.

Number of farmers:  
We have five people working constantly at the farm, but we hire local people when we need to. For example for the harvest we hire around 70 people from the local community, where many, if not half of them are women.

Our cotton:  
We grow Peruvian Pima Cotton. It is an ELS (extra long staple) fibre.
Our other crops:
We use corn for crop rotation, also because we use the corn plants to make our own compost. We also have a little area where we grow lots of vegetables (carrots, onions, sweet potato, etc) for our own need.

Water management:
We use a drip irrigation system; this allows us to apply water to the root zone of the plants while saving many liters amount of water.

Soil Management:
We currently produce our own compost with manure from nearby livestock and the corn plants or cotton plants that we grow.

What I like about organic:
I like that it is a challenge. It feels good to know you are doing something for our planet even if it is just a tiny bit of land.

Some of the challenges:
Insects...and the limited products available to control them.

My hopes for Barcelona:
To meet other organic cotton farmers and exchange experiences and hopefully learn new sustainable practices which we can apply in our local community; as well as an organic cotton farmer it would be very helpful to learn more about demand for organic cotton in every stage of the supply chain.
Augusto César Fajardo  
President, Coproexnic, Nicaragua

I was born on March 20, 1962. I have received training in organic agriculture in Mexico, USA and Canada on the international organic certification standards (IFOAM). I went for 4 years a member of the board OCIA International (USA).

About my family:
My wife’s name is Karla, have five children (2 women and 3 men), Karen 23, Niurby 20 years, Cesar Jr. 18, Charles 14, Angelo 4. Karen and Niurby in college, Cesar Jr. and Carlos are finishing high school. Angelo next year to enter school. We all live together.

Where I live:
I live in a town near Managua, 13 km away. My village has 140 inhabitants, mostly poor people. We are surrounded by mountain ranges.

Where I work:
The name of my cooperative is “Organic Farmers, traditional and Exporters of Nicaragua” (COPROEXNIC).

My role:
I am the president of the board of directors. Legal representative, and coordinated the production - export.

I have been involved in organic farming:
I have 17 years working in organic agriculture.

Production area:
This year we are producing 214 ha 500 ha of cotton and sesame.

Number of farmers:
We are 2000 (two thousand) farmers, 20% women. The directive involves a woman who is the treasurer. Our producers are distributed in different regions.

Our cotton:
We plant, cotton Melba. A variety developed in Nicaragua, medium length fiber and good performance. It’s a period of 140 days.
**Our other crops:**
In the cotton land also cultivate sesame, soybean and peanuts. We export to Central America, USA, EU and Canada.

**Water management:**
We don’t use irrigation, because our crops developed in winter period (with rain). Crops production with irrigation in Nicaragua is very expensive.

**Soil Management:**
We use organic matter from plants, incorporated into the soil. We use the vermicompost and green manures. We are constantly improving the soil.

**What I like about organic:**
I like organic farming because I consider it important to care for the earth and the environment we inhabit. It is also safe for our health. I believe that organic cotton production is important because the people wear clothes without danger of contamination.

**Some of the challenges:**
We need to develop and industrialize the production of organic fertilizers and insecticides.

**My hopes for Barcelona:**
I hope to meet producers in Barcelona, share experiences, establish contacts and learn new techniques in organic farming.
Vasconcelos Ferreira Ramos Shyrlley Hesteólivia, but my friends call me Tete
Facilitator, Diaconia, Brazil

email: teteshyrlley@gmail.com
website: diaconia.org.br

About my family:
I live with my husband, his name is Jean Carlos Lopes, and sometimes colleagues stay at our place.

Where I live:
I live in a town called Umarizal, Rio Grande do Norte, northeastern Brazil. It is a small town of about 11,000 inhabitants, and most people live in rural areas. Farmers mostly plant subsistence crops (corn, beans) and vegetables. In the past the region was one of the largest production, and trading, centers of the state of Rio Grande do Norte – this makes cotton very important in the local culture, as it is part of the history of many people. The economy of the city economy is based on public servants, pensioners and farmers. Umarizal is situated in the semi-arid region, with a period of rain and a period of sun; nearby (around 30 kilometers) there are also cities with a mountain climate, cooler and welcoming.

Where I work:
I work in an NGO called Diaconia, which works to contribute to the development of poor farmer families living in the semi-arid region. Diaconia is a non-profit social organization with Christian inspirations, whose mission is “to contribute to building solidarity, citizenship and human rights guarantees for excluded populations, from the perspective of social transformation, in Northeast Brazil”. The actions of the organization focus on change through education and on the political organization of communities, and linked to the church. These actions are realized through the Program for Promotion of Children and Teenagers (PABX), Support Program for Family Farming (PAF) and the Program of Support for Action by Churches Deacon (PRAA). These programs directly benefit children, teenagers and their families in poor communities in the metropolitan areas of Recife (Pernambuco) and Fortaleza (Ceara), farmer families of the micro-regions of Alto Pajeu (PE) and East-Western Rio Grande do Norte (RN), and church leaders in the cities of Recife (Pernambuco), Natal (RN) and Fortaleza (CE).

My role:
At the moment I am facilitator of the Brazilian Network of Organic Cotton, mediating dialog between the different players involved in the network: farmers, companies, NGOs and public institutions. We contribute to the development of production and commercialization of organic cotton, reinforcing smallholder agriculture.
I have been involved in organic farming:
Since 1997 I work on issues of rural and urban development, especially in education. From 2006 I started participating in the coordination, supervision, support of production and commercialization of agro-ecological cotton in five states (Paraíba, Rio Grande do Norte, Pernambuco, Ceará and Piauí) and support on technical assistance between the government, producers and companies.

Production area:
About 850 farmers produce organic cotton on 627 ha. Divided into 13 production sites in five states. Production is expected to reach 80 tons of cotton lint, (220 tons of raw cotton). This production is 5 times superior to the 2010 production.

Number of farmers:
There are around 850 farmers, in which the women and the families play an important role in supporting the work and tasks of agriculture and livestock. On average 30% of the women are directly involved.

Our cotton:
About the variety of seeds we work with in the 5 states. We work with 8H, 7MH, and Aroeira. After harvest, crop residues provide food for animals. Families often do not grow the following year in the same place, in order to control the weevil. A distinctive characteristic of the Aroeira variety is the percentage of oil that can be extracted from the seed. All these varieties have the goal of reaching a 30/1 yarn. In 2009, the states of Pernambuco and Rio Grande do Norte reached a 40/1 yarn. One of the main concerns of the network is to maintain the genetic quality of these varieties.

Our other crops:
The main crops are corn, beans, sesame, pigeon pea, pumpkin (squash), peanuts, cilantro. This year we have obtained differentiated prices for the commercialization of sesame. Another element is that the organization of the families has improved since the government programs started promoting access to vegetables and products from family agriculture to public markets (PAA and PNAE programs).

Water management:
In the northeast of Brazil, all cotton is grown in rainfed systems. Some areas have been planted under irrigation. Most households have drinking water from tanks that are on their roofs. The strategy in the semi-arid zone is to save and reuse water from domestic use for irrigation of vegetables and fruits for family consumption.

Soil Management:
The most common techniques are the use of animal-drawn plow, manure, bio-fertilizers, and the application of neem, and intercropping; including plants for animal food.
What I like about organic:
Yes, I do believe in a better world and try to bring my contribution. I prefer organic food, as it is better for my health and allows me to support families who sell to local market fairs and to small supermarkets. The production of organic cotton is a way to encourage families to produce in an environmentally friendly way. Unfortunately, clothes made with organic cotton are not easily available for these families, but it sure is nice to know that I am wearing clothes that respect the people and the planet.

Some of the challenges:
Farming families face many challenges, especially when it comes to organic production. The first is a paradigm shift, customs and culture, fighting against a tradition of conventional farming. We often encounter difficulties in communities where someone wants to try agro-ecological techniques, but we are slowly changing that. Another challenge is climate change. We must consider that we live in a semi-arid region; before we based weather forecasts on our ancestors’ predictions, but now things have changed. There is also the question of access to the market. A law on organics has been approved in Brazil, but it still needs to be implemented, and we lack committed technical assistance.

My hopes for Barcelona:
- Identify opportunities with ICCO Netherlands, to strengthen the work of the network
- Diagnose synergies and exchanges with other farmers around the world
- Establish new funding partnerships for the Network
- Identify opportunities and synergies with potential partners
- Meet other players and improve my professional performance
- Work to increase the visibility of the network during the Conference
- Increase communication contacts
- Be able to transmit all the acquired knowledge to the other members of the network
CONTRIBUTORS TO PART ONE

- AgLife Research, USA
- Anvil Knitwear, USA
- AOFG, India
- Aratex Organica, Paraguay
- Bergman Rivera, Peru
- bioRe India
- bioRe Tanzania, C&A, Belgium
- Chetna Organic, India
- CottonConnect, UK
- Egedeniz, Turkey
- Eileen Fisher, USA
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- Indigenous Designs, USA
- ICCO, Netherlands
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- NOGAMU, Uganda
- Nordstrom, USA
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- PAN Germany
- PAN UK
- Pants to Poverty, UK
- Patagonia, USA
- Remei AG, Switzerland
- GAP project, Turkey
- SEKEM, Egypt
- SOCiLA, Germany
- Soils and More, Netherlands
- TOCMC, Texas, USA

FARM LEADERS IN BARCELONA

AFRICA
- Davo Simplice, OBEPAB, Benin
- Sidy Moctar, MOBIOM, Mali
- Niranjan Pattin, BioRe Meatu, Tanzania
- Riyaz Haider, BioSustain, Tanzania
- Jane Nalunga, NOGAMU, Uganda

INDIA
- Mahesh Ramakrishnan, Arvind
- Rajeev Baruah, BioRe India
- B.G.Mahesh, Chetna Organic Farmers Association
- Rama Krishna Yarlagadda, Chetna Organic
- Satish Chukkapalli, Zameen Organic

CENTRAL ASIA
- Shaknoza Kurbanalieva BioService, Kyrgyzstan

LATIN AMERICA
- Tete Shyrlley, Diaconia, Brazil
- Thomas Favennec, Tudo Bom, Brazil
- Cesar Fajardo, Coproexnic, Nicaragua
- Javier Otoya, New Expo, Peru

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Textile Exchange is a non-profit organization. We envision a global textile industry that restores the environment and enhances lives. We inspire and equip people to accelerate sustainable practices in the textile value chain. Our work is unique in that we focus on the entire value chain, from production, through manufacturing, to retail.

ICCO is the interchurch organisation for development cooperation. ICCO's mission is to work towards a world in which people live in dignity and prosperity, a world where poverty and injustice are no longer present. ICCO fund the work of Textile Exchange's Farm Engagement Program.