ABOUT TEXTILE EXCHANGE

Textile Exchange is a nonprofit organization with staff in eight countries committed to expanding responsible organic fiber agriculture, globally. Textile Exchange has a unique focus on the Entire Value Chain.

Organic Exchange, now Textile Exchange, has had and will continue to have Organic Cotton as a core and signature initiative.

OUR MISSION

Textile Exchange continues to be a catalyst that allows many of the social, economic, and environmental issues associated with conventional cotton production to be addressed – environmental issues, climate change, biodiversity, water quality and utilization, food security, human rights, gender and social issues, as well as poverty in agricultural communities.

By facilitating the expansion of organic fiber agriculture, we, in association with our members and stakeholders, can continue to have a positive, significant, visible, and measurable impact on the world.

Through our unique partnerships and our focus on the entire value chain, we now positively affect the lives of over 275,300 organic cotton farmers, primarily small-scale, worldwide. Conservative estimates show that each farmer in the Global South has responsibility for a household of five people. This means that TE programs have directly and positively impacted the lives of over 1.4 million people in developing countries.

To support these efforts, we bring together brands and retailers with their business partners, farmers, and key stakeholders to learn about the social and environmental benefits of organic agriculture, and to develop new business models and tools to support engagement brands and retailers with farmers to increase responsible fiber production and enable suppliers to create short and long-term production schedules.

Our efforts culminate in consumer education, highlighting farmers and farming innovations, beautiful yarns and fabrics and highly desirable products.
OUR VALUES

• We believe cotton that is produced organically and with integrity should be the flagship of the cotton industry.
• We are committed to supporting fair and transparent value chains.
• We are committed to promoting the environmental, social and economic stability that organic farming delivers to farmers, communities and our planet.

OUR VISION

• Organic cotton farmers enjoying access to stable and rewarding value chains.
• Well organized and well informed Producer Groups with high visibility in the marketplace.
• Environmental sustainability achieved by organic agriculture.
• Farming families enjoying secure access to nutritious food through crop diversification.
• Organic by choice!
ACKNOWLEDGEMENTS

First and foremost we would like to thank the organic cotton farmers for inviting us into their world; generously sharing information, and helping us understand the challenges and opportunities. The annual Textile Exchange Farm & Fiber Report would not be possible without them or the generous contribution and support of our partner and funder ICCO (the Dutch interchurch organization for development cooperation). We would also like to personally thank the following Textile Exchange members and friends for their support and contribution:

- Arun Ambatipudi, Chetna Farms, India
- Agricultural Products Export Development Authority (APEDA), India
- Gokhan Aydin, Sanko, Turkey
- Tobias Bandel, Soil and More, Netherlands
- Christina Boecker, Sekem, Germany
- Reşat Çakmak, Rapunzel, Turkey
- Satish Chukkapalli, Zameen, India
- Eric Ducoin, Biocoton, India and France
- Patricia Flores, IFOAM, Latin America
- John Flynn, Greensource, United States
- Riyaz Haider, BioSustain, Tanzania
- Mujaba Habib, Kings Group, Pakistan
- Angela Hofmann, Sekem, Egypt
- Patrick Hohmann, Remei, bioRe Foundation, India and Switzerland
- Christian Kemp Griffin, EDUN, Uganda
- Susanne Klages, Guest-scientist, Julius Kühn-Institut (JKI), Germany
- Karst Kooistra, AK Organic, Syria
- Stamatis Kouroudis, Thrakika Ekkokistiria, Greece
- Shaknoza Kurbanalieva, Bio Cotton, Kyrgyzstan
- Jesse Last, Root Capital, United States
- Hugo Lemon, Woolworths, South Africa
- Martin Ma, Solidaridad, China
- Kees Marais, Mavideniz, Turkey
- Phil Monday, Pesticide Action Network UK
- Musa Muwanga, NOGAMU, Uganda
- Atul Narania, Zameen, India
- National Commission of Organic Farming (NCOF), India
- Niranjan Pattni, bioRe Meatu, Tanzania
- Kelly Pepper, Texas Organic Cotton Marketing Coop, United States
- Michel Pimbert, IIED, UK
- Maiken Pollestad Sele, Oikos, Norway
- Dr. John Reganold, Regents Prof. of Soil Science, Washington State University, USA
- Orlando Rivera, Bergman Rivera, Peru
- Olga Segovia, Aratex Organica, Paraguay
- Mali Shenitzer, Israeli Cotton Board
- Jens Soth, Helvetas, Switzerland
- Aydin Unsal, Egedeniz, Turkey

This year we are privileged to bring you a number of stunning images kindly provided by: bioRe Foundation (India & Tanzania), Remei (Switzerland), and Zameen Producer Group (India). Cover photo by Zameen Producer Group.

Report design by Evonne Tan.
Welcome to the 5th issue of our annual Farm & Fiber Report. We continue to bring you the most comprehensive up to date information on organic cotton production worldwide. This year we also bring you views and perspectives from a number of our valued members and friends; all experts in areas of organic cotton production, value chains or marketplace for sustainable textiles. This year we have also produced a supplement to this report; a collection of briefings and resources which will equip you with all you need to know about the many benefits of organic cotton as a responsible solution to some of the problems facing cotton production today.

Despite the ongoing challenges, many of them relating to global markets, we are delighted - and a little surprised - to say that organic cotton production has continued its strong growth this year, particularly in India. Syria and Turkey continue to be significant in global production and, although ‘niche’ in the United States, Texan organic cotton continues to make its presence felt. The fledgling organic cotton growing programs in China are ones to watch. More support and incentive is needed to keep some of our important organic cotton growing regions thriving (for instance Africa, Latin America, and Turkey). Emerging organic cotton growing countries such as China, Kyrgyzstan and Tajikistan will also require support and encouragement but there are pockets of good will already present. Organic cotton growing in Greece and Israel continue but have not expanded.

If the consumer demand continues at the rate predicted we believe the organic sector will find ways to meet this demand. You may recall reading in our recent 2009 Market Report that the commitment from the top 30+ brands is strong. We will see market growth continue at a minimum of 20 percent per annum with stronger growth of 40 percent or more in markets and programs that have both strong commitment and corporate support; especially when brands have made strong linkages for stable supplies of organic fiber. Value chain relations are now more important than ever.

Continued growth is expected in 2011 due both to continued support and greater awareness on the part of consumers as well as the strong commitments from key brands and retailers to increase and expand their organic and sustainable textile programs. We will be working hard to support responsible, sustainable expansion.

LaRhea Pepper,
Organic cotton farmer and Senior Director of Textile Exchange
A WORD FROM THE ICAC CHAIRMAN

I am honoured to write this brief message for readers and I am glad to learn from this year’s report that the organic cotton industry is growing.

The consequences of insecticide use are better understood today than they were at the time of introduction and promotion during the 1950s, 1960s and 1970s. At the same time, confidence in non-chemical control measures and organic pest control methods has increased. The downward trend in insecticide use is continuing. Cotton accounted for 6.2 percent of world pesticide sales in 2009, down from 11 percent in 1988. The ICAC, working with research organizations and national governments, is encouraging the adoption of best management practices that offer pragmatic tools for worldwide adoption of production systems that minimize pesticide use.

Awareness of safer, lower cost and environmentally friendly methods is increasing. Many segments of the cotton industry have contributed to this awareness, including the organic segment. Increases in organic cotton production during the 2000s are testimony to increased interest in organic cotton products. There are many cotton producing countries that do not use herbicides and make minimal use of insecticides. This indicates that additional areas may be suitable for increased organic cotton production.

The ICAC Secretariat has published many articles on organic cotton and has continuously collaborated with the Organic Exchange, now the Textile Exchange, to raise awareness and provide data about organic cotton around the world.

I wish organic cotton farmers all the success in their endeavours to produce and process cotton safely for the benefit of both producers and consumers.

M. Rafiq Chaudhry, Ph.D., Head
Technical Information Section, International Cotton Advisory Committee
CHAMPIONING ORGANIC

In SEKEM in Egypt we know that the cultivation of organic cotton, like any other organic farming, is part of the solution for climate change and many of the other pressing problems of our time. Organic agriculture uses less water, does not rely on expensive fertilisers and pesticides, helps to sequester carbon in the soil and provides a fair livelihood for people in disadvantaged communities. I am therefore happy to support the Farm & Fiber Report of Textile Exchange, which will help to deliver this message to the world.

I hope everybody in our industry will realize that farmers are an important part of the solution and that the cotton industry has the unique opportunity to create a positive contribution for the fight against climate change by using organic cotton. Hopefully this encouraging message can be used to convince consumers to buy more organic cotton and to wear it with pride!

Helmy Abouleish, CEO SEKEM Group,
working in SEKEM since the foundation and a proud activist in promoting organic agriculture worldwide
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<tr>
<td>APPENDIX 6: REFERENCES</td>
<td></td>
</tr>
</tbody>
</table>

This report is supported by a Supplement document. This Supplement is a compilation of additional resources; it provides background to issues and challenges in cotton growing, and provides insight into organic benefits and solutions.
INTRODUCTION


This year, our report also acts as a platform for experts within the organic cotton community to share views, opinions, perspectives and experiences. You will come across many ‘expert insights’ as you make your way through the report.

Whilst the main objective of this report is to alert stakeholders to the profile and production levels of each organic cotton growing region, it is also a call for change. We see organically produced cotton as not ‘just another commodity’ but as an environmental and socio-economic vehicle that will contribute to the health and sustainability of our planet and its inhabitants. We will attempt to construct our report to give you everything you need to understand the current status of organic cotton worldwide.

Important points:

1. Revised figures for India 2008-09. Data has now been finalised by the Indian Government, with increased figures resulting. In light of these final figures we have adjusted our data accordingly; and have scaled up organic cotton fiber production for India to 142,347 mt (from our previously reported 107,510 mt for 2008-09). This has obviously affected our 2008-09 global production figure (from a reported 175,113 mt to 209,950 mt).

2. Predictions for 2010-11. Although our data focuses on 2009-10, due to the recent price escalations experienced in the commodity market for cotton (and the excitement, confusion, uncertainty and concern this is having on the entire textile industry), we have provided predictions and discussion for the 2010-11 season. It’s these recent escalations in cotton commodity prices (which started in August 2010) that will be at the forefront of most of our minds.

We remain committed to providing credible, comprehensive, global, regional, and country-specific data on organic cotton production. All efforts have been made to ensure accuracy and completeness. However, some of the data is estimated, there may be producers who we have overlooked, and we are constantly refining our figures to provide a more accurate representation. All figures have been rounded up to the closest whole number.
HOW TO READ THIS REPORT

The report is divided into 6 parts:

Part 1 is the executive summary of the report and is designed to give you farm and fiber data highlights for 2009-10 at a glance.

Part 2 brings you a global overview; summarizing and aggregating regional data to provide a snapshot of worldwide activity.

Part 3 provides a closer look at the six organic cotton producing regions. Each regional roundup includes: a regional review, profile and production figures and special insights from our experts.

Part 4 brings together general conclusions, recommendations and priorities going forward.

Part 5 introduces you to the work of the Farm Engagement Team at Textile Exchange.

Part 6 includes all Appendices to this report. Here you will find a glossary which may help interpreting some of the terminology used within the report.
PART 1: EXECUTIVE SUMMARY

“Sustainability is kind of a Utopian concept. What it says is, if we meet sustainability guidelines, or if a particular farm is to be sustainable, it needs to be economically sustainable, environmentally sustainable, and socially sustainable. So the farm also has to make money. It has to be good for the environment. But it also has to be socially just - the people working there should get fair wages, benefits, and it should be good for the community. When you look at all of these things you say, wow, that’s a tough business to be in - and it is. But if you look at those variables, and you look at the studies that have been done, in general, organic systems are more sustainable than conventional systems.”

Professor John Reganold from the Department of Crop and Soil Sciences, Washington State University
THE YEARS IN NUMBERS 2009-10 (2008-09)

241,697 mt amount of fiber produced in 2009-10
209,950 mt amount of fiber produced in 2008-09

15% increase on last year’s production
20% increase on last year’s production

1.1% of global cotton production
0.9% of global cotton production

23 number of countries growing organic cotton
22 number of countries growing organic cotton

275,300 organic cotton farmers
220,000 organic cotton farmers

461,000 ha amount of land certified organic
253,000 ha amount of land certified organic

81% was produced in India
68% was produced in India
Organic cotton represents a small fraction of all cotton produced (just over 1 percent). However, unlike global production of conventional cotton, organic levels have continued to grow. At 241,697 mt (1.1 million US bales) this represents a growth rate of 15 percent on last year’s production of 209,950 mt.

South East Asia remains the highest producer region; with over 80 percent of our organic cotton produced in India. This represents a growth rate of 38 percent for India. The high growth can be attributed to factors such as: a strong agronomy, economies of scale and close links to a vast manufacturing base. However, it is clearly having knock-on effects for the rest of the world. We saw production in some parts of the world stagnate or even dip slightly, with Producers in West Africa, Latin America and Turkey reported to finding it difficult to compete with prices coming out of India.

Other major events effecting organic cotton production worldwide included contamination of organic cotton in Uganda by the necessary spraying of chemicals to combat the disease, climatic stresses in China and Latin America, pest attacks in Turkey and Syria, and other crops receiving higher prices generally. The fact that many countries are still recovering from the impact of the global economic recession continued to effect market confidence and therefore investment in organic cotton production.

What’s interesting, and reassuring, is that although organic cotton production has reduced in a number of key organic cotton growing countries, the commitment to organic agriculture has remained high; with cotton being replaced by other organic crops (more lucrative at the time). See Part 2 and 3 for details of global and regional activities.
## THE WORLD’S ORGANIC FIBER PRODUCTION

<table>
<thead>
<tr>
<th>Country</th>
<th>Metric Tonnes</th>
<th>(percentage breakdown)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 India</td>
<td>195,412</td>
<td>(80.85%)</td>
</tr>
<tr>
<td>2 Syria</td>
<td>20,000</td>
<td>(8.27%)</td>
</tr>
<tr>
<td>3 Turkey</td>
<td>11,599</td>
<td>(4.80%)</td>
</tr>
<tr>
<td>4 China</td>
<td>4,300</td>
<td>(1.78%)</td>
</tr>
<tr>
<td>5 USA</td>
<td>2,808</td>
<td>(1.16%)</td>
</tr>
<tr>
<td>6 Tanzania</td>
<td>2,635</td>
<td>(1.09%)</td>
</tr>
<tr>
<td>7 Uganda</td>
<td>1,550</td>
<td>(0.64%)</td>
</tr>
<tr>
<td>8 Peru</td>
<td>831</td>
<td>(0.34%)</td>
</tr>
<tr>
<td>9 Egypt</td>
<td>666</td>
<td>(0.28%)</td>
</tr>
<tr>
<td>10 Mali</td>
<td>541</td>
<td>(0.22%)</td>
</tr>
<tr>
<td>11 Pakistan</td>
<td>345</td>
<td>(0.14%)</td>
</tr>
<tr>
<td>12 Burkina Faso</td>
<td>298</td>
<td>(0.12%)</td>
</tr>
<tr>
<td>13 Israel</td>
<td>150</td>
<td>(0.06%)</td>
</tr>
<tr>
<td>14 Benin</td>
<td>150</td>
<td>(0.06%)</td>
</tr>
<tr>
<td>15 Paraguay</td>
<td>109</td>
<td>(0.05%)</td>
</tr>
<tr>
<td>16 Greece</td>
<td>100</td>
<td>(0.04%)</td>
</tr>
<tr>
<td>17 Kyrgyzstan</td>
<td>83</td>
<td>(0.03%)</td>
</tr>
<tr>
<td>18 Tajikistan</td>
<td>55</td>
<td>(0.02%)</td>
</tr>
<tr>
<td>19 Senegal</td>
<td>27</td>
<td>(0.01%)</td>
</tr>
<tr>
<td>20 Nicaragua</td>
<td>17</td>
<td>(0.007%)</td>
</tr>
<tr>
<td>21 South Africa</td>
<td>15</td>
<td>(0.006%)</td>
</tr>
<tr>
<td>22 Brazil</td>
<td>5</td>
<td>(0.002%)</td>
</tr>
<tr>
<td>23 Zambia</td>
<td>2</td>
<td>(0.001%)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>241,697</strong></td>
<td></td>
</tr>
</tbody>
</table>

*The data has been presented in the nearest whole number.*
AT A GLANCE...

In 2009-10 organic cotton growing took place in 23 countries. Countries have been categorised into six Regions as displayed in the map below.

United States of America
- California
- New Mexico
- Texas

Latin America
- Argentina*
- Brazil
- Nicaragua
- Paraguay
- Peru

Africa
- Benin
- Burkina Faso
- Mali
- Senegal
- South Africa
- Tanzania
- Uganda
- Zambia

China
- Xinjiang District

South East Asia
- India
  -- Andhra Pradesh
  -- Gujarat
  -- Karnataka
  -- Orissa
  -- Madhya Pradesh
  -- Maharashtra
  -- Rajasthan
  -- Tamil Nadu
  -- Pakistan

*Argentina - cotton in-conversion
A brief overview of each region is provided below, for more details refer to Part 3 of this report. For explanation of measurements, refer to the glossary in the Appendix.

<table>
<thead>
<tr>
<th>Region</th>
<th>Countries</th>
<th>General Staple Classifications</th>
<th>No. of Producer Groups</th>
<th>No. of Farmers</th>
<th>No. of Women Farmers</th>
<th>Organic Cotton Production Area (ha)</th>
<th>Seed Cotton Production (mt)</th>
<th>Fiber (lint) Production (mt)</th>
<th>Bales of Cotton Lint</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRICA</td>
<td>Benin, Burkina Faso, Mali, Senegal, South Africa, Tanzania, Uganda, Zambia</td>
<td>Short, Medium &amp; Long</td>
<td>15</td>
<td>31,069</td>
<td>9,371</td>
<td>32,504</td>
<td>14,481</td>
<td>5,217</td>
<td>23,947</td>
</tr>
<tr>
<td>CHINA</td>
<td>Xinjiang</td>
<td>Medium</td>
<td>8 (inc. 4 In-Conversion)</td>
<td>978</td>
<td>390</td>
<td>2,600</td>
<td>11,622</td>
<td>4,300</td>
<td>19,737</td>
</tr>
</tbody>
</table>
EUROPE, MIDDLE EAST & NORTH AFRICA

Countries: Israel, Egypt, Greece, Kyrgyzstan, Syria, Tajikistan, Turkey
General Staple Classifications: Short, Medium, Long & Extra Long
No. of Producer Groups: ~13
No. of Farmers: 5,201
Organic Cotton Production Area: 49,347 ha
Seed cotton production: 87,937 mt
Fiber (lint) production: 32,653 mt
Bales of Cotton Lint: 149,878

LATIN AMERICA

Countries: Argentina (in-conversion), Brazil, Nicaragua, Paraguay, Peru
General Staple Classifications: Short, Medium, Long, Extra Long & Colored
No. of Producer Groups: 20 (inc. 9 In-Conversion)
No. of Farmers: 1,304
No. of Women Farmers: 117
Organic Cotton Production Area: 1,414 ha
Seed Cotton Production: 2,610 mt
Fiber (lint) Production: 962 mt
Bales of Cotton Lint: 4,414
SOUTHEAST ASIA

Countries: India, Pakistan
General Staple Classifications: Medium & Long
No. of Producer Groups: 209
No. of Farmers: 236,701
Organic Cotton Production Area: 369,923 ha
Seed Cotton Production: 592,973 mt
Fiber (lint) Production: 195,757 mt
Bales of Cotton Lint: 898,523

UNITED STATES OF AMERICA

States: California, New Mexico, Texas
General Staple Classifications: Medium & Extra Long
No. of Producer Groups: 8
No. of Farmers: 40
Organic Cotton Production Area: 5,185 ha
Seed Cotton Production: 7,590 mt
Fiber (lint) Production: 2,808 mt
Bales of Cotton Lint: 12,888
The 2010-11 is proving to be no less ‘interesting’ as we watch the price of conventional cotton soar on the commodity market. Inevitably, enthusiasm for planting cotton will increase - thus reinforcing the effects of ‘supply and demand’.

We hear stories of traders beating down doors to buy cotton - organic or otherwise - straight off the farm for prices beyond organic (or fairtrade) premiums. Needless to say, due to the unpredictability of the market and a history of relatively low prices, it’s little wonder that farmers are prepared to let their organic crops go to the ‘best offer’. This throws a kink in the works when it comes to pricing organic cotton and maintaining dedicated organic cotton value chains. We are yet to experience the full effects of this latest round of changes.

Over the past five years we have seen organic cotton production jump from 37,000 to over 240,000 mt of fiber channelled into organic products or blended textiles. Market appetite suggests the demand continues to be greater than supply.

In many ways the roller coaster continues. Prices for conventional cotton (on which the organic ‘premium’ is based) have shot up to over double the prices of a year ago. Not necessarily a good result for the organic sector as its retailers and other buyers struggle to cope with the drastic price hike. Meanwhile our carefully grown organic cotton enters anonymous commodity stockpiles.

It seems that whilst we remain fully hitched to the conventional cotton horse-and-cart, organic cotton will continue to be treated as simply another commodity in the marketplace. Farmers and brands alike will remain vulnerable to market conditions, competition, and insecurity of supply or demand.

However, in terms of forecasted growth, we are expecting to see a slight decline in global production. Stronger traceability measures introduced by the government of India along with increasing acreage under GM cotton, and higher prices awarded to food crops may mean a decline in organic cotton production in India. So, unless other countries step up their production, the picture is likely to remain skewed; with India continuing to produce at least 75 percent of the world’s supply. See Part 4 for more details.
RECOMMENDATIONS & PRIORITIES

Textile Exchange is excited about the progress the organic cotton community has made in terms of growth generally. However, we believe there is still plenty to do to improve the business of organic cotton for everyone. Most importantly, if we want to see the retail of organic textile products grow retailers need to work harder at securing supply and producers continue to build the knowledge, skills and strengthen organizational structure.

Experience shows that until we get the contractual arrangements right, and receive the right kind of incentives from governments, the other (environmental and social) benefits of organic may not be enough to hold all organic farmers to the cause.

We, at Textile Exchange, are deeply committed to supporting all members of the value chain. We see the Sectors’ priority going forward into the next five years, as working collaboratively to secure sustainable supply and conduct responsible trade.

Top priorities for the organic cotton community include:

- Continue strengthening integrity in production, processing and certification;
- Further develop tools to measure impact through environmental, social and economic indicators;
- Promote and communicate best practice in responsible value chains;
- Understand how other financial models such as Fairtrade and rural financing models in other commodity sectors such as coffee might work for organic supply chains.

Part of the ongoing success will be sharing stories from the field and from the label: making the link between where organic cotton comes from, who grows it, and why it makes a difference.
Organic cotton fiber production has gone through several phases of development over the past twenty years. These included enthusiastic growth in the early 1990s, re-orientation in the early to mid 1990s, then the laying of a more structured and professional approach in the late 1990s and early 2000s (see Ton, 2002, Myers and Stolton 1999).

The middle of the decade showed increased organic cotton production and trade, improved supply chains and fiber quality and rapid growth in demand. Reaching a staggering 152 percent growth in 07-08 over the previous year’s production. This dropped to a 20 percent growth and this year 15 percent. This was all despite a turbulent economic climate and the ongoing challenges for the sector.
Recent economic pressures and the tantalising ‘price premium’ placed on organic cotton led to some concern over the integrity of this tremendous growth (particularly in India). As production sky-rocketed prices plummeted much to the shock of organic cotton producers in other countries.

Over the past year we have seen a call to action to address integrity in production, rigor and transparency in certification. Collaborative efforts by the leading and most influential stakeholders in the sector are resulting in clearer direction and enforcement of ‘rules’. There is still more to do, but the sector can be proud of its progress.

As priorities such as traceability and country of origin continue to mature in retail we are seeing more brands and retailers taking this journey. This attention will reinforce and provide the impetus needed to reach the next level.

**TOP 10 PRODUCER COUNTRIES**

The top 10 producers of organic cotton have remained fairly constant over the years with some reshuffling as India made its way to the top in 2007-08 and Syria burst onto the scene. Now India represents over 80 percent of global production.

**TABLE 1: TOP TEN ORGANIC COTTON PRODUCERS OVER PAST 5 YEARS**

<table>
<thead>
<tr>
<th>Rank</th>
<th>2005-06</th>
<th>2006-07</th>
<th>2007-08</th>
<th>2008-09</th>
<th>2009-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Turkey</td>
<td>Turkey</td>
<td>India</td>
<td>India</td>
<td>India</td>
</tr>
<tr>
<td>2</td>
<td>India</td>
<td>India</td>
<td>Syria</td>
<td>Turkey</td>
<td>Syria</td>
</tr>
<tr>
<td>3</td>
<td>China</td>
<td>China</td>
<td>Turkey</td>
<td>Syria</td>
<td>Turkey</td>
</tr>
<tr>
<td>4</td>
<td>USA</td>
<td>Syria</td>
<td>China</td>
<td>Tanzania</td>
<td>China</td>
</tr>
<tr>
<td>5</td>
<td>Peru</td>
<td>Peru</td>
<td>Tanzania</td>
<td>China</td>
<td>USA</td>
</tr>
<tr>
<td>6</td>
<td>Pakistan</td>
<td>USA</td>
<td>USA</td>
<td>USA</td>
<td>Tanzania</td>
</tr>
<tr>
<td>7</td>
<td>Uganda</td>
<td>Uganda</td>
<td>Uganda</td>
<td>Uganda</td>
<td>Uganda</td>
</tr>
<tr>
<td>8</td>
<td>Tanzania</td>
<td>Tanzania</td>
<td>Peru</td>
<td>Peru</td>
<td>Peru</td>
</tr>
<tr>
<td>9</td>
<td>Israel</td>
<td>Israel</td>
<td>Egypt</td>
<td>Egypt</td>
<td>Egypt</td>
</tr>
<tr>
<td>10</td>
<td>Egypt</td>
<td>Pakistan</td>
<td>Burkina Faso</td>
<td>Burkina Faso</td>
<td>Mali</td>
</tr>
</tbody>
</table>
## STATUS OF GLOBAL ORGANIC PRODUCTION: OPPORTUNITIES AND CHALLENGES

<table>
<thead>
<tr>
<th>Region</th>
<th>Opportunities</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td><strong>Status:</strong> Production down slightly. Government support for organic cotton production and textile manufacturing in Tanzania. Good demand for West African organic (and fairtrade) cotton. Positive farming experiences on transition to organic.</td>
<td>Different challenges in different countries; ranging from political support for conventional production in Uganda and support for GM cotton in Burkina Faso.</td>
</tr>
<tr>
<td>China</td>
<td><strong>Status:</strong> Similar production to recent years. Potential for growth but interest and investment needed if organic cotton to become a booming industry.</td>
<td>Big investment made in GM cotton, lack of incentive for farmers to grow organic due to subsidies in place.</td>
</tr>
<tr>
<td>EMENA</td>
<td><strong>Status:</strong> Little growth in Greece, Turkey dipped slightly, Syria and Egypt steady. Kyrgyzstan and Tajikistan on planned growth strategies. Strong textile base in Europe and Turkey, close to strong consumer markets in west Europe. Egypt’s biodynamic high-quality cotton.</td>
<td>Competitive prices from developing countries (felt by Europe and Turkey). Cost of labour in Europe combined with high agricultural subsidies which do not adequately incentivise organic production.</td>
</tr>
<tr>
<td>SE Asia</td>
<td><strong>Status:</strong> Flourishing organic cotton sector, some fine examples of solid, progressive business models, high interest in expansion.</td>
<td>Access to non-GMO seed becoming critical, integrity in process and certification under spotlight due to massive growth spurt, climatic changes impacting on traditional growing seasons. Note: Tightening of organic production criteria required by APEDA’s ‘tracenet’ system can be viewed as both an opportunity and a challenge since it may reduce India’s production (in the short term) by culling purely speculative production but improve integrity, traceability, and reputation in the long run.</td>
</tr>
<tr>
<td>Latin America</td>
<td><strong>Status:</strong> Production down. Well-established companies have sound business models. Cotton in-conversion, pilot projects and new investment could lift levels in the future.</td>
<td>Recent climatic unpredictability resulting in severe droughts for an already water stressed continent.</td>
</tr>
</tbody>
</table>
Sustainable methods of production have taken flight tremendously over the past 5 years, although they remain only a small proportion of the total amount of textiles produced globally. Brands are increasingly aware of the environmental and social challenges in the production of the textiles they use. One of the most noteworthy initiatives within the sustainable textile industry is the increasing use of certified organic raw materials. The world has seen the organic textile industry grow from a niche market to a mainstream activity. Textile Exchange has made a crucial contribution to the success of this movement.

The increasing popularity of organic textiles, and specifically organic cotton, has brought about an increasing professionalization of the organic value chain. Brands, factories and farmers are now communicating and using each other’s strengths and experiences to further improve the use and availability of organic cotton.

This increasing popularity does, however, create challenges for all who work in the industry. Having organic cotton certified throughout the value chain may seem a daunting task, but this traceability is crucial to knowing that final products actually contain organic fibre. Companies in the organic textile industry must remain vigilant about risks such as contamination with non-organic fibre. For this reason certification is an important element in making sure that consumers retain confidence in the concept of buying organic fibre.

The last years have seen a tremendous growth in the volume of organic cotton produced. This means that for organic cotton the future is bright, and it will become a stable element in the array of sustainable initiatives of which there are so many in the textile industry. Having said that, the industry is also looking at factors other than certified organic raw materials, including the general environmental impact of production, processing and recycling. Organic certification will remain the most important assurance of high quality and sustainable production methods for natural fibres such as cotton, but will share its place with initiatives that focus on reducing carbon footprints, environmental and social impact and recycling initiatives.

Mark Prose, Program Manager, Control Union Certification
“The first year I planted organic cotton it represented very hard work for me, the cleaning, treatment of the plants with natural remedies to repel and prevent pests, the hot weather... now after 3 years I know without doubt this is what I want. My field is full of life, the soil is fertile, I can hear the birds again, and my family and I can enjoy nature again”.

Antonio Benitez, Aratex farmer, Caaguazú, Paraguay
GLOBAL OVERVIEW

The quote from Antonio Benitez (previous page) sums it up well - the path may not be easy; results are not always instant but the rewards leave no doubt in one’s mind that organic agriculture, working with nature, is the right thing to do; for healthy rural communities, ecological sustainability and responsible profit-making.

The year 2009-10 (following the ICAC cotton calendar year August 2009 to July 2010) sees organic cotton production continue to grow. However, despite the positive growth figure, it has been another challenging year for many organic cotton producers. As we come through the global economic crisis, uncertain as to how best to pick up the pieces, many producers entered the new season with stockpiles remaining and uncertainty about the future. The experience of excess cotton sitting unwanted in storage sheds, the lower than expected prices organic was fetching at the farm gate and the uncertainty about the future led many growers to be extra-conservative at sowing time.

2009-10 saw India continue to dominate the global scene in terms of production and in fact grew at a rate unique amongst the sector. Production of organic cotton from India was 38 percent higher than the year before (2008-09) and the country produced just over 80 percent of the world’s organic cotton.

Production levels in the world’s other major organic cotton producing regions, such as Syria, Turkey, China and the United States of America did not change significantly from the year before. There was an attack by the greenworm in Turkey and Syria which brought levels down slightly and a number of Turkish growers, unimpressed with prices for organic cotton decided to grow organic grains instead. Production in Syria whilst sitting second on our top producers list is the work of one company. The Syrian model will be an interesting one to follow going forward since it involves organic cotton production on an uncharacteristically large-scale.

African organic cotton production was down this year; influenced by the market situation of the previous year, the significant reduction in Uganda (due to issues with certification as a result of DDT spraying against malaria), and unfavorable climatic conditions.

Latin America also experienced a slowing down of production due to both price competition and climatic stresses. But thankfully land classified as organic has not been disturbed. The Latin American farmers simply decided to invest in other organic crops as they wait to see the future for cotton.

Note: In our tables we have included data such as number of female farmers and cotton in-conversion where we have reliable figures to so so.
Most of the world’s cotton comes from China, India and America. Cotton can also be a significant crop for farmers in Africa, Latin America, Australia, parts of Europe and Central Asia. Cotton farming is carried out on 2.5 percent of the planet’s agricultural land.

Organic cotton farmers make up only a small number (approx 275,300) of the world’s 100 million cotton producers and are predominantly found in India, Turkey, Syria, Egypt, Latin America, and both west and southern Africa, with some grown in the United States, China and Central Asia (ICAC). Farmers growing cotton organically have chosen to remove synthetic agrochemicals from their farms and from their lives - but also see organic as a positive way to improve economically.

Only 4 out of the top 10 conventional cotton producing countries are in the top 10 for organic production. The top 10 organic producing countries make up 1.19 percent of the total for top 10 conventional production. India, which is the highest organic cotton producing country by far, only produces 2.8 percent of what China produces in conventional cotton.

**ORGANIC AGRICULTURE**

The International Federation of Organic Agriculture Movement (IFOAM) defines organic agriculture as follows:

“Organic agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes,
PERCENTAGE BREAKDOWN OF TOP 10 ORGANIC COTTON PRODUCING COUNTRIES

India 81%
Syria 8%
Turkey 5%
China 2%
USA 1.2%
Tanzania 1.1%
Peru 0.3%
Egypt 0.3%
Uganda 0.6%
Mali 0.2%

Source: Textile Exchange

biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved.”

Organic agriculture is proven to be highly suitable for small scale farming in developing countries. Providing farmers work cooperatively to achieve economies of scale and supportive trade relationships are found, organic agriculture improves livelihoods on most levels: human health, food security, income diversification, gender equality (organic agriculture is more attractive to women and more acceptable in some cultures for women to carry out). Organic agriculture, when carried out ‘by design and not by default’, can produce higher yields, generate higher incomes and provide investment opportunities for the grower associations - when the groups have access to a reliable and responsible value chain.

Environmentally, cotton grown organically or agro-ecologically (see glossary) once again when carried out ‘by design and not by default’ protects the topsoil, retains moisture in the soil, helps maintain biodiversity, and helps carbon sequestration.
CONVENTIONAL COTTON OVERVIEW

If we start off looking at the big picture of conventional cotton production worldwide we see China well ahead in production quotas with India and the US coming in at second and third. The five leading exporters of cotton in 2009 were United States, India, Uzbekistan, Brazil and Pakistan. In India, the states of Maharashtra (26.63 percent), Gujarat (17.96 percent) and Andhra Pradesh (13.75 percent) and also Madhya Pradesh were the leading cotton producing states; these states have a predominantly tropical wet and dry climate. In the United States, the state of Texas leads in total production, while the state of California had the highest yield per acre. The largest non-producing importers of cotton were Korea, Russia, Taiwan, Japan, and Hong Kong.

Global production of conventional cotton in 2009-10 continued to fall. At 22.1 million mt this is a drop from 2008-09’s 23 million mt, which was also a reduction from the year before (26.3 million mt) (ICAC). Next year (2010-11) we are likely to see higher prices triggering a planting frenzy resulting in a spike of production (weather and ecological conditions allowing).

Reasons for the recent drop in production and subsequent price rise this past year (Cotlook Index quoting prices over US $1/pound since August 2010) were factors such as acreage moving into food crops, floods in Pakistan, bad weather in China, lower rainfall in other cotton growing regions, even the response to ‘the market’ itself injecting uncertainty through commodity trading (such as highly-active trading, especially in the futures markets). Conventional cotton prices have been historically low, and below the actual cost of production which is estimated now at USD $.75-$ .80/pound depending upon the region. This is in part why some of the poorest and disadvantaged people are in cotton growing regions around the world, and why cotton subsidies and the associated issues of access to seed, inputs and other support in many countries remain critical issues.

Global adoption of genetically modified (GM) cotton has risen from 0.8 mha in 1996 to 15.5 mha in 2008 constituting 12.4 percent of total global land area under GM crops. Genetic modification in cotton has been carried out for insect resistance or herbicide tolerance. Bt (Bacillus thuringiensis) cotton is the fourth most dominant transgenic crop at the global level and is commercially cultivated in 15 countries (APAARI). GM cotton now represents more than 30 percent of the total world production of cotton and is grown by the worlds major producers of cotton: the USA, Australia, Brazil, China and India. Unlike GM food, GM cotton does not have to be labelled (PAN UK).
GLOBAL ORGANIC COTTON PROFILE

Textile Exchange groups global production into six regions, capturing 23 countries, approximately 260 producer groups and roughly 275,300 farmers. These figures are generally higher than last year however, Textile Exchange’s relationship with the organic cotton community and data collection systems improves each year and enables us to report more accurate information.

GLOBAL ORGANIC COTTON PRODUCTION

Organic cotton fiber production for the first time represented over 1 percent of all cotton produced in 2009-10; totalling 241,697 mts. This figure also represents a 15 percent increase from the year before. The majority of organic cotton was grown in India (whose production has increased by 38 percent). Two-thirds of India’s organic cotton comes from Madhya Pradesh. Eight percent of the world’s supply is grown in Syria.

The stockpiles of organic fiber reported in the 2009 Farm & Fiber Report have been shifted and now that supply is down and demand high, many countries have sold or committed a good proportion of their 2010-11 harvest. Africa and Latin America are reportedly ‘sold out’ of organic cotton.

TABLE 2: GLOBAL PROFILE OF ORGANIC COTTON SECTOR 2009-10

<table>
<thead>
<tr>
<th>Region</th>
<th>No of PGs</th>
<th>No of Farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>15</td>
<td>31,069</td>
</tr>
<tr>
<td>China</td>
<td>4</td>
<td>978</td>
</tr>
<tr>
<td>Europe, Middle East &amp; North</td>
<td>13</td>
<td>5,201</td>
</tr>
<tr>
<td>Latin America</td>
<td>11</td>
<td>1,304</td>
</tr>
<tr>
<td>South East Asia</td>
<td>209</td>
<td>236,701</td>
</tr>
<tr>
<td>USA</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>260</td>
<td>275,293</td>
</tr>
</tbody>
</table>

Note: *See breakdown of production date by country inside each Regional Review.

TABLE 3: GLOBAL ORGANIC COTTON PRODUCTION 2009-10 (by region*)

<table>
<thead>
<tr>
<th>Region</th>
<th>Area under organic cotton production (ha)</th>
<th>Seed cotton production (mt)</th>
<th>Fibre (lint) production (mt)</th>
<th>Bales of Cotton Fibre/Lint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>32,504</td>
<td>14,481</td>
<td>5,217</td>
<td>23,947</td>
</tr>
<tr>
<td>China</td>
<td>2,600</td>
<td>11,622</td>
<td>4,300</td>
<td>19,737</td>
</tr>
<tr>
<td>Europe, Middle East &amp; North</td>
<td>49,347</td>
<td>87,937</td>
<td>32,653</td>
<td>149,878</td>
</tr>
<tr>
<td>Latin America</td>
<td>1,414</td>
<td>2,610</td>
<td>962</td>
<td>4,414</td>
</tr>
<tr>
<td>South East Asia</td>
<td>369,923</td>
<td>592,973</td>
<td>195,757</td>
<td>898,523</td>
</tr>
<tr>
<td>USA</td>
<td>5,185</td>
<td>7,590</td>
<td>2,808</td>
<td>12,888</td>
</tr>
<tr>
<td>Total</td>
<td>460,973</td>
<td>717,213</td>
<td>241,697</td>
<td>1,109,387</td>
</tr>
</tbody>
</table>

Note: *See breakdown of production date by country inside each Regional Review.

Note: In some cases, land reported certified as organic includes acreage under other organic crop.
“There are two options facing everyone of us - to continue doing business as usual or face up to the realisation that if we do that, we face the possibility of permanently damaging the planet we share forever and at the cost of our very own survival... Facing up to this challenge will require partnerships and transparency and a will to make it work. Without the last one, it will be a very hard and long journey.”

Hugo Lemon, Woolworths, South Africa
“During our visit the NOGAMU staff had the opportunity to discuss benefits of organic cotton production for the previous season with some farmers. Farmers intimated that they had never before reaped from cotton as they had from organic cotton last season. One farmer showed the staff a bicycle he had bought from sales of his organic cotton and said that he was able to take his daughter to a boarding secondary school using the money from organic cotton. He had high hopes that with organic cotton he could continue earning steadily and improve the livelihood of his family.”

Musa.K.Muwanga, Chief Executive Officer, National Organic Agricultural Movement of Uganda (NOGAMU)
Although cotton production in Africa is not significant on a global scale, a large number of African countries remain heavily dependent on cotton. For example, cotton accounts for 60 percent of foreign exchange earnings in Benin. Cotton production and productivity levels vary considerably among African countries (e.g. yield in Tchad is 0.6 metric tonnes per hectare on average compared to Niger where it reaches 1.95 metric tonnes per hectare).

Countries involved in organic cotton production are the same as previous years (Benin, Burkina Faso, Mali, Senegal, Tanzania, Uganda, Zambia, and South Africa) however the numbers of producer groups have decreased slightly.

Organic cotton production in Africa during the season 2009-10 has been influenced by the market situation of the previous year, the significant reduction in Uganda, and climatic conditions. Most organic cotton producer groups in Africa decided to reduce production in the season 2009-10 because of the drop in price and because of remaining stocks from the 2008-09 season. This was the consequence of previous expansion that did not match the market demand. In October 2009 in West Africa, 50 percent of the production was still in stock. This is now not the case. In Uganda, the anti malaria spraying policy of the Government has significantly impacted the sector of organic cotton. Some projects lost their certification due to DDT sprayed in farmers’ compounds. The first rainfall of the season, particularly in West Africa, came late and was followed by a long period without rain. As a consequence, farmers planted late and the seedlings suffered from water scarcity and some farmers had to replant twice over.

### REGIONAL PROFILE

The overall production of organic (including organic and fairtrade) cotton during the season 2009-10 in Africa is about 5,217 mt of fiber. There are approximately 31,069 farmers actively engaged in the production with 15 projects or farm groups on a total area of 32,504 ha.

### TABLE 4: AFRICA ORGANIC COTTON PROFILE

<table>
<thead>
<tr>
<th>Sub-Region</th>
<th>Country</th>
<th>No of PGs</th>
<th>No of Farmers</th>
<th>No of Women Farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Africa</td>
<td>Benin</td>
<td>2</td>
<td>1,237</td>
<td>511</td>
</tr>
<tr>
<td></td>
<td>Burkina Faso</td>
<td>1</td>
<td>2,665</td>
<td>853</td>
</tr>
<tr>
<td></td>
<td>Mali</td>
<td>2</td>
<td>7,700</td>
<td>2,200</td>
</tr>
<tr>
<td></td>
<td>Senegal</td>
<td>2</td>
<td>1,964</td>
<td>955</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td>7</td>
<td>13,566</td>
<td>4,519</td>
</tr>
<tr>
<td>South &amp; East Africa</td>
<td>South Africa</td>
<td>1</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Tanzania</td>
<td>4</td>
<td>6,688</td>
<td>1,528</td>
</tr>
<tr>
<td></td>
<td>Uganda</td>
<td>2</td>
<td>9,400</td>
<td>2,820</td>
</tr>
<tr>
<td></td>
<td>Zambia</td>
<td>1</td>
<td>1,400</td>
<td>500</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td>8</td>
<td>17,503</td>
<td>4,852</td>
</tr>
<tr>
<td>Africa Total:</td>
<td></td>
<td>15</td>
<td>31,069</td>
<td>9,371,</td>
</tr>
</tbody>
</table>

Note: For a number of Producer Groups (in South Africa, Tanzania, and Uganda) an estimate based on 30 percent of growers was made to calculate number of female farmers.
The top three contributing countries in terms of organic cotton fiber are respectively Tanzania, Uganda and Mali. Tanzania is the highest contributor with 62 percent in terms of land and 51 percent in terms of organic cotton fiber produced with only 22 percent of farmers. Uganda is the second highest contributor with 18 percent of land, 30 percent of cotton produced by mobilizing 30 percent of the total number of farmers (being the highest contributor in terms of number of farmers). During previous years, Uganda was regularly the highest contributor. This position is now occupied by Tanzania due to many political issues (including the anti malaria policy) that diminish the sector in Uganda.

Two countries (Tanzania and Uganda) contribute 80 percent of fiber produced while 20 percent of fiber is produced by six countries (Benin, Burkina Faso, Mali, Senegal, South Africa and Zambia).

**TABLE 5: AFRICA ORGANIC COTTON PRODUCTION 2009-10**

<table>
<thead>
<tr>
<th>Region</th>
<th>Area under organic cotton production (ha)</th>
<th>Seed cotton production (mt)</th>
<th>Fibre (lint) production (mt)</th>
<th>Bales of Cotton Fibre/Lint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>779</td>
<td>345</td>
<td>150</td>
<td>686</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>2,002</td>
<td>709</td>
<td>298</td>
<td>1,367</td>
</tr>
<tr>
<td>Mali</td>
<td>3,402</td>
<td>1,238</td>
<td>541</td>
<td>2,482</td>
</tr>
<tr>
<td>Senegal</td>
<td>202</td>
<td>79</td>
<td>27</td>
<td>125</td>
</tr>
<tr>
<td>West Africa Total:</td>
<td>6,384</td>
<td>2,371</td>
<td>1,015</td>
<td>4,661</td>
</tr>
<tr>
<td>South Africa</td>
<td>30</td>
<td>39</td>
<td>15</td>
<td>69</td>
</tr>
<tr>
<td>Zambia</td>
<td>10</td>
<td>5</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Tanzania</td>
<td>20,091</td>
<td>7,371</td>
<td>2,635</td>
<td>12,095</td>
</tr>
<tr>
<td>Uganda</td>
<td>5,989</td>
<td>4,695</td>
<td>1,550</td>
<td>7,115</td>
</tr>
<tr>
<td>South &amp; East Africa Total:</td>
<td>26,120</td>
<td>12,110</td>
<td>4,202</td>
<td>19,286</td>
</tr>
<tr>
<td>Total:</td>
<td>32,504</td>
<td>14,481</td>
<td>5,217</td>
<td>23,947</td>
</tr>
</tbody>
</table>

Image: bioRe (Tanzania)
The production of the season 2009-10 compared to 2008-09 decreased by 37 percent. All countries have reduced production except Benin where the production increased slightly by about 4 percent. This is mainly due to the extension of Alafia project (around the natural reserve of Pendjari) in terms of both number of farmers and area cropped.

During the season 2009-10, African projects have reduced production and fortunately the market conditions are good. All organic cotton produced is sold and there is no remaining stock. This situation will incite many farm groups who will be enthusiastic about increasing their production again during the next season (2010-11).

The actual market trend with increasing cotton price is partly more influenced by incidental events. A very big increase in the production may yield the opposite effect of unsold remaining stock. It is recommended that any increase of production should not exceed 20 to 30 percent.
As a fashion executive I never imagined I’d become a cotton farm manager in Uganda, but I soon realized that if EDUN (the fashion brand started by Bono and his wife, Ali Hewson) was going to set out to do what it wanted to do: help create jobs and trade in Africa while protecting the precious biodiversity of the continent, then cotton was a logical place to start.

EDUN signed a Memorandum of Understanding with The Wildlife Conservation Society (WCS) and Invisible Children (IC) and created Conservation Cotton Initiative in Uganda (CCI-U). CCI began working with farmers in Northern Uganda, where people had spent the last 20 years in internal displacement camps (away from their fields) because of one man, Joseph Kony, who terrorized the community by stealing children as young as 5 years old and placing them in his Lord’s Resistance Army. Virtually nothing grew there for years.

CCI accompanied farmers back to their land, provided oxen for ploughing, rotation crop seeds, set up a structure of area coordinators, field officers and lead farmers and coached farmers on how to grow organic cotton. CCI now works with 3500 farmers. The soil was naturally organic and Ugandans had always grown organically so CCI concentrated on helping with pest management, traceability, and organization of their Primary Society Groups. With additional help of Textile Exchange, NOGAMU (the organic body in Uganda), Technoserve and financial assistance from USAID, CCI successfully produced organic cotton with 900 farmers in the first year.

But working in Africa can be as complicated as it is rewarding. The Ugandan government decided this year that they would hand out free pesticides to farmers, believing that organic agriculture could not control pests effectively. Home spraying for malaria has complicated the certification process.

Nonetheless, EDUN is sticking with its 3500 farmers and continuing to teach the great principles of organic agriculture. CCI will continue to have organic plots to do controlled studies to show the government that organic has positive effects for the community. First and foremost, EDUN wants to stick with its people and help revive the strong agricultural base that flourished before the troubles.

Christian Kemp-Griffin, CEO, Edun
EXPERT’S INSIGHT - TANZANIA

BioRe Tanzania was established in 1994 and produces organic cotton in compliance with NOP and EU 834/2007 standards, mainly for our partners Remei AG in Switzerland. We are situated in Meatu District, one of the 8 districts of Shinyanga Region in Tanzania. Shinyanga is located in Western Cotton Growing Area in the North Lake zone area.

BioRe works with smallholders on contract basis to promote organic agriculture with a focus on organic cotton. In farming season 2009-10 we have 1747 registered farmers under contract and approximately 6000 family producers. In addition to contract farming BioRe Tanzania also promotes & works with a farmers group of 605 farmers in the neighboring Maswa District.

BioRe provides extension services to all of these farmers spread around in 15 villages in Meatu District. Within the context of extension service we provide training, advisory service and monitoring of all the activities all round the season. To bring ourselves closer to the farmers, we have established offices in each of these villages where our permanent extension staff reside and can be easily approached by the farmers.

We believe that a farmer is not just a producer of organic cotton for us, but he is our partner in creating ecological, economic and sustainable agriculture.

We ensure timely supply of inputs such as seeds, botanical pesticides and farm implements. We make farm implements available to our farmers in each of these villages such as an ox weeder, ripper and ridger. We provide interest free loans to our farmers to enable them carry out their agricultural activities without hindrance. This year we allocated US $20,000.00 for this purpose.

We give five years guarantee to our farmers to purchase 80 percent of their harvest. We make the payment on the spot at the purchase centre for the average purchase price of the day and an additional 15 percent premium for each and every kilo purchased. In addition to that we also give him a credit of 5 percent “Input Premium” to enable him to purchase inputs for the next season.

Unfortunately, this season has not been so favourable to us. We had 1747 registered farmers against a target of 1983, and they produced 3,666 mt of seed cotton against a target of 8,642 mt. This resulted in 1,286 mt of cotton lint compared to our target of 2,384 mt.

There were a number of reasons for failing to meet our targets: Low or zero cotton production in other cotton growing areas attracted other conventional cotton buyers to concentrate in our area creating competition; we also suffered from side selling- mainly by family producers - who were misguided and sometimes cheated by unscrupulous cotton agents and traders. Finally, we had quality problems resulting from the late harvest and the rains which hit the harvest.

We are committed to quality organic cotton production and look forward to a better 2011.

Niranjan Pattni, Managing Director, bioRe Meatu, Tanzania
There are two options facing every one of us - to continue doing business as usual or face up to the realisation that if we do that we face the possibility of permanently damaging the planet we share, forever and at the cost of our very own survival. There is no doubt that the second option is not going to be a pleasant one, mainly for the challenges that it presents in shifting our behaviour as consumers and producers. But setting out to produce something that is harmful in its creation and use simply doesn’t stack up. In fact if that is the accepted norm it is not only selfish and irresponsible, but in the longer term could be suicidal.

There are a number of approaches on the table at the moment - not least organic cotton. At face value the question of organic production seems absolutely correct - natural production in a natural way. But the world’s trading systems and environment are sterile, and certainly not the most accommodating of something as simple as organic cotton. The principal challenges here centre around being able to maintain and indeed contain the value of the fiber through a complex processing and trading system. Current practice has so many areas of unnecessary cost being added that ultimately have very little to do with the end product - and often these costs are punitive enough to restrict development at the rate that is required.

This will require partnership and transparency and, most important, a will to make it work. Without the last one it will be a very hard and long journey.

Hugo Lemon, Woolworths, South Africa
“For the Chinese Government and cotton growers, organic farming is a new challenge after years of dependency on chemicals for higher cotton yields. At present, organic farming is still conducted as pilot projects. However, further development can be expected from China’s organically grown cotton. Since organic cotton farming is a highly labour intensive process, it will be to China’s advantage to grow organic cotton, given its abundant labour resource and low labour costs, which is a bright way forward for sustainable agricultural production. The Xinjiang region has very good natural conditions for the development of organic cotton, and the local government can play a very important role in promoting organic production.”

Recommendation by UNEP to China’s Environment Protection Administration, Ministry Of Agriculture, private sector, and farmers
China is the largest (conventional) cotton producer in the world, with cotton occupying a crucial position in the national economy and the basic means of livelihood for many Chinese. China has about 100,000 cotton farmers; mainly located in the eastern region of the nation. The province of Xinjiang accounts for the greatest amount of cotton, producing over a quarter (30 percent) of China’s total cotton. Henan is the next largest cotton-producing province in China, producing just over 15 percent (USDA Economic and Statistics System).

Chinese cotton production requires an average of 3,000 to 5,000 cubic metres of water per hectare and it’s reported that 30–40 percent of all pesticides applied in China are applied to cotton, making it the most heavily treated agricultural crop (China Cotton Association). As a strategy for reducing pesticide use heavy investment was made in genetic modification. Now, more than half (68 percent) of China’s cotton production is genetically modified to produce a substance (Bt toxin) that protects it against insect pests. Recent research is showing that the cotton bollworm is now developing resistance and will not be susceptible to Bt cotton after 20-30 generations, or in six to seven years. Moreover, Bt cotton does not effectively control secondary pests such as the Lygus bug (Institute of Science in Society). China is reported to be in the midst of re-thinking its approach to GM agriculture.

Organic cotton production in China is still a small consideration. Xinjiang is so far the only province with sizeable organic production. The first organic cotton trial in China started in 2001 in Akesu area of the Xinjiang Uyghur Autonomous Region. This project was initiated in a small pocket of land (30 hectares) by the Regiment #3 of Division #1 of the Xinjiang Production and Construction Corp (XPCC), following a request from a Taiwanese buyer. By 2009, organic production had expanded to more than 3000 hectares of planted area in Xinjiang, and the total output was approximately 4300 metric tonnes of lint. In 2010, at least two more farms (assisted by Solidaridad) in Xinjiang engaged in organic production, with expected harvest of 100 metric tonnes, making the total expected national output approximately 5000 metric tonnes in 2010-11.

Due to limited supply, for a number of years organic cotton had been priced at roughly 50 percent above the market price for conventional cotton. In the past two years, however, the premium had been reduced to about 35 percent of the conventional cotton price.

Organic cotton is financed by a small number of private companies (in Taiwan etc.), some technical support is provided by the Cotton Institute in China and specialist advice on organic cotton farming and development by the international NGO’s Helvetas and Solidaridad. Organic fiber is currently supplied to a small number of Chinese textile manufacturers: including Esquel Group, Jolo, Shanghai Flying Dragon, and Beijing Organic Farm Company. China is a more significant importer of organic cotton, yarn, mainly from Turkey, India and other bigger organic cotton producing regions. This is not surprising given that the Chinese garment industry is still 10 times bigger than that of India, Turkey, Vietnam and any of the other big textile manufacturing centres. Organic cotton certification is provided mainly by OCIA and BCS.
Division and regiments are the names used for cotton production units under the China Xinjiang Production and Construction Corps (XPCC), which is so far the dominant organic cotton producer in China. The XPCC is a semi-military setup, responsible for agricultural production in China’s frontier areas. However, approximately half of the farming units have been set up with private finances. So far almost all organic production is done by medium to large plantations, with planted area ranging from 60 hectares to 800 hectares. All farmers are hired workers; one average worker takes care of about 3 hectares of planted area. Only about 1 percent (1100) of China’s 100,000 cotton farmers are involved in organic production.

**TABLE 6: CHINA ORGANIC COTTON PROFILE**

<table>
<thead>
<tr>
<th>Production Unit</th>
<th>Country</th>
<th>No of Farmers</th>
<th>No of Women Farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Division #1 Regiment 8</td>
<td>Alar</td>
<td>301</td>
<td>120</td>
</tr>
<tr>
<td>Division #1 Regiment 3</td>
<td>Aksu</td>
<td>201</td>
<td>80</td>
</tr>
<tr>
<td>Division #1 Regiment 81</td>
<td>Bole</td>
<td>301</td>
<td>120</td>
</tr>
<tr>
<td>Hobksar</td>
<td>Hobksar</td>
<td>175</td>
<td>70</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td>978</td>
<td>390</td>
</tr>
<tr>
<td><strong>In-Conversion (IC)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Division #1 Regiment 16</td>
<td>Alar</td>
<td>125</td>
<td>50</td>
</tr>
<tr>
<td>Division #3 Regiment 45</td>
<td>Kashgar</td>
<td>30</td>
<td>12</td>
</tr>
<tr>
<td>Zhongliang</td>
<td>Korla</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>New Jingfeng</td>
<td>Kucha</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td>206</td>
<td>82</td>
</tr>
</tbody>
</table>

Note: To calculate approximate number of farmers we have used the ratio of one farmer to 2.66 ha (40 mu). In China, farmers are employed as hired labour, and one farmer takes care of 40 mu of land; ratio is usually men 60 percent, women 40 percent.
REGIONAL PRODUCTION

Organic production in China takes place in the Xinjiang district. Growth of organic cotton was more or less suspended in China, due to the good prices fetched by conventional cotton; there has been little change between harvests this year (2009-10) and last year (2008-09) (Martin Ma, Solidaridad).

Instead of steady growth, organic cotton production in China is still negligible, compared to the annual cotton output of 6.5 million metric tonnes. The primary reason is that since China is the world’s biggest cotton consumer (40 percent of world’s total production), cotton in China has been for long a seller’s market, and heavily subsidised i.e., conventional cotton farmers, especially small holders, in most cases don’t consider it worthwhile to take the risks of shifting to organic production (e.g., lowered yield, market fluctuation). Farmers are not very motivated to grow organic cotton, especially with the current cotton subsidies.

Due to the history and nature of the cotton industry in China governments would need to show clearer signs of support. Significant investment (including financial incentives and rewards) would need to be made before farmers would be willing to convert to organic. A few years back in 2002, UNEP’s Country Study recommended (amongst a host of trade-focussed recommendations) that local governments in China should encourage the introduction of organic, environmentally friendly cultivation practices.

There is speculative interest in where China might head, and a number of brands, investors, and NGOs are keen to explore China’s potential for cotton to ‘go organic’.

### TABLE 7: CHINA ORGANIC COTTON PRODUCTION 2009-10

<table>
<thead>
<tr>
<th>Production Unit</th>
<th>Location</th>
<th>Area under organic cotton production (ha)</th>
<th>Seed cotton production (mt)</th>
<th>Fibre (lint) production (mt)</th>
<th>Bales of Cotton Fibre/Lint</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Division #1 Regiment 8</td>
<td>Alar</td>
<td>800</td>
<td>4,054</td>
<td>1,500</td>
<td>6,885</td>
</tr>
<tr>
<td>Division #1 Regiment 3</td>
<td>Aksu</td>
<td>533</td>
<td>2,973</td>
<td>1,100</td>
<td>5,049</td>
</tr>
<tr>
<td>Division #1 Regiment 81</td>
<td>Bole</td>
<td>800</td>
<td>2,973</td>
<td>1,100</td>
<td>5,049</td>
</tr>
<tr>
<td>Hobksar</td>
<td>Hobksar</td>
<td>467</td>
<td>1,622</td>
<td>600</td>
<td>2,754</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td><strong>2,600</strong></td>
<td><strong>11,622</strong></td>
<td><strong>4,300</strong></td>
<td><strong>19,737</strong></td>
</tr>
<tr>
<td><strong>In-Conversion (IC)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Division #1 Regiment 16</td>
<td>Alar</td>
<td>333</td>
<td>1,351</td>
<td>500</td>
<td>2,295</td>
</tr>
<tr>
<td>Division #3 Regiment 45</td>
<td>Kashgar</td>
<td>80</td>
<td>270</td>
<td>100</td>
<td>459</td>
</tr>
<tr>
<td>Zhongliang</td>
<td>Korla</td>
<td>67</td>
<td>135</td>
<td>50</td>
<td>230</td>
</tr>
<tr>
<td>New Jingfeng</td>
<td>Kucha</td>
<td>67</td>
<td>135</td>
<td>50</td>
<td>230</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td><strong>547</strong></td>
<td><strong>1,892</strong></td>
<td><strong>700</strong></td>
<td><strong>3,213</strong></td>
</tr>
</tbody>
</table>
EXPERT’S INSIGHT - CHINA

Ying (Martin) Ma, Managing Director of the REC, Solidaridad manages a program to improve the workplace conditions of Xinjiang cotton farmers. He is simultaneously seeking to remedy the environmental problems of pesticide application and the deep poverty of the farm workers...

“Three decades of economic reform has fundamentally changed China. China is now the world’s third biggest economy - this phenomenal rate of growth has brought with it many problems and stresses. The most visible of these are heavy pollution, a significant income gap, and poor working conditions in millions of factories and plantations. More that 150 million people live below the poverty line.

Xinjiang is the world’s most productive cotton growing region, but to achieve this farmers rely on intensive cultivation and high inputs of pesticides and fertilizers. In 2007, we started working with cotton cooperatives, promising support with planting techniques, market information, seed supply and microfinance. Despite these resources, farmers were unwilling to take the ‘risk’ of converting to organic, even when Solidaridad promised to buy their first harvest.

In 2008, we decided to work in partnership with the two big state cotton companies, Korla and Kuqa, hoping that they would take up the opportunity of converting some of their farmers to organic cotton. In the co-operation framework with these two companies, they are required to provide better conditions for workers, such as increasing winter heating, to pay workers a monthly wage from 200 yuan to 500 yuan, reaching a minimum wage level; and to give the more literate migrant workers 2 hours a day of leave, so they can provide education to the children. As an additional benefit, Solidaridad would provide some funding subsidies to the farm, provide technical advice on a regular basis, and be present during the peak period at the start of the project.

Luck was not on the side of the project - Korla was hit by storms which destroyed the harvest. However, we remains convinced that the hardworking and innovative Chinese farmers will benefit from our approach. In Xinjiang, cotton can even grow in the desert, so nothing is impossible.”

Martin Ma, Managing Director of the REC, Solidaridad
“Turkish growers welcome organic cotton agriculture as their field sizes are small. Organic is family work; to grow local products. Farmers were not using too many chemicals, they were harvesting cotton by hand and also most of all, they are happy to gain premium on top of market prices... They also like the spirit of organic agriculture and the chance to hand over a cleaner environment to their children.”

Aydin UNSAL, Egedeniz, Izmir, Turkey
REGIONAL SUMMARY

European, Middle East and North African countries producing organic cotton in 2009-10 were: Egypt, Greece, Israel, Kyrgyzstan, Syria, Tajikistan, and Turkey. Data are aggregated here. However, due to their very different characteristics each country warrants an individual review.

REGIONAL PROFILE

It would be misleading to paint a single picture of this regional grouping since individual countries are so different.

As a major European producer of cotton Greece has the capacity to go beyond the current level of organic production but for reasons including European subsidies for conventional cotton, most piloted organic projects have been let go. Israel’s cotton, including organic, is controlled by the Israeli Cotton Board and organic production is small.

Egyptian organic cotton farmers tend to grow independently yet feed their cotton into the SEKEM value chain.

Both Kyrgyzstan and Tajikistan, areas of burgeoning organic production, are supported by the NGO Helvetas. We are seeing great progress in Kyrgyzstan (with both organic and fair-trade status). The Tajikistan project is still a relatively new and bold initiative.

Turkish production is well established in Izmir and the South West. Whilst Syria’s large-scale organic project is producing 8 percent of the world’s supply.

TABLE 8: EMENA ORGANIC COTTON PROFILE

<table>
<thead>
<tr>
<th>Country</th>
<th>No of PGs</th>
<th>No of Farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>2</td>
<td>600</td>
</tr>
<tr>
<td>Greece</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Israel</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>1</td>
<td>1,000</td>
</tr>
<tr>
<td>Syria</td>
<td>1</td>
<td>1,254</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>1</td>
<td>75</td>
</tr>
<tr>
<td>Turkey</td>
<td>6</td>
<td>2,255</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>13</strong></td>
<td><strong>5,201</strong></td>
</tr>
</tbody>
</table>

Note: Farmers in Egypt tend to work independently. The majority producing for SEKEM.
REGIONAL PRODUCTION

Only a small amount of organic cotton is produced in Greece, Israel, Kyrgyzstan and Tajikistan.

Egyptian cotton is mainly grown around the delta of the Nile. A significant proportion of Egyptian organic is grown biodynamically (using fermented herbal and mineral preparations and an astronomical sowing and planting calendar).

A significant proportion of the world’s organic cotton is supplied by both Syria and Turkey. Volumes from Turkey have dropped however due to competition from abroad. However, Turkey remains a country with much potential. With a well established manufacturing base and a GMO-free status Turkey is in a strong position.

TABLE 9: EMENA ORGANIC COTTON PRODUCTION 2009-10

<table>
<thead>
<tr>
<th>Region</th>
<th>Area under organic cotton production (ha)</th>
<th>Seed cotton production (mt)</th>
<th>Fibre (lint) production (mt)</th>
<th>Bales of Cotton Fibre/Lint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td>150</td>
<td>405</td>
<td>150</td>
<td>689</td>
</tr>
<tr>
<td>Egypt</td>
<td>606</td>
<td>1,986</td>
<td>666</td>
<td>3,057</td>
</tr>
<tr>
<td>Greece</td>
<td>80</td>
<td>270</td>
<td>100</td>
<td>459</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>500</td>
<td>224</td>
<td>83</td>
<td>381</td>
</tr>
<tr>
<td>Syria</td>
<td>25,000</td>
<td>54,054</td>
<td>20,000</td>
<td>91,800</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>71</td>
<td>166</td>
<td>55</td>
<td>252</td>
</tr>
<tr>
<td>Turkey</td>
<td>22,940</td>
<td>30,832</td>
<td>11,599</td>
<td>53,240</td>
</tr>
<tr>
<td>Total:</td>
<td>49,347</td>
<td>87,937</td>
<td>32,653</td>
<td>149,878</td>
</tr>
</tbody>
</table>

EGYPT

Egypt has a somewhat closed cotton economy, making it a small player in international cotton trade. Approximately 70 percent of the total area planted to cotton is located in the Delta. The remainder is found in Middle and Upper Egypt (USDA 2010). Production and productivity levels are high in Egypt. This performance originates in the fact that cotton is grown under irrigation in Egypt and grown on the fertile plains of the Nile delta. Over the past three years, the area planted to cotton in Egypt has declined because of inconsistent government policy which affected the cropping pattern especially cotton and farmers turned to more profitable crops such as corn and rice (U.S. Department of Agriculture’s Foreign Agricultural Service 2009). Further, competition from shorter staple cotton has also reduced demand for Egypt’s extra-long staple fiber. However, recovery is underway and export in 2009-10 increased dramatically. This sharp increase in exports is a direct result of the partial recovery of the world financial crisis (USDA 2010).

The Egyptian organic cotton industry is a fascinating one due to its connection to the Egyptian biodynamic agricultural movement led by Dr. Abouleish of Sekem (the Egyptian biodynamic food, pharmaceutical and textile company). This ‘modern’ biodynamic agricultural movement started in 1977
GREECE

Greece is the largest (if not the only) cotton producer in Europe, with some 80,000 farmers growing the crop. Cotton is grown in small pockets throughout the entire country. Greece imports only a small amount of cotton, but its exports are significant, making Greece the fourth largest cotton exporter in the world (USDA Economic and Statistics System). Like many other countries, high production costs and low lint prices have prompted Greek growers to turn to alternative crops. Under the Common Agricultural Policy (CAP) farmers in Greece currently receive the highest (per farmer) subsidy in the world. The subsidy is offered whether cotton is grown (65 percent coupled) or not (decoupled 35 percent). This sort of financial reward has lead to a lack of real incentive to produce. (Yiannis Papadogiannis, Cotton International, July 2010).

The Greek cotton industry has shown a small interest in organic cotton; piloting organic with the goal of expansion in the 1990s. The ginning company Thrakika Ekkokistiria pioneered the first production of organic cotton in Europe; and saw the first cultivation in 1993-94. However, for a number of reasons, not least the lack of financial incentive for organic agriculture in the Country, organic cotton growing has not yet taken off in Greece. The large denim manufacturer, Accas Textile Group, is currently the only company producing organic cotton in Greece; with producers located in Thessalia an area in Central Greece. The Group, in cooperation with the farmers, is currently cultivating organically grown, long-staple, and coloured cotton and manufacturing bio denim. Organic certification is accredited by the internationally recognized Greek standard “DIO” (Certification and Inspection Organisation of Organic Products). The mill is also certified by DIO to gin organic cotton.

ISRAEL

The Israel Cotton Production & Marketing Board Ltd. (ICB) was established in 1956. Israel is a small producer with about 12,000 hectares under cotton - mainly Extra Long Staple Cotton. Irrigation is based on recycled water. The use of effluents for irrigation has greatly contributed to reducing growing costs. There is no GMO cotton and no Governmental subsidies for cotton.

Organic cotton is a small business. The Israeli Cotton Board reported that there are 6-7 growers producing about 150 metric tonnes of organic ELS lint on about 150 hectares. Israeli organic cotton carries IFOAM certification.
**KYRGYZSTAN**

Kyrgyzstan is a poor, mountainous country with a dominant agricultural sector. Cotton, tobacco, wool, and meat are the main agricultural products, although only tobacco and cotton are exported in any quantity (Mundi Index 2010). Kyrgyzstan (a former Soviet state) is a country in transition to a free market economy. An assessment of the country’s situation reveals three key problem areas or development issues: Poverty, Sustainable Economic Development, Democratisation and Decentralisation (Helvetas).

In Kyrgyzstan, cotton has been grown for a long time. The production of cotton accounts for over 40 percent of the agricultural value added, with agriculture still being the main sector of the Kyrgyz economy. Whereas industrial production dropped significantly during the 1990s, the production and processing of cotton has been growing steadily. However, the situation on the world market, the great price fluctuation and the dependency on chemical pesticides of conventionally produced cotton do not make it an economically and ecologically sustainable product.

The organic movement in Kyrgyzstan is aiming at continuous growth over the next years. The BioCotton Project (BCP) facilitates the growth of organic and Fairtrade production and trade in and from Kyrgyzstan. The Bio Cotton Project is a collaborative initiative of local organizations Agricultural Commodity Service Cooperative and Bio Service Public Foundation. Major elements of their future strategy are: Growth in number of farmers, area under organic and Fairtrade production and sales; Adding value - establishing value chains for rotation crops such as cereals, pulses and Medicinal and Aromatic Plants (MAP) - from inputs to processing; Diversification of target markets - entering North American markets, exploring Japanese and Russian markets as well as local markets; and Building the institutions - developing human resources and building up capital (Helvetas 2009).
SYRIA

Cotton is planted in the north, east, and central parts of Syria. Mainly upland cotton is produced in Syria. All cotton is irrigated. The major planted varieties are Aleppo 40, which was developed by the Cotton Bureau in Aleppo, in the early eighties. The Cotton Bureau encourages early planting and harvesting by paying a higher price for early deliveries. The government subsidized some costs of production including the price of diesel fuel (which was increased by 257 percent in May 2008).

In the past the Cotton Marketing Organization (CMO) used to buy about 97 percent of the seed cotton crop. The CMO is buying a smaller part of the crop these days due to the low prices set by the government. The balance of the crop is sold to the owners of private gins. Issues for cotton farmers include the small seed cotton procurement price increase, the huge increase in fertilizer prices, and the cost of fuel (USDA Foreign Agricultural Service 2009).

Syria has been producing organic cotton since 2006. Production is in the Aleppo area. This is currently the result of one organic project; an interesting one to watch not least because of its size and production quota. Production was quickly increased in a short period of time and all organic cotton production is certified by Control Union certifications & SGS. Syria has rapidly become one of the biggest organic cotton producers and exporters in the world. Recently there have been further organic cotton trials in Syria but these have either not continued nor made much progress.

The government supports organic projects in their belief that environmental friendly production provides a financial advantage to their farmers. Because there is a large internal market for cotton in Syria, every year the Syrian government usually decides final export quotas. This year 100 percent of Syrian organic is available for sale.
TAJIKISTAN

Tajikistan has a population of 6.3 million people, nearly half of whom are under 14 years of age. Between the 11th and the 16th century, Tajikistan was heavily ruled by the Turks, Mongols and Uzbeks. The Russian Empire took over Tajikistan from the Uzbeks. During that time (1897-1917), the nation experienced many economic and political advances, including the introduction of cotton. Due to a history of political chaos, Tajikistan has suffered many human rights abuses.

Tajikistan’s main trading partners for cotton are Russia, Iran, Turkey and Latvia. However, last year, Tajikistan exported cotton fiber to 18 different countries (State Committee for Statistics).

In 2009, the Ministry of Justice of the Republic of Tajikistan officially registered the Branch Office of Helvetas. In January 2010, the Helvetas Branch in Tajikistan became a fully fledged country office. In Tajikistan Helvetas implements the Organic Value Chain Development (OVCD) project - growing organic cotton amongst other crops. The OVCD project has a long term perspective to improve the Tajik farming sector system (particularly in cotton), allowing farmers to increase their incomes and improve livelihoods in a sustainable way through alternative value chains. The OVCD project is funded by ICCO (Dutch Interchurch Organization for Development Co-operation) and Helvetas.

TURKEY

Turkey is the sixth largest producer of cotton in the world, and the fifth largest consumer. Turkey is the ninth largest importer of cotton and a significant exporter of cotton (USDA Economic and Statistics System). Cotton has been grown in Turkey for centuries and it is recognised as producing some of the finest quality in the world. Turkey’s major cotton growing areas lie predominantly in the western region of the country and down in the south east. The textile industry is well-established here and is home to some of the biggest and longest-running organic textile manufacturers in the world.

Organic cotton is mostly produced in the west of Turkey (around Izmir), and in the south east. Turkey remains GMO-free and has a burgeoning domestic organic industry. Organic production includes dried fruits such as figs, apricots, sultanas, and nuts such as pistachios, as well as cotton. Most organic production has stemmed from conventional producers branching into organic. There is some government support for organic production but currently not enough to play a major role in building the organic sector. The growing middle class in Turkey, especially in the bigger cities, is beginning to appreciate organic food and the ‘organic bazaar’ is becoming more and more popular. Organic textiles do feature locally, however organic cotton is more likely to be exported (either as fiber, yarn or finished product) to parts of Northern Europe and the US.

Turkey is in a good position to lead the sustainable textile sector due to its well established manufacturing base, good labour standards, and access to high quality fiber, locally. However, the recent global economic downturn, whilst felt less severely by the Turkish economy generally, impacted heavily on the textile industry. This in turn has led to a stand-still in organic textile growth. Organic cotton production levels are down slightly; with farmers concentrating on more lucrative organic crops such as organic grains and other crops. This is likely to change provided the economics, customer demand and commitment within value chains are achieved.
Turkish growers, especially in western parts, welcomed organic cotton agriculture. Field sizes were small, it was a family work to grow the local products, they were not using many chemical inputs, they were harvesting cotton by handpicking and also most of all, they were happy to gain a premium on top of conventional market prices. Additionally they also liked the spirit of organic agriculture and identified themselves with protecting their environment to hand over a cleaner environment to their children.

This worked from mid 1990’s until the first several years of the new millennium. Turkish cotton, thanks to its good quality, was welcomed in many countries by both industry and retailers. This helped organic projects to grow in Turkey with industry and retailers more or less committing themselves to certain organic production value chains.

But, in the early 2000’s this began to change. Conventional cotton prices fell to low levels due to increased production and high subsidies in some growing countries as well as organic cotton production’s rapid growth during the period. Turkish growers, both conventional and organic, were not happy with their income and they started to grow other products. In addition, the organic cotton business had become just like any other commodity business with fierce competition and no long-term commitment from buyers. This caused Turkey, formerly the world’s leading producer, to drop down to third in the world.

Of course, cotton prices started to increase globally from beginning of 2010. Turkish traders and growers revitalized some of their organic cotton projects and this season we expect to see a higher quantity harvested than in the 2009 crop.

We shall see the 2010 quality and quantity when harvesting finishes, but the price signal is having a significant positive effect.

Aydin Unsal, Egedeniz, Turkey
EXPERT’S INSIGHT - SYRIA

AK Organic cotton project Syria - The AK organic cotton project is a large-scale organic experiment that is producing promising results.

Started in 2007, the project in Syria is a collaboration between the governmental Cotton Marketing Organisation (CMO), AK Verwaltungs und handelsgesellschaft (AK) of Germany and the local company Majed Rajab Oglu and Partner Co. (MR&P Co.).

The project is a result of the integration of different worlds, bringing together the CMO which is well rooted in the cotton sector of Syria while AK brings in its long time experience with organic growing techniques and running organic projects.

Syria is considered a suitable country for organic production, due to availability of resistant cotton varieties, a ban on import and use of GMO seeds, availability of both large and small scale farmers and existing interest in sustainable production.

Currently (October 2010) the project covers over 16,000 ha, includes 1300 farmers, and is focused on large scale organic production. We have developed several innovative techniques such as large scale compost distillation, growing and open field application of natural predators, and the use of the latest organic pesticides where needed.

The total production capacity of the project is around 20,000 mt of organic cotton, which is only partly exported, depending on the local need for both organic and conventional cotton.

The organic cotton is grown in rotation with herbs and leguminous crops which are partly marketed as organic.

Integration is the key - the presence of CMO from the cotton sector allows for transparent traceability, and the presence of AK and MR&P in the field through a team of 12 agronomists allows for good internal control and efficient farmer communication.

Besides export the project also supplies the growing local organic food and textile industry.

The size and organization of the project allows for large scale experimentation with organic techniques, yielding promising results for further growth and development.

Karst Kooistra, Agricultural coordinator, AK Organic Cotton Project Syria
EXPERT’S INSIGHT - KYRGYZSTAN

In the 2010 planting year cotton had an intensive revival with Kyrgyz farmers due to increasing world market prices. The organic movement in Kyrgyzstan is growing strongly as farmers feel the environmental and social impacts of organic farming and especially value the protection it offers against the problems of the world market.

The two local organizations Agricultural Commodity and Service Cooperative (ACSC) and Bio Service Public Foundation (BS) had to deal with turbulent times in their initial years, with a world economic crisis and a revolution and ethnic conflicts in Kyrgyzstan. They matured and are well prepared for further expansion and professional provision of their services in Kyrgyzstan and the Central Asian region. They have solid growth strategies and are forward planning.

The Bio Cotton Project (BCP) of Helvetas facilitates the growth of organic and Fairtrade production and trade in and from Kyrgyzstan. There are many positive results from the organic movement in Kyrgyzstan:
- 1000 contracted organic farmers in 2010, 25 percent of them women
- 10 percent lower yields, but a 20 percent higher price for the farmer
- 8 percent lower production cost; but a 27 percent higher net profit
- Better access to financial credits (less need for farmers to sell livestock in emergencies)
- Cotton oil for cooking and press cake as animal feed are valuable and highly appreciated by-products of organic cotton production
- Significant improvements in health conditions due to consumption of organic food and cotton oil, and no need to use dangerous chemicals.
- Almost all farmers perceive an improvement of soil fertility & water holding capacity
- 91 percent of organic farmers would convert again

Organic, Fairtrade and in conversion cotton fiber production has grown from 166 mt in 2007 to 380 in 2010. For 2011 and beyond the organic movement in Kyrgyzstan foresees continued growth in the number of farmers, area under organic and Fairtrade production and sales of organic cotton and rotation crops. This will go hand in hand with a diversification of target markets - entering North American markets, exploring Japanese and Russian markets as well as strengthening local markets.

As organic production implies a rotation system for growing a range of crops, other value chains, for rotation crops such as cereals, pulses and Medicinal and Aromatic Plants will be established. These will cover inputs through growing and processing to selling locally and abroad.

Building the institutions that foster organic farming will be the core aim of Helvetas, who stay committed to organic farming in Kyrgyzstan until at least 2014. This means enhancing capacities, especially developing human resources and building up capital. We look forward to continued growth in our organic movement.

Shaknoza Kurbanalieva, Bio Cotton Project, Kyrgyzstan
“We cannot think of our own health in isolation from our environment. Human health, our ecosystems and the planet must be considered (and valued) as a complete system. We must manage our work with respect, justice and equity. Through knowledge exchange we value our ancient and modern knowledge. Working in this way reaffirms our regional identity, valuing our traditional knowledge, genetic resources, and our social and fair economic relations. Organic agriculture is inclusive and welcoming, encouraging whole families to join in a multidimensional participation, allowing farmers’ families in vulnerable situations to overcome poverty.”

Patricia Flores, IFOAM Regional manager for Latin America and Caribe
REGIONAL SUMMARY

Cotton has a long history in Latin America. Pre-Hispanic cultures developed cotton to use its fiber for garments. Many echoes of this remain, reminding us of the importance of cotton for Inca and pre Inca cultures. According to genetics specialists, Gossypium barbadense was originated in the Northern Coastal region of Peru. Between the decades of the 1940’s to the 1960’s cotton saw significant development in coastal Peru, Paraguay also developed major cotton production, and Brazil, given its large area, is also one of the main cotton producers. Cotton is also produced in Nicaragua, Colombia and Argentina.

Nowadays, most of the cotton grown in Latin America is conventional (based on the use of fertilizers and chemical pesticides); Brazil, Argentina and Colombia have large areas with transgenic (GM) cotton. Organic cotton is found only in Argentina, Brazil, Nicaragua, Paraguay and Peru. In September 2010 a test trial was started in Colombia to assess organic cotton productivity. Some of these projects also have fairtrade certification.

Organic cotton has been introduced for two main reasons: first and foremost in projects driven by farmers and/or companies who consider that organic production provides a development model which is favourable to the environment, to people’s health and generates revenues for farmers as well; and secondly, the opportunity to make use of the organic market with its premium price potential.

Brazil is probably the only country with government support. EMBRAPA (Empresa Brasileira de Pesquisa Agropecuaria) is a national research institute working in organic cotton. The Don Helder Camara project, supported through government funds, is also an example of their interest in supporting organic cotton growing initiatives.

In Latin America the main development drivers are export demand and the opportunities presented by the quality of the fiber produced.

Export drivers - Some countries in the region have Free Trade Agreements (in the case of Peru with USA, China, Korea and others) which include tariff benefits on textile production located in free trade areas (as happens in Nicaragua). This also applies to countries belonging to Mercosur (Brazil, Argentina, Paraguay, Uruguay and Chile). In both cases there is a direct benefit for the trade in textile products which favours fiber production in countries with organic production projects. However, this depends on the existence or maintenance of demand in the importing countries.

Fiber quality - The existence of long or speciality fibers such as coloured fibers is an important opportunity in a very competitive market that is looking for distinctive products. Here the market demand is a key factor.

The most important changes that are needed to take advantage of opportunities arising within the region are:

- Improving and promoting seed production with certain attributes (fiber length, resistance, yield and colour), and maintain organic seed production programs through alliances between farmers, industry and universities.
- Improving technical aspects of crop management, i.e. production and use of competitive natural manure, efficient natural pesticides for the control of the
main pests, and improvements in water management systems on irrigated zones (Peruvian coast). These measures can all be oriented to improve yield and improve the quality of cotton field management.

- Promoting appropriate rules and regulations in those countries wishing to allow transgenic cotton (Argentina, Brazil and Colombia).
- Promoting markets for rotation or farm system crops alongside organic cotton.
- Developing contingency plans to cope with climate change (droughts, intense rainfall, etc.) to allow for sustainable organic cotton productive processes.
- Promoting internal markets especially in countries such as Brazil and Argentina which have large populations which have very strong domestic market and high demand for textile products.

Forecasts for organic cotton production for the season 2010-11 from both programs and companies indicate that the cropping area for organic cotton is being maintained. The effects of weather conditions, international prices and cotton competitiveness will be the most important factors for crop harvest in year 2011.

The support of ICCO to some projects in Paraguay and Brazil (Northeast) through work platforms to coordinate actions is an important contribution. In Colombia, the local government of Uramita is trialling organic cotton production to assess the efficiency of management plans and production levels (this program is supported by CONALGODON, La Siesta, Fatelares and Textile Exchange).

Finally, a development that will be significant is the building of alliances between countries from the same region or within the same country in order to face fluctuations in the international market. Latin American countries typically export finished products, not fiber, so this could be an important element running alongside improvements in the quality and quantity of fiber and textile products aimed at the international and regional markets.
REGIONAL PROFILE

Cotton production in Latin America operates through different systems. In some cases farmers work independently and are associated though an “integrated list” by a company or organization holding the organic certificate which organizes the farmers, generally providing also technical assistance, supplies and/or credit. This can be seen in Paraguay and Peru. There are cases where farmers have some degree of self organization and act as partners of the companies, and in some cases companies are independent of crop growing matters as in the case of Nicaragua and Paraguay. In Brazil NGOs are the main promoters of organic cotton projects and are oriented towards attaining certificate independence.

In all cases, these production models face a common issue which is price determination either for seed cotton or fiber (in Brazil and Paraguay farmers are normally associated and sell fiber). The type of organization depends on the economic and social context for each region and country, and on the development relationships amongst the industry and their links to the textile sector.

<table>
<thead>
<tr>
<th>Country</th>
<th>No of PGs</th>
<th>No of Farmers</th>
<th>No of Women Farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>3</td>
<td>127</td>
<td>11</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>1</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>Paraguay</td>
<td>2</td>
<td>720</td>
<td>60</td>
</tr>
<tr>
<td>Peru</td>
<td>5</td>
<td>446</td>
<td>46</td>
</tr>
<tr>
<td>Total:</td>
<td>11</td>
<td>1,304</td>
<td>117</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>No of PGs</th>
<th>No of Farmers</th>
<th>No of Women Farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>1</td>
<td>180</td>
<td>70</td>
</tr>
<tr>
<td>Brazil</td>
<td>10</td>
<td>199</td>
<td>25</td>
</tr>
<tr>
<td>Total:</td>
<td>11</td>
<td>379</td>
<td>95</td>
</tr>
</tbody>
</table>

Image: Oro Blanco (Peru)
REGIONAL PRODUCTION

Organic cotton responds to the dynamics of conventional cotton, to the international economic crisis, but also to other factors such as increased crop profitability and, in the special case of Latin America, to the effect generated by the increase in cropping area in other regions.

In Latin America there are five countries producing organic cotton: Argentina, Brazil, Nicaragua, Paraguay and Peru. The area planted with organic cotton in Latin America during 2009-10 season was 1,733 ha (including land in-conversion). Additionally, there are some initiatives or projects starting up in Colombia and Costa Rica.

Organic cotton has seen a decline over the previous year. In 2008-09, the total production of raw cotton was 2,812 metric tonnes with a total production of 1,039 metric tonnes of fiber. Production in Latin America in 2009-10 has reduced further to 2,610 metric tonnes of seed cotton (962 metric tonnes of fiber). The decline is mainly due to the changes in the international market, lower fiber prices, restructuring of enterprises and projects, and the effects of drought.

According to our data, Peru is the country with the largest organic cotton acreage in Latin America, followed by Paraguay, Brazil and Nicaragua. Fiber is produced in various ranges according to size: 19 mt of short fibers, 277 mt of medium fiber, and 742 mt of long fiber. This production results from the work of 1,683 farmers of which 212 are women. Argentina is undergoing conversion to organic. Additionally, in some countries there is a certain amount of cotton area planted in the traditional way (without use of external inputs) or by following the guidelines of agro-ecology, but without organic certification.

Organic certification is awarded by Biolatina, Control Union, IBD, Ceres and IMO. Companies or farmer associations with organic certification, in some cases have other qualifications such as fairtrade (FLO).

TABLE 11: LATIN AMERICA ORGANIC COTTON PRODUCTION 2009-10

<table>
<thead>
<tr>
<th>Region</th>
<th>Area under organic cotton production (ha)</th>
<th>Seed cotton production (mt)</th>
<th>Fibre (lint) production (mt)</th>
<th>Bales of Cotton Fibre/Lint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic Brazil</td>
<td>20</td>
<td>12</td>
<td>5</td>
<td>22</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>21</td>
<td>43</td>
<td>17</td>
<td>76</td>
</tr>
<tr>
<td>Paraguay</td>
<td>410</td>
<td>296</td>
<td>109</td>
<td>500</td>
</tr>
<tr>
<td>Peru</td>
<td>962</td>
<td>2,258</td>
<td>831</td>
<td>3,816</td>
</tr>
<tr>
<td>Total:</td>
<td>1,414</td>
<td>2,610</td>
<td>962</td>
<td>4,414</td>
</tr>
<tr>
<td>IC Argentina</td>
<td>110</td>
<td>165</td>
<td>63</td>
<td>289</td>
</tr>
<tr>
<td>Brazil</td>
<td>209</td>
<td>38</td>
<td>14</td>
<td>64</td>
</tr>
<tr>
<td>Total:</td>
<td>319</td>
<td>203</td>
<td>77</td>
<td>356</td>
</tr>
</tbody>
</table>
ARGENTINA

“Otro Mercado del Sur” is the only company that has a program of organic cotton. The production takes place in the “El Chaco” region and its cotton does not possess organic certification, while in transition, but with certification for fair trade. It has 110 has of cotton (30 ha in first year conversion and 80 ha in second year conversion). The program is composed of 180 farmers from which 70 are women, has on average 1.5 ha, and depends on rainfall. They also grow other crops like maize, citrus, and beans.

BRAZIL

Most organic cotton projects in Brazil are located in the northeast. The dry season has been very long, and rain has not been consistent. There was a 90 percent loss of crops, not only cotton, but also other crops were affected creating great difficulties for the cotton sector. Support from ICCO is promoting a platform of organic cotton in the north which is composed of various groups linked to cotton production, farmers’ associations, companies, NGOs, EMBRAPA, PDHC (Project Don Helder Camara), etc.. In Brazil most projects are based on initiatives by NGOs, however, it is the only country where the state has a stake in the development chain. The role of EMBRAPA research is very important and projects like the PDHC show the state’s interest to encourage the production of organic cotton.

COLOMBIA

Colombia is a country with a cotton tradition; currently conventional cotton seed is mostly transgenic. The cotton leading organization is CONALGODON which brings together cotton producers. There is a research initiative sponsored by “La Siesta”, a German company that sells hammocks made with organic cotton in partnership with the Colombian company “Fatelares”. Currently the company purchases cotton in Africa. However, there is interest in creating a cluster in Colombia. This has led to the beginning of a research process from October 2010 in the town of Uramita, in conjunction with local government (municipality). They are experimenting in small batches with the organic system in order to assess the feasibility of its production in Colombia.
NICARAGUA

The only organic cotton project in Nicaragua is driven by COPROEXNIC and it continues, despite market changes and adverse effects of the weather. During the 2009-10 season there were only 21.4 ha sowed because of the drought that took place between June and August of 2009. Despite this mishap, some farmers sowed at the end of July with the little rain available. In total 953 QQ of organic seed cotton was harvested with a production of 336 QQ of cotton fiber (80 bales of approximately 4.20 QQ each). Current production costs fluctuate between 450 and 500 dollars per ‘city block’ (1.2 ha). The production of COPROEXNIC has been sent to Guatemala for spinning, owing to the fact that the Genesis Cooperative, responsible for the spinning in Managua, has yet to finish construction work and implementation of its spinning teams. It is expected to be in operation for the 2010-11 season. The final link is the cooperative COMMANUVI that makes garments for export. The Coproexnic project, despite being small, is interesting from the point of view of integration in the development of a production chain, where it has achieved - in very small scale - a production system of cotton, the implementation of a small spinning factory (Genesis) and a cooperative of garment manufacturing (Commanuvi). Currently Coproexnic has in store more than 100 QQ of certified seed of the variety Melba for the 2010-11 season.

PARAGUAY

In Paraguay there are two companies producing organic cotton: Aratex and Prorganica. Production decreased due to the effect of international market trends. Aratex had a production of 74 metric tonnes of medium length fiber varieties REBA Aratex, IAN 425 and certified by IMO. Prorganica produced 35.5 metric tonnes of fiber, also of average staple and variety IAN 425. In Paraguay this company still has support from ICCO financing for certain areas of cotton production, and have brought together the various actors in the cotton marketing chain. The effects of the international economic crisis generated a direct impact on production and farmers’ interest.

PERU

In Peru there is a reduction in the planted area of organic cotton. The companies with certification of cotton production are Bergman Rivera, Ecotton, New Expo, Oro Blanco, Peru Naturtex and Romero Trading. Companies like Ecotrad have a rough draft cotton traditionally handled; APAEM on the northern coast did not grow cotton this year due to lack of irrigation water and currently only continue with native colored cotton for handicrafts. In Peru all certifications are performed by Control Union. Productive projects are mainly based on business initiatives; white and colored cotton are grown. In Peru’s three distinct ecological areas, alternative projects have developed. On the north coast (Lambayeque) the “Del Cerro” variety is used, in the central coast mainly the Tangüis variety is used, and the northern jungle (San Martin) planting cotton with short fiber (áspero) and brown cotton.
“From the field to the city - different places same challenges- The world scenario in terms of the economy, climate, social and cultural aspects are certainly changing constantly everywhere, of course it means we must be very focused on our goals, be creative looking for new solutions every day, be positive about things even if they are not what we had expected at first. I often remember something I heard once from Antonio Benitez, one of our farmers from Caaguazú - Paraguay, he said “the first year I planted organic cotton it represented a very hard work for me, the cleaning, treatment of the plant with natural remedies to repel and prevent pests, the hot weather...now after 3 years I know without doubts this is what I want. My field is full of life, the soil is fertile, I can hear the birds again, and my family and I can enjoy nature again”. The same happens to us in Aratex, things can be very hard sometimes because the prices are too low or too high, quality must be improve, sales must be increased... different places, different issues, same feelings, same challenges. Investing our time, spirit and energy to find what we really want, working in what is good for the society and nature will always benefit us all in the long term”

Olga Segovia, Aratex Organica, Paraguay
Organic agriculture in Latin America has developed in a variety of ways. It was born in some countries as a result of searching for a model for development in rural areas, where it turned into a tool for social transformation (especially in Brazil). In other countries the organic system has been introduced as a tool for agronomic competitiveness (such as in Peru and Chile). These developments take place against a backdrop of ancient agricultural knowledge, even though for 200 years people have been trying to destroy it.

These are the reasons why Organic Agriculture is important in Latin America:

- Responsible conservation and use of the native germoplasm is rooted in the biodiversity that characterizes the Andean and the Indo-American regions. These places, as centres of origin for many food species, have great significance for the world population.

- We cannot think of our own health in isolation from our environment. Human health, our ecosystems and the planet must be considered (and valued) as a complete system.

- We must manage our work with respect, justice and equity. Through knowledge exchange we value our ancient and modern knowledge.

- Through organic practices we develop autonomy, not only in production, but also in our way of thinking. This gives us a great advantage against the threat of big corporations which wish to get control of knowledge, technology, and genetic resources.

- Working in this way reaffirms our regional identity, valuing our traditional knowledge, genetic resources, and our social and fair economic relations.

- Organic agriculture is inclusive and welcoming, encouraging whole families to join in a multidimensional participation, allowing farmers` families in vulnerable situations to overcome poverty.

Patricia Flores, IFOAM Regional manager for Latin America and Caribe
“Reaching a fair market price depends on the buyers management and their distribution channel. Key elements are to increase the harvest’s yield with the ideal mix of modern and traditional techniques; to increase involvement in the project by sharing the results between buyers and farmers; and for buyers to ensure they are punctual with their fiber payment, and enter into a long term commitment, (ideally 3 years), and book their order requirement 8 months before the harvest so that farmers can plan properly.”

Eric Ducoin, Project manager for sustainable dvt., Fairtrade and organic cotton. Biocoton France & India
REGIONAL SUMMARY

Organic cotton is grown in both India and Pakistan. India is the world’s largest producer of organic cotton coming from approximately 200 producer groups. Pakistan has only one but one very effective producer group located in the Baluchistan province.

REGIONAL PROFILE

In India, the growth of organic cotton indicates a clear signal that cotton assumes great significance as a choice among organic crops, and a significant number of farmers in organic cultivation in the major cotton producing States such as Maharashtra, Madhya Pradesh, Gujarat and Orissa choose to grow cotton. Given the fact that all four states fall within the “High poverty group”, and have a good percentage of India’s rural poor, the role of organic cotton in delivering benefits to these farmers and reducing poverty through a growth in income and reduction of costs assumes great significance.

The Kings’ Cotton Group produces organic cotton in the Baluchistan province, neighbouring to the West of the Sindh region.

TABLE 12: SOUTH EAST ASIA ORGANIC COTTON PROFILE

<table>
<thead>
<tr>
<th>Country</th>
<th>State</th>
<th>No of Organic Farmers</th>
<th>No of Farmers In-Conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
<td></td>
<td>954</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>Madhya Pradesh</td>
<td>143,236</td>
<td>15,049</td>
</tr>
<tr>
<td></td>
<td>Maharashtra</td>
<td>40,266</td>
<td>39,234</td>
</tr>
<tr>
<td></td>
<td>Gujarat</td>
<td>10,185</td>
<td>2,489</td>
</tr>
<tr>
<td></td>
<td>Orissa</td>
<td>32,677</td>
<td>8,279</td>
</tr>
<tr>
<td></td>
<td>Karnataka</td>
<td>484</td>
<td>350</td>
</tr>
<tr>
<td></td>
<td>Tamil Nadu</td>
<td>750</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>Andhra Pradesh</td>
<td>2,377</td>
<td>5,055</td>
</tr>
<tr>
<td></td>
<td>Rajasthan</td>
<td>5,772</td>
<td>1,670</td>
</tr>
<tr>
<td>India Total:</td>
<td></td>
<td>235,747</td>
<td>72,426</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td>236,701</td>
<td>72,426</td>
</tr>
</tbody>
</table>
In Pakistan, the Kings’ Cotton Group produces organic cotton in the Baluchistan province, neighbouring to the West of the Sindh region.

Future prospects for organic cotton appear promising in Pakistan. The Pakistan Ministry of Food and Agriculture (MINFA) is engaged in preparing a regional project to produce organic cotton as part of a project funded by the Common Fund for Commodity (CFC) under the advice of International Cotton Advisory Committee (ICAC), Washington D.C. (USDA foreign agriculture service).

TABLE 13: SOUTH EAST ASIA ORGANIC COTTON PRODUCTION 2009-10

<table>
<thead>
<tr>
<th>Country</th>
<th>State</th>
<th>Area under organic cotton production (ha)</th>
<th>Seed cotton production (mt)</th>
<th>Fibre (lint) production (mt)</th>
<th>Bales of Cotton Fibre/Lint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
<td>Baluchistan</td>
<td>1,115</td>
<td>815</td>
<td>345</td>
<td>1,583</td>
</tr>
<tr>
<td>India</td>
<td>Andhra Pradesh</td>
<td>2,461</td>
<td>5,178</td>
<td>1,709</td>
<td>7,843</td>
</tr>
<tr>
<td></td>
<td>Gujarat</td>
<td>15,608</td>
<td>20,899</td>
<td>6,897</td>
<td>31,656</td>
</tr>
<tr>
<td></td>
<td>Karnataka</td>
<td>968</td>
<td>956</td>
<td>315</td>
<td>1,446</td>
</tr>
<tr>
<td>Organic</td>
<td>Madhya Pradesh</td>
<td>247,934</td>
<td>396,755</td>
<td>130,929</td>
<td>600,964</td>
</tr>
<tr>
<td></td>
<td>Maharashtra</td>
<td>62,333</td>
<td>106,310</td>
<td>35,082</td>
<td>161,028</td>
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<td></td>
<td>Orissa</td>
<td>32,635</td>
<td>50,141</td>
<td>16,547</td>
<td>75,949</td>
</tr>
<tr>
<td></td>
<td>Rajasthan</td>
<td>6,569</td>
<td>11,624</td>
<td>3,836</td>
<td>17,607</td>
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<tr>
<td></td>
<td>Tamil Nadu</td>
<td>300</td>
<td>296</td>
<td>98</td>
<td>448</td>
</tr>
<tr>
<td></td>
<td>India Total:</td>
<td>368,808</td>
<td>592,159</td>
<td>195,412</td>
<td>896,941</td>
</tr>
<tr>
<td>Organic</td>
<td>India</td>
<td>63,626</td>
<td>61,961</td>
<td>20,447</td>
<td>93,853</td>
</tr>
</tbody>
</table>

REGIONAL PRODUCTION

India’s production of 195,757 mt of lint for 2009-10 demonstrates a continued increase in production at a significantly high rate, (revised production figure for 2008-09 is 142,347 mt of lint) and showing a growth rate of 38 percent over the previous year. It is significant to mention that the figures put out by the Government of India for 2008-09 show a higher figure of 186,000 mt and if this is accepted as a baseline for comparison then this year would reflect a growth of 5 percent only.

In Pakistan, the Kings’ Group maintains steady production and although parts of the country experienced severe flooding this past year, organic production was unscathed.
**INDIA**

In India, (conventional) cotton is grown mainly in the states of Maharashtra, Gujarat, Andhra Pradesh and also Madhya Pradesh. These states have a predominantly tropical wet and dry climate. The northern regions of India are mainly irrigated whilst the central and southern regions are mainly rain fed. Since its introduction in 2002, the area under Bt (*Bacillus thuringiensis*) cotton in India has expanded from 50,000 ha to some 8.3 million ha (mh), out of the total 9.6 mh sown to cotton in 2009. India’s agricultural profile with an approximate 58 percent of the population dependent on agriculture in rural India is indicative of a high dependence on the agricultural economy. Add to this the incredible diversity in agro ecological, cultural and social milieu that defines India, and one will get an idea of the multi layered nature and complexity of agriculture in India.

There is no doubt that organic cotton is beginning to play a dynamic and significant role in the larger scheme of Indian agriculture, despite the negligible percentage of land under organic cotton when compared to conventional (i.e. approximately 3 percent) From the high position that organic cotton holds in the organic acreage and as the leading export, it is evident that it also plays a vital role in the organic agricultural economy. In this context it is worthwhile to examine the promise of organic as an increased opportunity for small and marginal farmers, one that would seek to deliver several benefits by providing a safer environment through reduced pesticide risk, greater efficacies in sound land management practices, secure social networks, committed purchasing of assured volumes and prices that makes organic cotton farming worthwhile in an economic sense.

It is increasingly apparent that India will continue to be a key player in organic cotton production in the context of being a country with the largest acreage potential, and a significant number of dedicated organic farming communities. This combined with an enviable production capability for a wide spectrum of textiles contributes to making India a “one stop destination” for brands and buyers from all parts of the world. In this sense, it remains imperative that manufacturers, brands and retailers strive to deliver, beginning with a true understanding of the long term and committed nature of relationships with the farmer, based on equity and respect. There is no doubt that this would result in greater and genuine commitment from the farmers.

The lack of such commitments and genuinely nurtured relationships will result in continued speculative production. There is an imperative need for better matching of supply and demand, improved organic farming technologies and more remunerative prices for organic fiber, enabling systems to ensure that farmers reap the benefit of such prices, and ensuring that the large numbers of contract farming models have effective and equitable management systems in place. Farmers continue to remain at the rough end of a complex supply chain. The need of the day is emergence of growth with balance and equity. Progress and sustainable growth hinges on the attitudes and actions of all the players up the value chain, and connected inextricably to vital support systems such as Government support and favourable policy, transparency, access to finance, and long term partnerships.

The availability of seeds for organic cotton production continues to be a major challenge, and there is an imperative need
for immediate, concerted action by all stakeholders. There are some efforts being made by some groups, notably Chetna and Cotton Connect (for the European Retailer C&A) which are to be lauded, but clearly there is a need for greater convergence of ideas, action and support. India has a strong scientific community, ample gene pools that are suitable for organic in both the public and private domain, and seed companies that will be willing to support production for this sector, provided there is synergy and forward planning. The onslaught of Bt can only be overcome by pro active and dynamic action; seeds are a complex subject with varied factors such as regional variations, farmers choices, legislation governing breeding and commercial production playing a significant role. There is need for careful and intelligent action.

The nurturing and growth of a strong domestic market for organic fiber could play a significant role in strengthening producer groups and reducing their dependence on the export markets. India continues to attract a wide variety of goods and services and large segments of the population are getting increasingly aware and discerning. The time is right for creating strong local markets and engaging local and local/international brands. A nationwide survey commissioned by ICCOA as far back as 2006, showed very high awareness of organic foods in the major shopping metros, demonstrating that there is a strong potential for creating awareness of the social, environmental and economic issues in cotton. This could be an area for intervention and engagement by funders and civil society groups. Currently there are small efforts towards introducing Fair trade garments and craft in the domestic market.

The dominance of big brands in the organic fiber market needs to be balanced with growing smaller value driven brands and retailers who can better communicate the value of organic and position products in a manner befitting the efforts of organic.

India’s leading role in the organic cotton industry is not confined to the volume of cotton produced. There is plenty of scope for India to demonstrate leadership. Some of the challenges thrown up by the swift growth of the industry such as the challenges around Certification and Accreditation have been dealt with by laudable efforts to improve Governance about these areas by APEDA the Accrediting body of the Ministry of Commerce. Notable among this is the introduction of an online traceability system for all agricultural produce called “Tracenet”. Tracenet is expected to address several of the issues that were seen as challenges to integrity, especially in group certification. Tracenet has become mandatory and all Certification bodies have been co opted by APEDA to implement this program. APEDA is confident that the new system will offer effective controls and make group certification reliable and sound.

Added to this, APEDA has also mandated a maximum group size of not more than 500 farmers per ICS (Internal Control System) group, thereby ensuring better farmer: supervisor ratios and manageable group sizes.

The Government of India has also made significant progress by having a distinct plan and strategy in place for the growth, governance, and marketing of organic cotton in their National Fiber Policy for the next Five Year Plan. In accordance with the recommendations of the Sub Committee constituted for this purpose, the support for organic cotton will be extended for an initial period of five years on the lines of the Technology Missions for cotton or TMC’s as
they are popularly known. Special attention will be given to seeds for organic production as the Government of India recognizes the gap in this area and has plans to rope in specialized scientific bodies such as the CICRs (Central Institutes of Cotton Research) and the Directorate of Cotton Development, and Several Agricultural Institutes to support these interventions.

Other significant developments include the potential formation of a cotton producer’s Forum and a Certifiers Forum thereby enabling greater co-operation and understanding amongst these critical groups.

The Government continued to peg the MSP (minimum support price) for cotton at more or less the same rate as the previous year at Rs 3000 or so for medium staple cottons. Cotton Corp of India (CCI) acquired considerable bales of cotton. Like last year this posed a challenge to contractors and brands, as the prices for organic and fair trade cotton were not significantly higher than the conventional prices, thus putting a strain on genuine projects and committed organic farmers, who were already feeling the impact of growing labour costs for weeding and picking particularly, for all outsourced labour, higher costs of all commodities and fuel, and general inflation.

In particular the rise in food price was a double edged sword as it is reported that many marginal farmers sold their food crops and subsequently wound up spending significant amounts of money on food grains of relatively poorer quality, thereby compromising food and nutritional security.

**PAKISTAN**

Most of the cotton produced in Pakistan is grown in a belt along the eastern border of the nation. The province of Punjab accounts for the majority of the nation’s production, producing 85 percent of Pakistan’s total cotton, while the province of Sindh produces the other 15 percent of Pakistan’s cotton (the USDA Economic and Statistics System). However, due to the floods earlier this year, losses of 17 percent are expected to bring down the 2010-11 harvest to 8.75 million bales (480 lbs). While the Government of Pakistan has only recently approved field trials for six BT cotton cases, an estimated 70 percent of the 2009-10 crop is believed to be planted in Bt (USDA foreign agriculture service).

The Kings’ Cotton Group produces organic cotton in the Baluchistan province, neighbouring to the West of the Sindh region. The Kings’ Group has a close working partnership with the US textile company Greensource. Together the two companies are addressing environmental, social and economic concerns for the rural communities in which they are based (e.g. the establishment of a new school in Baluchistan) but also considering the larger sustainability impacts of textile manufacturing; and pioneering new technologies to reduce energy and water consumption.
EXPERT’S INSIGHT - INDIA

The Indian cotton market has a particular annual rhythm influenced by the growing techniques adopted by smallholder farmers.

The seed cotton that starts to come into the markets from mid September onwards to mid October is mainly from those farmers having access to irrigation and therefore engaged in early sowing (March-May), this is almost always conventional cotton (more often than not GM/Bt cotton). The majority of seed cotton in India starts to flow into the markets from the end of October and until end December and when traders (ginners + input suppliers) are most active. The ginning industry needs to keep its machinery in operation from the end of September and up until March to break even and/or make any profits.

Since the season of 2009-10, the ginning industry, as well as cotton traders, has been eager to take maximum advantage of the duty free export markets opened up by the Government of India. This, for the current season/year (2010-11) is for a maximum of 5.5 million bales of lint/fiber as declared by the GOI. This has led to the traders/ginners registering or booking quantities in advance for export and then going on a buying spree to ensure supplies; the volume involved is almost 1/6th of the total cotton production in India. It is possible that another 2.0 million bales could go into unregulated export markets, mainly because of the rising demand for Indian cotton fiber from countries like China, Vietnam, Bangladesh, and Sri Lanka.

Because the Indian government has not engaged in a consultative process of fixing a clear Minimum Selling Price for cotton based on costs like living costs, cost of production, etc., the MSP declared by the government tends to be at least 35 percent lower than the prices offered by the local ginners/traders to the farmers at local level (based on export demand). This is evident not only from a demand and supply logic, but also to ensure that the buyers (ginners & local traders) ultimately fulfil their statutory obligations without suffering any penalties.

Nevertheless, these dynamics have ensured that small scale conventional cotton farmers in rainfed regions are not only in a position to receive better prices without hassle (from middleman or certification), but they are also engaged in a supply-driven environment.

On top of this, the production of cotton in the US and China is going down each year for various reasons and these are positive signals for India. The crop failure in Pakistan and North of India (Punjab) as recently as Oct 2010 is also a reason for the price escalation.

However, it is assumed that once the flow of cotton volumes start to increase (say from mid November), the prices will stabilise or fall. The halt of yarn exports by GOI was expected to contribute to lowering of the cost of seed cotton. Yet, the trend does not indicate so. The demand for short staple cotton is significant and is predicted to increase.

Arun Chandra Ambatipudi, Chetna Organic
EXPERT’S INSIGHT - INDIA
Biocoton: Working for multiple benefits in India.

Himshikha Development Project (HDP) is a sustainable cotton project established to provide overseas market linkages to the farmers in India on a long term relationship basis. Our ethos is to be compliant with the principles of fair exchange but also to consider the factors which build market acceptance.

The current project is based on research conducted in a pilot project in India between 2006 and 2009, in which a total of 400 farmers and their families participated. Data was collected from the farmers’ families including education and health. In addition to complying with all Organic and Fairtrade standards, HDP has undertaken several other sustainable initiatives such as organizing health camps, distributing free pumps, utensils, pre-financing and so on.

Our work is based on an understanding of what farmers need and what customers need. Often the needs coincide, and can be seen as two sides of the same coin.

- Farmers need a minimum support price, and buyers need the best, stable price.
- Farmers need a sale guarantee, and buyers need reliability in the supply chain.
- Farmers need good health and access to medical facilities; buyers need pride in being part of a noble initiative.
- Farmers need education and training; buyers need education for them and their customers.
- Farmers need insurance; buyers need transparency, stability and compliance with regulations.
- Farmers need independence; buyers need competitive advantage.
- Farmers need recognition; buyers need a one stop shop.

When looked at in a holistic manner, these needs can coincide, or be met for both parties. Today the HDP can celebrate success in a number of areas. We had 100 mt of orders booked in 2009 for 2010-11 - the majority of our clients have stuck with the project and remain faithful despite the poor economic conditions. A commitment to procure 150 mt of seed cotton has already been made this year (2010) with the farmers, and we forecast 750 mt for 2011-12.

Most clients have visited the project in India, and farmers are benefitting from the responsible community created by the project. We are working on the best sustainable market price through the HDP method described above, and adding to economic sustainability through long term contracts with the farmers. Our objective remains to focus on the global market, including developing consumers’ price acceptance, and to extend the project to different countries.

Eric Ducoin, Project manager Biocoton France & India
EXPERT’S INSIGHT - INDIA
The high prices of cotton and no buyers ready to enter into contract makes times very difficult for heads of producer groups...

Without any confirmed buyers or contracts bankers are not willing to advance any working capital. Without working capital the cotton grown by the farmers cannot be procured as all the farmers need immediate cash to meet their expenses... Hence the farmers have started selling the cotton in the open market as conventional cotton.

The Zameen farmers will benefit even if they sell their Fairtrade and Organic cotton as conventional cotton due to high prices in the market. But the current Indian government policy (which has been sanctioned) is to ban cotton exports beyond 55 million bales. So, if the registered 55 million bales are not exported before 15th of December, then the government is not likely to allow export. Further to this the government has banned yarn exports beyond 720 million kgs, both these issues will have an impact on the cotton prices in the market.

Farmers who are holding the cotton expecting the prices to rise further will be disappointed when the prices fall in the market. The farmers at this junction will put pressure on the project to procure the cotton and pay the FLO (fairtrade) and organic premiums. The spinners and the brands are sitting on the fence waiting for the prices to fall - and are not committing to any contracts - this is causing great difficulty for the project and not allowing us to secure working capital funds from bankers. With no money in the kitty we are not in a position to procure the cotton from the farmers.

The farmers will be losing confidence in the whole FLO & Organic farming approach as there are no guarantees to buy the FLO & organic certified cotton which they are growing where the yield per acre is max 500 kgs. They hear about the non organic cotton farmer (who is using hybrid seeds) and getting 700 to 800 kgs per acre, some places even 900 kgs. There is a clear chance the organic farmers will be attracted to high yields which bring them more and assured money from the local market and will overlook the other benefits that organic farming has given them.

Even with 100 percent authenticity from the seed, organic cotton with high tractability back to the farmer, ICS in place, quality cotton, and various impact studies, there is no guarantee that the organic cotton grown by the farmers will be bought. All our efforts in training farmers in organic agricultural practises and various technical and quality training for the last 4 years still find us with no committed buyers. There is no opportunity for us to scale-up the organic farming. This is very de-motivating and disturbing in one way but this situation gives us lot of learning that the sustainable organic business need to be redefined and restructured with players with different rules and a different price system which will secure everyone in the chain.

Satish Chukkapalli, Founder Director, Zameen Organics Pvt Ltd
“The opportunities presented by developing a non-traditional production system in organic cotton in West Texas appear to be substantially more profitable than conventional cotton over the years studied. However, organic acreage is still only a very small fraction of total production acres. This profitability is in large part the result of successful group marketing efforts by the Texas Organic Cotton Marketing Cooperative that consistently achieves much higher prices for their organic cotton.”

Dept. of Agricultural and Applied Economics, Texas Tech University 2009
The United States is the third largest conventional cotton-producing nation in the world. The United States is also ranked third in the world for consumption of cotton. The United States is almost totally self-sufficient in terms of cotton supply and demand; so, on average, imports are relatively small, while exports are most of any country in the world (the USDA Economic and Statistics System).

Total 2009-10 conventional cotton harvested area in the United States was estimated at 10.8 million acres (4.37 million hectares). In 2010 93 percent of the US cotton crop was GM.

In the US one-fifth of the total land area (382 million acres) is used for crop production while 3,000 acres of productive farmland are lost to development each day. The reality of real estate: Increasing [urban] development pressure on farmland at the rural-urban interface is posing long-term challenges for agricultural production in the US.

Over the last 100 years, agriculture in the US has been shaped in many ways by increasing mechanization as well as government price support. As a result, farms operating in the US have more land and more machines than their counterparts in Asia and Africa. 86 percent of farm organizations are individuals/family or sole proprietorship farms. Principal farm operators are an average of fifty-seven years old and forty-five percent have farming as their primary occupation, down from fifty-seven percent last year.

In recent years cotton has been losing precedence and acreage to other competing commodities such as wheat, soybeans and corn. In 2010 the U.S. conventional cotton crop is projected at nearly 18.9 million bales, up 6.7 million bales from 2009 production.

For the last ten years, organic farming has been one of the fastest growing segments of U.S. agriculture. In 2002 the USDA implemented its national organic standards (NOP) and by 2005 the total area that was certified organic had doubled. However, there is a decline in the number of farms growing organic cotton in recent years.

The majority of organic cotton is grown in Texas, representing an estimated 80-90 percent of the total. Texas Organic Cotton Marketing Cooperative (TOCMC) members produce the majority of the organic cotton grown in the United States. Upland cotton is the dominant variety (pima grows in climatic conditions suitable for California). This region of Texas is well-suited to the production of organic cotton. Winter temperatures are cold enough to limit insect pressure and provide a hard freeze to defoliate the cotton plants prior to mechanical harvest. In addition, a sunny climate and quick-drying soils facilitate timely weed control. Farmers in this region grow other organic crops including peanuts, wheat, corn, milo, soybeans, black eye peas, pinto beans, black beans, and watermelons.

Darlene Vogler, Organic Farmer, TOCMC, explains why she’s an organic farmer: “We got into farming because we thought the price would be better. Then we learned that, as farmers, all of us have a calling to be stewards of the land and we have such a unique opportunity by being farmers that we can impact it on a larger scale and that is the most rewarding experience that we’ve had in our farming career. So that’s why I’m still here and part of the Texas Organic Cotton Marketing Cooperative.”
REGIONAL PROFILE

There were 8 projects in the US. There is a decline in the number of projects growing organic cotton in the last 2 years, with an increase in the total amount produced. The majority of farmers grow medium staple fiber representing 96 percent of the total type grown (this is an increase from the 83 percent that was medium staple in 2008-09). In 2010-11 medium staple will continue to represent 95 percent of the total grown. For 2009-10 fiber thickness was an average 38.7 micronaire and is expected to increase to 42 micronaire average in 2010-11 season.

<table>
<thead>
<tr>
<th></th>
<th>No of</th>
<th>No of</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>PGs</td>
<td>Farmers</td>
</tr>
<tr>
<td>Texas</td>
<td>1</td>
<td>30</td>
</tr>
<tr>
<td>New Mexico</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>California</td>
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<td>2</td>
</tr>
<tr>
<td>Total:</td>
<td>8</td>
<td>40</td>
</tr>
</tbody>
</table>

TABLE 14: USA ORGANIC COTTON PROFILE

Image: TOCMC (USA)
Farmers in the US grew 2,808 mt, representing 12 percent of global organic cotton production for the 2009-10 season. Organic cotton covered 5,185 hectares, with an average farm size of 485.83 hectares (1,200 acres).

Texas alone had 4,814 hectares under organic cotton, representing 93 percent of the total land area (in organic cotton) in the US.

The farmers growing organic cotton in California in previous years have struggled with water allocation and costs, and many have chosen to plant crops such as almonds, that have less price fluctuation. The high cost of labour and land in California make it almost impossible to grow organic cotton without a contract in place for the sale. This is especially unfortunate since California’s climate enabled it to be the producer of ELS Pima in the US. As Marcia Gibbs of the Sustainable Cotton Project explains;

“If the market developed for organic pima, California farmers would grow it”.

Total production for 2010-11 is expected to increase 14 percent from the previous year; an estimated 3,277 mt of fiber (14,450 bales).

**REGIONAL PRODUCTION**

Texas is showing a 20 percent increase in projection from the previous year. This will result in Texas producing 91 percent of all organic cotton grown in the US, up from 85 percent in 2009-10.

Arizona is growing organic cotton in 2010-11. However, California is not due to the increased costs of water, labor, and land.

### TABLE 15: USA ORGANIC COTTON PRODUCTION 2009-10

<table>
<thead>
<tr>
<th>State</th>
<th>Area under organic cotton production (ha)</th>
<th>Seed cotton production (mt)</th>
<th>Fibre (lint) production (mt)</th>
<th>Bales of Cotton Fibre/Lint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Texas</td>
<td>4,814</td>
<td>6,475</td>
<td>2,396</td>
<td>10,997</td>
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<tr>
<td>New Mexico</td>
<td>353</td>
<td>1,060</td>
<td>392</td>
<td>1,799</td>
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<tr>
<td>California</td>
<td>18</td>
<td>55</td>
<td>20</td>
<td>92</td>
</tr>
<tr>
<td>Total:</td>
<td>5,185</td>
<td>7,590</td>
<td>2,808</td>
<td>12,888</td>
</tr>
</tbody>
</table>
Gary Oldham from SOS Texas said: “The organic market is strong. We have seen an increase in demand because it is grown in the US, and the organic is an added benefit”.

Image: TOCMC (USA)
I am a third generation farmer and operate over 4,000 acres of land, most of which is certified organic. I grow organic cotton for (1) the increased financial gain and (2) the natural methods that can be used to better improve the environment.

Each bale of cotton marketed by our coop (TOCMC) can be tracked from the field to the customer. Buyers can know the producer’s name and farm for each bale purchased. TOCMC and our members are certified organic by the Texas Department of Agriculture (TDA).

USDA classing specifications are used to classify each bale of TOCMC cotton into one of five quality pools. Payments to producers are determined by the pool in which the bale falls, giving producers an incentive to grow the highest quality cotton possible. However, quality, like yield, is somewhat subject to weather conditions that are beyond the farmers’ control, resulting in some year-to-year variations in the percentage of the crop in each pool. The five quality pools are also the basis of TOCMC’s price structure. Customers receive bales from the pool containing cotton of the quality specifications they have requested and are charged the price related to that pool.

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.

Rainfall in a given year can make a significant difference in the percent breakdown of our production between dryland and irrigated. Abundant rainfall will also reduce the quantity of water used by our irrigated growers. Approximately 60 percent of our organic cotton acres are dryland and not irrigated. Based on our calculations, we estimated that our 2009 crop used approximately 250 gallons of irrigation water per pound of lint when you combine the irrigated and the dryland.

TOCMC members grow other organic crops including peanuts, wheat, corn, milo, soybeans, blackeye peas, pinto beans, black beans, and watermelons. Also, the cotton seed, which is separated from the cotton fiber in the ginning process, is marketed to organic dairies for feed.

The reward I receive for producing organically is the satisfaction of doing something that most people think cannot be done. That is - “environmental stewardship.” I believe in making this world a better place through fairness, honesty and integrity.

Jimmy Wedel, President, Texas Organic Cotton Marketing Cooperative
PART 4: REFLECTION, PREDICTIONS & RECOMMENDATIONS

“The overwhelming majority of cases show that organic farms are more economically profitable... The major difference in the profitability of the two systems is very often determined by the different management skills of the farmers... Integrated organic agriculture, whether certified or non-certified, is more management and knowledge-intensive, and so necessitates building the learning and cooperative capacity of individuals and groups.”

Food & Agriculture Organisation 2009
TO RECAP....

Organic cotton production continues to increase globally. However, the global production figure masks the struggles experienced by a number of producers over the past few years; particularly producers in West Africa, Latin America and Turkey. Barriers to growth included: ‘the very low’ prices on the market in India; the necessary spraying of chemicals to combat malaria in Uganda; and the tentative market environment (post-economic crisis), generally.

The 2009-10 ‘barriers to growth’ have even caused a number of producer groups to withdraw from organic cotton production; for instance in Latin America and Africa. The more established groups that have strong market partners have continued steady production. Speculative growth has mostly been seen in India and China, with varying degrees of success.

What is interesting - and reassuring - is that whilst organic cotton production dipped in a number of key countries, the commitment to ‘organic’ as a way of growing has generally persisted; with organic cotton being replaced by other organic crops (more lucrative at the time) such as organic corn and maize in Turkey.

Whilst most organic cotton continues to be grown on small-scale farms, Syria’s single organic cotton production company continued to grow around 20,000 mt of fiber in 2009-10 which makes for an interesting model of larger-scale business operations.

India provides us with the most dramatic growth trend; from just over 6,000 mt in 2005-06 when we started our Farm & Fiber Report to the current production figure of 195,757 mt. Although production jumps each year, the growth between 2006-07 and 2007-08 is by far the most extraordinary (an increase of 292%). Last year India’s growth was still a massive 93% on the year before and this year we saw a relatively more moderate 38% increase. What is of probably more noteworthy than India’s growth trend is the share of the world’s production that India now represents; going from approx 33% (5 years ago) in 2005-06 to over 81% in 2009-10.

If we are to see organic cotton production well-distributed across the cotton-growing world, we need to understand the variety of advantages offered by different producer countries and look at ways to build longer-term commitment, more diversity and better risk-spreading into our organic cotton value chains.

Experience shows that until we get the financial structure right - with the right kind of incentives from government as well - the other (environment and social) benefits of organic may not be enough to hold farmers to the cause.
REFLECTIONS

Despite the fragility of the organic cotton sector - post-economic crisis - organic cotton production grew 15 percent from 2008-09 to 2009-10. However, this positive outcome masks the skewed nature of the growth; some producer groups have dropped out and others slowed down. Steady growth is occurring in a few areas such as Texas and parts of Africa, but most of the growth is occurring in South East Asia.

South East Asia now accounts for over 80 percent of the world’s organic cotton production (with over two-thirds of India’s production coming from Madhya Pradesh). This is a significant jump from the 33 percent of global production India represented in 2005-06. It was in 2007-08 that India’s growth spurt took it to number one position with production figures (75,000 mt) reaching 50 percent of global production, over three times its production figure the previous year (19,000 mt) and over twice its nearest rival Syria (28,000 mt). Alongside the advantages of a well established textile manufacturing industry operating in India, this rapid growth spurt, over the past 5 years, is a symbol of the country’s incredible ability to recognise a good business model and embed it quickly. It’s fair to say that millions of farmers in India are finding a way out of poverty and poor health through organic cotton farming.

However, this growth has also raised questions about how growth is being achieved and how it might be impacting on the rest of the organic cotton producing world. India’s conventional cotton is almost 90 percent genetically-modified; which is forbidden in organic production. This expansion of GM cotton in India appears at odds with the rapid growth of organic, and the risk of contamination increases.

It’s also true that we are seeing countries such as Turkey and parts of Latin America unable to compete with Indian prices. The questions about India’s rapid expansion and its ultra-competitive prices will only be satisfied by strong evidence of transparent, responsible and integrity-led production and trade. Thankfully, APEDA’s new organic product tracking program ‘Tracenet’ for organic production exports is a response to this need.

If ‘organic’ is to continue to make a positive impact on the cotton industry, players within the value chain need to work hard to demonstrate that the entire philosophy of organic: for people, planet and profit, is being upheld.

PREDICTIONS

Alongside production growth, we have seen the global organic cotton market jump from under US$300 million in 2002 to over $4.3 billion in 2009. Textile Exchange expects market growth to continue at a minimum of 20 percent with stronger growth of 40 percent or more in key markets and where brands have built strong, stable supplies of organic fiber. Analysts also indicate that initial sales in the first quarter of 2010 have been strong (TE/OE Market Report 2009).

If we first take a quick look at predictions of growth for conventional cotton production it is evident that views vary widely. Yet it is likely we will see production respond to the high prices currently in the market. Some analysts are predicting the highest year-to-year rebound in 7 years (USDA News October 2010). However, if we continue to experience climatic stresses and/or pest attacks as we did in 2009-10, it will mean that this prediction is by no means guaranteed.
Over the past five years we have seen organic cotton production jump from 37,000 to 241,697 mt of fiber channelled into organic products or blended textiles. Market appetite suggests the demand continues to be greater than supply. However, in terms of forecasted growth, we are expecting to see a slight decline in global production figures. This dip is estimated to occur in India in response to the Nation’s tightening ‘Tracenet’ criteria being placed on organic cotton exports (see supplement briefing for details). The skew in production is likely to remain however with India continuing to produce at least 75 percent of the world’s supply.

REGIONAL PREDICTIONS

If we take a broad look at movement within each region it appears that there are signs of steady growth for many especially where there is clearly communicated demand. However, anticipated growth has fallen short for some due to ecological events (such as drought, floods or pest stresses). There do not appear to be any dramatic changes to match the scale of change happening in India.

It may be that the reduction in India’s output will stimulate increased production and capacity-building in other regions but we will probably not feel the full effects of this for 2-3 years.

If producers and brands are to achieve their goals of organic textile expansion issues such as security of supply, business diversification and forward planning need to be addressed at every link in the chain. If value chains are treated as partnerships (with a more open dialogue about requirements) commodity fluctuations will have less impact and growth can occur in a planned and predictable way - reducing risk and potentially costs for all.
Africa: Although production in West Africa is expected to increase by approx. 40 percent, all fiber has been sold or placed. Almost all West African organic cotton is certified Fairtrade as well as organic - and production rates are growing at twice the pace of conventional cotton. We can expect a big increase in production from Tanzania as part of their planned expansion (supported by the Tanzanian Cotton Board) and further supported by an intensifying textile manufacturing industry and good port access for export. There is some growth in South African organic cotton (although still a fledgling operation). In Uganda, production appears to remain stable despite the many challenges experienced over recent years in terms of political change and malaria treatment contaminating stockpiled organic cotton.

China: Although there is interest in the expansion of organic cotton in China, it seems there will be no substantial increase in 2010-11. Surprisingly, China has the 2nd biggest area of land under organic food production (after Australia) and we may see significant increases in the near future, given the right investment and support.

EMENA: Production in Greece and Israel remains relatively small yet constant - although with the right incentives and/or investment to stimulate change growth could occur. One of the significant barriers to growth in more developed countries is the cost of employment (and organic agriculture is more labour-intensive than conventional). Further, due to a greenworm infestation, Turkish production may dip slowly as may Syria’s production. The Syrian government has confirmed that all its 2010-11 organic cotton is free to be sold, and will not be used in domestic (conventional) consumption. Egypt’s production is estimated to increase moderately. Kyrgyzstan and Tajikistan although in their early stages, have strong growth strategies for 2010-11 and beyond.

Latin America: The effect of drought in Brazil and the strong variation of prices in Latin America generally, has resulted in a low-growth situation. Currently almost all the region’s fiber is sold or placed. If in-conversion and piloted organic cotton (especially in Brazil, Paraguay, Peru and Nicaragua) comes on line a slight increase may occur.

### TABLE 16: CONVENTIONAL VS ORGANIC COTTON PREDICTIONS 2010-11

<table>
<thead>
<tr>
<th>Region</th>
<th>Conventional</th>
<th>Organic</th>
<th>Big Producers 2010-11</th>
<th>Countries with High Forecast Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>↖</td>
<td>↖</td>
<td>Tanzania, Uganda</td>
<td>Tanzania, West Africa</td>
</tr>
<tr>
<td>China</td>
<td>↖</td>
<td>↖</td>
<td>China</td>
<td></td>
</tr>
<tr>
<td>Europe, Middle East &amp; North Africa</td>
<td>↖</td>
<td>↖</td>
<td>Turkey, Syria</td>
<td>Kyrgyzstan, Tajikistan</td>
</tr>
<tr>
<td>Latin America</td>
<td>↖</td>
<td>↖</td>
<td>Peru</td>
<td>Brazil</td>
</tr>
<tr>
<td>South East Asia</td>
<td>↖</td>
<td>↖</td>
<td>India</td>
<td>Pakistan</td>
</tr>
<tr>
<td>USA</td>
<td>↖</td>
<td>↖</td>
<td>Texas</td>
<td>Texas</td>
</tr>
</tbody>
</table>

Source: Conventional trend sourced from USDA November 2010. Organic trend based on Textile Exchange data.
RECOMMENDATIONS

Textile Exchange is excited about the progress the organic cotton community has made in terms of growth generally. However, we believe there is still plenty to do to improve the business of organic cotton for everyone. We are deeply committed to supporting continued progress for all members of the value chain.

We see the priority going forward into the next five years as being the growth of organic cotton partnerships; we hope to see more producers, manufacturers and retailers working together to secure supply and procurement, responsibly and sustainably.

As we observe brands and retailers making commitments to expand their organic cotton procurement we also see the need to peg this commitment to tangible value chain strategies that include managing security of supply.

Similarly, we see producer groups investing in building organic cotton production knowledge and skills, including certification competencies. But we also see issues with integrity of production being raised. The result is uncertainty and reputational risk for all links in the chain; and potentially reputational damage.

Textile Exchange has spent the past few years developing a better understanding of ‘progressive’ organisations and we now understand more acutely where the weaknesses lie. Our work will continue to focus on supporting value chains to improve integrity and responsibility. We will continue to calculate and communicate the ‘organic advantage’, and help both producers and brands build better business relationships.

We are constantly engaging with our members to ensure the work we do is sector-led and

SE Asia: Pakistan’s production is expected to increase although remains the unique operations of a single producer group. India has over 20,000 mt of cotton in-conversion with a significant amount coming online during the 2010-11 harvest. However, the steep growth curve we have seen over the past 5 years in India is predicted to dip for the first time - perhaps by as much as 25 percent - due to the new criteria introduced as part of the APEDA Tracenet program. However, number of producer groups in 2010-11 will go up on account of the revision in group size to 500 maximum. We envisage a decline in acreage and production of organic cotton to occur due to a number of factors: limited access to non-gm seeds, better prices for conventional cotton, lack of advance purchases or commitments for organic, paucity of finance for in-time purchases, tougher regulatory systems, and a dropping off the radar of the speculative producers. At this stage it is also unclear how much of India’s organic cotton harvest for 2010-11 will end up in conventional supply chains due to the pressure on growers to sell directly from the field - and the attractive prices on offer.

United States of America: Whilst we see a number of producer groups moving away from organic cotton particularly in California, new groups are moving in and production levels are set to increase by approximately 3% - with most of the growth occurring in Texas. There are signs that stable and committed partnerships with like-minded brands, and increasing consumer awareness are helping ‘locally-grown’ organic cotton further establish its niche in the US market.
that we are in touch with our members needs and aspirations. We continue to encourage change through inspiring and shining a light on the best way forward. We are also stepping up our collaborative activities with like-minded organisations to improve impact in the sector; for planet, people and profit.

Top priorities for Textile Exchange and the organic cotton community include working corroboratively to:

- Continue strengthening integrity in production, processing and certification;
- Further develop tools to measure impact through environmental, social and economic indicators;
- Promote and communicate best practice in responsible value chains;
- Understand how other financial models such as Fairtrade and rural financing models in other commodity sectors such as coffee might work for organic supply chains.

Part of the ongoing success will be sharing stories from the field and from the label: making the link between where organic cotton comes from, who grows it, and why it makes a difference.
PART 5: TEXTILE EXCHANGE FARM ENGAGEMENT PROGRAMME

“We work hard to make sure the supply chain from farmer to retailer is transparent, efficient, and equitable. Without any of those pillars, the process is unbalanced.”

LaRhea Pepper, Senior Manager, Textile Exchange
WHO WE ARE...

The Farm Engagement Team helps organic cotton producers gain access to sustainable textile and apparel markets and links them to Textile Exchange’s large network of brands, retailers and manufacturers seeking organic cotton.

Our mission is to catalyse growth in sustainable organic cotton production. This means: growth that is based on economic fairness and returns, transparency in the supply chain, promotion of best practice business models, ensuring ethical conduct and good relations between farmers and the value chain - as well as environmental sustainability.

The broad skills mix of the Textile Exchange Farm Engagement Program allows us both to think and to do - to be an active promoter as well as an institute of learning and knowledge exchange.

HOW DOES FARM ENGAGEMENT WORK?

The Farm Engagement team work as facilitators, as a learning institution, and as a network and convener to support the growth and dissemination of knowledge and the creation of platforms to support organic cotton production. The Farm Engagement Programme is the farmer’s voice and advocate within Textile Exchange and the organic cotton market.

We focus on:
- Research and analysis
- Education and training
- Network building
- Farmers’ visibility
- Development of tools to support farmers in their work
- Monitoring and assessing farm level impacts of the organic cotton industry

Image: bioRe (Tanzania)
WHAT WE DO...

**Farmer Visibility Map**
To help raise the profile of small scale farmers growing organic cotton we have created an interactive farmer visibility map. The map gives organic fiber producers an unprecedented level of visibility and voice in the marketplace. Visit “Meet the Farmer” located on the Textile Exchange website and find out where the world’s organic farmers are located.

**Annual Farm & Fiber Report**
Every year we undertake a survey on fiber production and publish our Farm & Fiber Report. The Farm & Fiber Report informs Brands and Retailers about sourcing opportunities and also raises awareness of issues facing organic cotton farmers in production and sustainability. *This is the 5th Report. Back copies can be downloaded from our resource library.*

**Farmer sustainability assessment scorecards**
Textile Exchange’s assessment scorecards help organic cotton farmers understand, reflect and act on key issues for their ‘sustainable development’ and to hold conversations about these issues with brands, buyers and other interested stakeholders. *Find our latest report on our website.*

**Responsible production and trade in organic cotton**
We have spent considerable time researching price issues, profit distribution, sustainable pricing mechanisms, and business models that maximise farmer income. *A growing portfolio of case studies providing real-life examples of successful organic cotton businesses can be found in the Farm Hub.*

**Farmers’ Toolkit**
The Farmer Toolkit is a compilation of best practices - scientific research and farmers’ experiences on a range of agricultural and business issues. *You can find our Farmers’ Toolkit in the Farm Hub.*

**Engage**
Our global newsletter Our monthly farm bulletin brings relevant news, views and information to the organic cotton community (more than 500 Farm Groups) - in English, Spanish and French. *Join our mailing list to receive your copy each month or visit our website for back issues.*

**Field Visits**
Every year the Farm Engagement team visit organic cotton projects, for learning, knowledge exchange, and to provide information, training, and field demonstrations. *Check our website for dates of a regional meeting near you.*

**Project Start up Advice**
We offer advice and support to producer groups on a range of issues including project design, agronomics, business development and a range of other important issues.

**Regional Meetings**
Regional meetings in key organic cotton producing regions focus on farming, supply chain, and business management. We incorporate aspects of innovation, drill into challenges and opportunities for the sector, and showcase existing best practice. *Check our website for dates of a regional meeting near you.*

**Global Conference**
We add value to our members and stakeholders by joining once a year at our Global Conference to: create connections; leverage networks; collect, interpret, and communicate information and demonstrate leadership in effecting positive change. *The next conference will be held in Barcelona, Spain in September 2011.*
WHERE TO FIND US...

Textile Exchange’s Farm Engagement Team is headquartered in the USA with staff located in five countries across five continents.

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Please visit us soon at:
www.TextileExchange.org/FarmHub
APPENDIX 1:
CONVERSATIONS ABOUT PRICING

A select group of Textile Exchange members were asked to share their experience and thoughts on ‘pricing organic’ to give us a snap shot of what is happening in trade arrangements right now. The following responses give unique insight into the issues and challenges within the current structure of pricing organic cotton and how some of our leading organisations are dealing with them. For more information on pricing and value chain best practice see briefing in the Report Supplement.

“The prices we are paying to the farmers are the official prices (daily quoted in the local newspapers); then adding to that we have our own criteria which are giving the farmers a premium, based on the average of the past 5 years. However, due to the market fluctuation (which is huge) we are paying 2.5 times last year’s price. Today we are at a crucial point, where the retailers have to take a firm part in this partnership with the farmers; a long term obligation which the farmers still have to get used to, as well. This would mean slower performance for longer term obligations. This would be a fair trade approach. But the farmers are not yet ready. Especially now when the prices are climbing and when the conventional market is dramatic the farmers do not have time and are not eager to discuss continuity when the buyers are calling them with better prices.”

European Retailer

“We add 40-45 percent on top of the conventional price to make an organic price. The lower the price goes the higher the percentage of increase. We do have our base production cost, we do also have a farmers ‘get price’. The combination of the two makes the price. For instance we have USD 0.62/lbs, we have our production cost + farmers get price we then make a price of 40-50 percent on top of the conventional price. It’s very difficult to have a formula here as the government declares the farmers seed cotton get price. This is about 65-70 percent of the world market price. You have to add all other costs transportation, ginning, government cesses, operation and handling cost. I think if we can simply add between 40-50 percent more to the conventional price we can meet our price.”

Manager/Advisor of an organic cotton producer group, Africa

“At the beginning of the 2009-10 season the organic cotton price at the farmer level (seed cotton) was 1000 Uganda Shillings (equivalent to 0.45USD), the price for conventional cotton at this time was 900 Uganda Shillings (equivalent to 0.40USD). At the end of the same season, the organic price had moved to 1100 Ug. Shs (0.50USD) and the conventional price had moved to 1000 Uganda Shs (0.45USD). The prices for 2010-11 have not been ascertained because the buying season starts next month (December).”

CEO, Organic Agricultural Association, Africa
“The craziness in the conventional cotton market is creating havoc for both conventional and organic cotton. We are trying to work out something price wise that is high enough to keep our farmers on board but low enough that our customers can pay it. In general, we figure that the net price back to our farmers for organic cotton lint needs to be about $0.50 per pound higher than the average price received by conventional farmers. From an economic sustainability standpoint, this pricing structure will maintain our existing growers, but it is not sufficient to attract new growers here in the US.”

Manager, Organic cotton cooperative, United States of America

“For raw cotton, in 2009 harvest, we paid farmers EUR 0,250/kg and in 2010 harvest EUR 0,415/kg. The premium price for organic quality was 10 percent over the conventional. Prices in 2010 are good for farmers. I can say it is the minimum level they want, if it is less than this amount, they are discouraged from working with organic cotton. The mechanism is based on the average price that conventional cotton ginners are paying in Paraguay plus the premium for organic cotton which can go from 10-25 percent. We know the minimum price the farmers are waiting for, for their raw cotton, to get to this we have to balance the international market price for organic - then the money exchange - then the production volume which has to absorbed, the certification cost, and the technical assistance cost.

One thing about our market is that every year there is less conventional cotton, so it means a lot of competition between ginners to buy everything they can, so for this reason, sometimes the local price can be higher than the international market level, but we have to compete; always offering farmers at least the same price ginners are offering. If we cannot do it of course farmers sell their raw cotton to the best price possible (in this case we would lose the investments in organic: seeds, technical assistant, certification cost).

Price is a very important issue for any business of course, in our case being part of the organic cotton world, it is also very important to grow in many other areas like seed quality, yield, technical assistance, manufacturing, good quality and good looking final products, market development, etc.. Without those components, it is impossible to keep a long term commitment and business model because the premium between conventional and organic is very small. This is why the fairtrade projects are so important for develop; this is the real column in many business models we think.”

Commercial Manager, Latin America
“The price last year we paid for our cotton (un-certified organic) was 1050 Ugandan schillings per kilo of seed cotton. Exchange rate to dollar is roughly 2000 to the dollar. Given the crazy times, this year we will likely pay a min of 1900 Ugandan schillings per kilo for seed cotton.”

Organic cotton buyer, Africa

“This year with pricing both for organic and in-conversion cotton was very tough. The organic farmers in Kyrgyzstan export cotton fiber and the by-products (seeds and lint) are returned to farmers. The prices paid to farmers for 2009 and 2010 look as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Organic fiber price (KGS)</th>
<th>Conventional fiber price (KGS)</th>
<th>Difference (%)</th>
<th>Currency (USD-KGS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>30.46</td>
<td>24.5</td>
<td>24%</td>
<td>43</td>
</tr>
<tr>
<td>2010</td>
<td>49.60</td>
<td>54.0</td>
<td>-8%</td>
<td>46</td>
</tr>
</tbody>
</table>

The pricing mechanism was always local market price + 20 percent organic and Fairtrade premium. Usually it is not easy to find a buyer who is willing to pay Fairtrade premium. In 2009 the organic price was 24 percent higher than the local market price. This is a very positive side of organic farming to attract more farmers in the future. But in 2010 it was not possible to fix a price at certain point because it was increasing every day during the harvest season. This gives uncertainty and difficulties for the local organizations like Bio Farmer Cooperative and Bio Service Foundation (established by Helvetas, Bio Cotton Project) which are trying to establish serious business relations at export market. It was not easy for these young organizations to secure the volume of cotton with such volatile market. However, the organic farmers have full trust in the Bio Farmer Cooperative they delivered still some cotton”

Bio Cotton Project Coordinator, Kyrgyzstan

We quote conventional price + a percent premium. Conventional price already has a considerable premium over market average due to quality and scarcity. Prices in 2009 for fiber were between US$90 - $120 per quintal, depending on the variety, long or extra long. Prices in 2010 for fiber were between US$125-US$170 per quintal. Prices for 2009 were bad due to the crisis, in 2010 they were very good for farmers and probably sustainable for the industry. The prices we are anticipating for the 2011 harvest are exceptional, but I believe unsustainable for the industry. In our particular case we are finding Fairtrade very useful to gain loyalty among farmers, as they see more than just money, they are getting involved in the social activities we promote. However, we are just launching a pilot, so it is too early to tell.”

Company Director, Latin America
In the top 7-9 cotton growing states in India, local traders (mainly ginners and their agents) are procuring seed cotton directly from the farmers’ doorstep for not less than INR 4,000 to anything up to 4,600 (conversion 1 US$ = 45 INR / 1 Eu = 61.5 INR / 1 BP = 72.5 INR). This literally means that traders are happily paying 30-35 percent more than the government declared price (MSP INR 30 per kg of seed cotton). Traders are weighing the cotton at the farmers’ field, paying ready cash and taking delivery of cotton from the field; not enforcing any form of packing in bags (jute / cotton) which has additional costs. All this means people are willing to pay for cotton and cotton farmers.

The positive side to all this is:
- Better prices to cotton farmers
- Transparency in terms of weighing (weighed at farmer’s doorstep)
- Immediate payment
- Better wage realization by farm workers
- Traders forced to become fair

The negative side to all this from an organic & FT point of view are:
- The traders as well as the farmers (who are mostly smallholder and in rain fed regions) don’t differentiate between conventional and Organic/FT certified cotton (and why should they?)
- The OFT cotton is ending up in open markets mixed up with conventional cotton
- No clear advance guarantee from brands and buyers (dealing in OFT cotton) about quantities

In fact, while traders are taking risks and buying conventional cotton for a higher price and from the farmer’s doorstep, big brands wanting OFT cotton are the least committal and are either waiting for ‘prices to drop’ or ‘sitting on the fence’ and not very clear about their future position/stand.

If we want OFT cotton, then we need to pay farmers additionally for this and cannot expect OFT cotton to be competitive with conventional markets. One needs to understand that these would equally have a negative impact on other responsible cotton projects not only in India, but also in Africa and other regions! While I write this, I have to admit that to date more than 50 mt of OFT cotton lint produced by farmers in my producer group has already been sold in open markets because of non-availability of procurement funds and no formal commitment from buyers/brands. This is possibly the case with many OFT cotton projects in India and elsewhere.

Executive Director, Organic Farmer Association, India
APPENDIX 2:
DATA COLLECTION METHODOLOGY

Farm and fiber data in this report has been collected by the Textile Exchange farm engagement team; directly from producer groups, NGO colleagues, government officials, certification bodies and other industry stakeholders. Estimates have been made for data which are partly available. For example, in some cases, only seed cotton production volume was available, the cropped areas have to be estimated using the historical yield known for the specific project. The same is also valid for fiber volume if only seed cotton volumes are available; the estimation is done using the ginning out turn known for the country.

AFRICA: Collected and collated by Silvere Tovignan, regional director for Africa. Data were collected (by telephone, email and physical contact). Data was provided by projects or companies that are directly responsible for the management of ICS. In some cases, these data were cross checked with certification bodies or transaction partners of specific projects. Phil Monday, Pesticide Action Network UK and Hugo Lemon, Woolworths provided data for South Africa.

CHINA: Data for China have been provided by colleagues in China (Martin Ma, Solidaridad) and (Jens Soth, Helvetas). Both organisations are working in China with cotton growers, investors and representatives of the Chinese government.

EUROPE, MIDDLE EAST & NORTH AFRICA: Collected and collated by Liesl Truscott, farm engagement director during field visit to Turkey and Egypt; interviews were held with producer groups, textile companies and other industry representatives. Data for Greece collected via phone interviews. Data for Syria collected via interview with producer group representatives. Helvetas projects provided data for Kyrgyzstan and Tajikistan via Textile Exchange Farmer Portal, cross checked by senior Helvetas staff.

LATIN AMERICA: Collected and collated by Latin American regional director Alfonso Lizarraga and assisted by Doraliz Aranda, Market Development Manger. Initially all Latin American Producer Groups (in Argentina, Brazil, Colombia, Nicaragua, Paraguay and Peru) provided data through the Farm Hub global on-line survey. Survey completion was followed by interviews (telephone and in-person). In addition, some representatives of certifier companies and government offices were interviewed.

SE ASIA: India - Collected and collated by Prabha Nagarajan, regional director for India, via visits and telephone interviews with individual farm groups, certifying bodies, Government bodies, civil society groups, and stakeholder groups working or sourcing from India. Pakistan - Data input by individual producer groups into Farmer Portal and cross-checked by farm engagement director.

UNITED STATES: Collected via interview and collated by Ashley Currin, supply chain specialist and checked against third party records.
APPENDIX 3:
GLOSSARY

Aid for Trade: Assistance offered by the WTO to developing countries to assist with the adjustment to trade liberalisation and the utilisation of open markets, with the intention of stimulating economic growth and poverty reduction.

Agro-ecological agriculture: Agro-ecology is concerned with the maintenance of a productive agriculture that sustains yields and optimizes the use of local resources while minimizing the negative environmental and socio-economic impacts of modern technologies.

Biodynamic agriculture: is the oldest consciously organic approach to farming and gardening. It is founded on a holistic and spiritual understanding of nature and the human being and builds on the pioneering research work of Rudolf Steiner.

Cash Crop: A crop grown for direct sale rather than subsistence crops which, for example, are grown for home consumption and to feed livestock.

Common Agricultural Policy (CAP): CAP is a system of European Union agricultural subsidies and programmes. It represents 48 percent of the EU’s budget, €49.8 billion in 2006 (up from €48.5 billion in 2005). The CAP combines a direct subsidy payment for crops and land which may be cultivated with price support mechanisms, including guaranteed minimum prices, import tariffs and quotas on certain goods from outside the EU. Reforms of the system are currently underway reducing import controls and transferring subsidy to land stewardship rather than specific crop production (phased from 2004 to 2012).

Conventional cotton: For the purpose of this report ‘conventional’ includes all mainstream cotton i.e. not grown organically, agro-ecologically, biodynamically (or to fairtrade standards). Conventional cotton is typically grown using synthetic chemicals (pesticides and fertilizers and defoliants) and can be genetically modified. These days much conventional cotton growing follows some ‘integrated pest management’ (IPM) principles.

Cotton in-conversion: Organic cotton in conversion is grown on land which has only recently been converted to organic methods (typically less than 2 or 3 years). Therefore, although no chemical pesticides and synthetic fertilizers are being used, residues may still be found in the soil. This conversion period can be difficult for farmers, who usually experience an initial drop in yield, while not being able to obtain premium organic price for their crops.

Cottonseed: Cottonseed is the seed of cotton after the lint has been removed. It is a source of cottonseed oil, the residue is used as a stock feed.

Extension Services: ‘Extension’ has been recently defined as “systems that facilitate the access of farmers, their organizations and other market actors to knowledge, information and technologies; facilitate their interaction with partners in research, education, agribusiness, and other relevant institutions; and assist them to develop their own technical, organizational and management skills and practices”. (Christoplos, 2010)

Fairtrade Premium: Money paid (on top of the Fairtrade minimum price) as part of a contractual arrangement between producers and traders that is invested in social, environmental and economic development projects. Projects are decided upon democratically by producers within the organisation or by workers on a plantation.

Fiber (see Lint): develops as an extension of cells in the walls of the developing cotton seed.

Food security: The World Food Summit of 1996 defined food security as existing “when all
people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life”. Commonly, the concept of food security is defined as including both physical and economic access to food that meets people’s dietary needs as well as their food preferences. In many countries, health problems related to dietary excess are an ever increasing threat. In fact, malnutrition and foodborne diarrhoea are become double burden. Food security is built on three pillars:

- Food availability: sufficient quantities of food available on a consistent basis.
- Food access: having sufficient resources to obtain appropriate foods for a nutritious diet.
- Food use: appropriate use based on knowledge of basic nutrition and care, as well as adequate water and sanitation.

**Genetic engineering**: is the transfer of genetic characters between species to enhance the performance of the recipient species in some specific characteristic. Different types of Genetically modified (GM) cotton do different things. Herbicide resistant cotton can be sprayed with particular herbicides without dying; with the objective of allowing herbicides to be sprayed on weeds without harming the GM cotton plant. The insecticide resistant GM cotton contains two genes that kill particular insects. In this case the Cotton Bollworm and the Native Budworm will die when they eat the GM cotton. Other insects however are not affected by the GM cotton.

**Ginning**: the process of separating the cotton fiber from the seed. Ginning can be either by roller or by saw and takes place in a cotton gin. Ginned cotton lint is compressed into bales.

**Integrated Pest Management (IPM)**: A system of pest management that incorporates all aspects of pest control, including cultural practices, biological control, natural control, pheromones and discriminate chemical control.

**Internal Control System (ICS)**: An Internal Control System (ICS) is the part of a documented quality assurance system that allows an external certification body to delegate the periodical inspection of individual group members to an identified body or unit within the certified operator. This means that the third party certification bodies only have to inspect the well-functioning of the system, as well as to perform a few spot-check re-inspections of individual smallholders (IFOAM)

**Lint**: The lint is the cotton fiber obtained by the ginning process once the cotton seed, leaves and casings have been removed.

**Organic agriculture**: Organic production is an overall system of farm management and food production that combines best environmental practices, a high level of biodiversity, the preservation of natural resources, the application of high animal welfare standards and a production method in line with the preference of certain consumers for products produced using natural substances and processes. The organic production method thus plays a dual societal role, where it on the one hand provides for a specific market responding to a consumer demand for organic products, and on the other hand delivers public goods contributing to the protection of the environment and animal welfare, as well as to rural development.

**Organic cotton project**: Is an initiative to set up an organic cotton business; with a defined start and end to the intervention. Projects are often initiated by an NGO or development group supporting growers in a developing country.
Organic farm systems: Organic cotton is not usually grown on its own (as a monoculture). It requires a variety of crops performing special roles to support the organic nature of the farm system. This means each crop grown on the farm has a role to play in supporting the viability of the organic farm system to produce cotton — and thus the livelihood of the small scale farmer. The role each crop plays will vary — for example it might contribute to soil fertility (rotation crop), help control pests (trap crop), keep the family food secure or be a valuable cash crop. Food for personal consumption, and further income from local, regional or export market contributes to the socio-economic viability of the farm system.

Producer group: Is a group of farmers working collaboratively to produce organic cotton to economic scales. The group is usually defined by geographical location such as village. The cooperative nature of the group enables the structure, organisation and various specialised roles to develop (such as leadership, marketing, administration, ICS, training management) necessary to build a successful business. A producer group may be a cooperative, NGO-supported project, company, independent farmer association and so on.

Small scale farming: For developing countries, small-scale farmers are usually defined as those farming two hectares or less. In other parts of the world, small-scale farmers have much larger land bases. Marginal farmers own very small amount of land (usually less than a hectare).

Subsidy: A sum of money granted by the state or a public body to help an industry or business keep the price of a commodity low, usually to encourage production or consumption or to help the business to be more competitive. Subsidies which stimulate over production causing prices to fall are trade distorting.

Trading: Spot trading is any transaction where delivery either takes place immediately, or with a minimum lag between the trade and delivery due to technical constraints. Commodity markets are markets where raw or primary products are exchanged. These raw commodities are traded on regulated commodities exchanges, in which they are bought and sold in standardized contracts. Commodity and futures contracts are based on what’s termed forward contracts. Early on these forward contracts — agreements to buy now, pay and deliver later — were used as a way of getting products from producer to the consumer. Forward contracts have evolved and have been standardized into what we know today as futures contracts. The Cotlook A Index is intended to be representative of the level of offering prices on the international raw cotton market. It is an average of the cheapest five quotations from a selection of the principal upland cottons traded internationally.

Value Chain: A chain of activities in which the product (cotton) gains in value on its downstream journey from production to final consumption.
APPENDIX 4: MEASUREMENTS USED IN COTTON

Bale: is a package of compressed cotton lint after ginning, tied with wire or metal bands and wrapped in cotton, jute or polypropylene. Bales vary in weight in different countries but the universal density bale weighs 218 to 225 kg, has a density of 448 kg/m3 and measures nominally 1.400 X 0.53 X 0.69 m. A ‘bale’ is a basic tradable unit of lint (ginned cotton). Bale weights vary from country to country. By convention, a ‘statistical’ bale weighs 480 lbs.

Classification: Cotton fiber is classified in four ways, by its length, micronaire, strength and uniformity.

Fiber staple length categories: Cotton fibers may be classified roughly into three large groups, based on staple length (average length of the fibers making up a sample or bale of cotton) and appearance.

Short staple - includes the coarser cottons, ranging from about 10 to 25 mm in length, used to make carpets and blankets, coarse and inexpensive fabrics, and blends with other fibers. Medium staple - contains the standard medium-staple cotton, such as American Upland, with staple length from about 25 to 30 mm. Long and Extra Long staple - includes the fine, lustrous fibers with staple length ranging from about 30 to 65 mm and includes types of the highest quality—such as Sea Island, Egyptian, and pima cottons. Least plentiful and more difficult to grow, long-staple cottons are used mainly for fine fabrics, yarns, and hosiery.

<table>
<thead>
<tr>
<th>Staple classification</th>
<th>Length (mm)</th>
<th>Length (inches)</th>
<th>Spinning Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short</td>
<td>Less than 25</td>
<td>15/16 – 1</td>
<td>Coarse Below 20</td>
</tr>
<tr>
<td>Medium</td>
<td>25 - 30</td>
<td>1.1/132 - 1.3/32</td>
<td>Medium Count 20s-34s</td>
</tr>
<tr>
<td>Long</td>
<td>30 - 37</td>
<td>1.3/32 - 1.3/8</td>
<td>Fine Count 34s - 60s</td>
</tr>
<tr>
<td>Extra Long</td>
<td>Over 37</td>
<td>1.3/8 - 1.9/16</td>
<td>Superfine Count 80s - 140s</td>
</tr>
</tbody>
</table>

Ginning Outturn (GOT): the ratio of lint to seed cotton produced by the ginning process. Efficiencies range from approximately 20 percent (low) to 45 percent (high).

Metric Ton (mt): is the internationally recognised measurement for weighting cotton. A metric ton (mt) is 1000kgs (2205 pounds). One American bale is 400-500 pounds (0.218 mt).

Micronaire: The size of an individual cotton fiber taken in cross-section. Usually the Micronaire value is referred to evaluate fineness of Cotton and its suitability for spinning particular count of Yarn.

Quintal: In India, France and the former Soviet Union, the quintal is equivalent to 100 kilogram. In Peru 1 quintal = 46 kg. In Spain, the metric quintal is also defined as 100 kg. In Portugal a quintal is about 58.75 kg. The German Zentner is pound-based, and thus since metrification is defined as 50 kg, whereas the Austrian and Swiss Zentner since metrification is 100 kg.

APPENDIX 5: ORGANIC CERTIFICATION OPTIONS

Background: Organic standards have long been used to create an agreement within organic agriculture about what an “organic” claim on a product means, and to some extent, to inform consumers. Regional groups of organic farmers and their supporters began developing organic standards as early as in the 1940’s. Currently there are hundreds of private organic standards worldwide; and in addition, organic standards have been codified in the technical regulations of more than 60 governments.

Organic certification was first instituted in the 1970’s by the same regional organic farming groups that first developed organic standards. In the early years, the farmers inspected one another on a voluntary basis, according to quite a general set of standards. Today third-party certification is a much more complex and formal process. Although certification started as a voluntary activity, the market began to demand it for sales transactions, and now it is required by the regulations of many governments for any kind of an “organic” claim on a product label. IFOAM’s Organic Guarantee System (OGS) is designed to a) facilitate the development of organic standards and third-party certification worldwide, and to b) provide an international guarantee of these standards and organic certification. The IFOAM Basic Standards and the Accreditation Criteria are two of the main components of the OGS. Visit the Organic Guarantee System Section on this website for further information.

Internationally, equivalency negotiations are underway, and some agreements are already in place, to harmonize certification between countries, and facilitate international trade. There are also international certification bodies, including members of the International Federation of Organic Agriculture Movements (IFOAM) working on harmonization efforts. Where formal agreements do not exist between countries, organic product for export is often certified by agencies from the importing countries, who may establish permanent foreign offices for this purpose (IFOAM). http://www.ifoam.org/about_ifoam/standards/index.html

Organic cotton has the advantage of following internationally recognized organic farming standards that are enshrined in law. Below are some of the most commonly recognised, internationally. Keep in mind that different countries may recognise different programmes, standards are not exactly the same, and they are being updated all the time.


National Organic Program (NOP) 
The United States Department of Agriculture USDA's National Organic Program regulates the standards for any farm, wild crop harvesting, or handling operation that wants to sell an agricultural product as organically produced. http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5060370&acct=nopgeninfo

National Standards for Organic Production (NPOP) The NPOP for India is operated by the Agricultural and Processed Food Products Export Development Authority (APEDA), established by the Government of India under the Agricultural and Processed Food Products Export Development Authority Act passed by the Parliament in December, 1985. The NPOP standards for production and accreditation system have been recognized by European Commission and Switzerland as equivalent to their country standards. Similarly, USDA has recognized NPOP conformity assessment procedures of accreditation as equivalent to that of US. http://indocert.org/images/downloads/D.1.2%20PR%20Procedure%20for%20Organic%20Certification.pdf

Global Organic Textile Standard (GOTS) GOTS covers the production, processing, manufacturing, packaging, labelling, exportation, importation and distribution of all natural fibers. The final products may include, but are not limited to fiber products, yarns, fabrics and clothes. This standard ensures that the organic status is maintained from the harvesting of the raw materials, (cotton for example) through environmentally and socially responsible manufacturing up to labelling, in order to provide a credible assurance to the end consumer. Products that are produced and manufactured in full compliance with this international organic standard should be labelled as conforming to the Global Organic Textile Standard. http://www.global-standard.org/certification.html

OE 100 Standard The Organic Exchange 100 Standard (OE 100) is a standard for tracking and documenting the purchase, handling, and use of 100 percent certified organically farmed cotton fiber (or organic-in-conversion cotton fiber) in yarns, fabrics and finished goods.

OE Blended The Organic Exchange Blended Standard (OE Blended) is a standard for tracking and documenting the purchase, handling, and use of certified organically farmed cotton fiber (or organic-in-conversion cotton fiber) in blended yarns, fabrics, and finished goods. The standard applies to all goods containing a minimum of 5 percent organic, or organic-in-conversion, cotton.
APPENDIX 6: REFERENCES

Information, data and statistics on organic cotton production etc. has been gleaned by Textile Exchange through our member organisations. Supporting information, data and statistics provided in this report have been sourced from reputable sector and stakeholder bodies listed below.

APAARI (Asia Pacific Association of Agricultural Research Institutes) www.apaari.org
EJF (Environmental Justice Foundation) http://www.ejfoundation.org
FLO (Fairtrade Labelling Organisation) http://www.fairtrade.net
Helvetas http://www.helvetas.ch/wEnglish/index.asp
ICCO (Inter church organisation for development cooperation http://www.icco.nl/en/home
IFOAM (International Federation of Organic Agriculture Movements) http://www.ifoam.org
FAO (Food and Agriculture Organisation) http://www.fao.org
UNEP (United Nations Environment Programme) http://www.unep.org
National Cotton Council of America http://www.cotton.org
PANNA (Pesticide Action Network North America) http://www.panna.org
PAN UK (Pesticide Action Network United Kingdom) http://www.pan-uk.org
Solidaridad http://www.solidaridadnetwork.org
USDA Economic and Statistics System http://usda.mannlib.cornell.edu/MannUsda/homepage.do;jsessionid=23D1EB0C7D8194FB2ABC14499CF512A0
A Unique Focus on the Entire Value Chain - Improving the Lives of Over One Million People

Through the work of Textile Exchange, and funding from our key partner ICCO, we now positively affect the lives of over 275,000 organic cotton farmers worldwide. Conservative estimates show that each farmer in the Global South has responsibility for a household of five people. This means that TE programs have directly and positively impacted the lives of over 1.4 million people in developing countries.

TE’s methodology is unique and innovative in many respects, including:

• Textile Exchange takes a global approach to developing markets. This is particularly effective given the global nature of cotton production and consumption.

• We build demand and supply simultaneously. Engaging with farmers through to brand and retailers to help increase responsible fiber production and enable suppliers to create short- and long-term production schedules. Our efforts culminate in consumer education, highlighting farmers and farming innovations, beautiful yarns and fabrics, and highly desirable products.

• Textile Exchange is unique in that we focus on the entire value chain, from seed procurement through to retail. We provide models and tools for collaborative planning, problem solving, product development, and point of purchase materials.

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