

Sowing the Seeds of Change: Weaving Innovation and Integrity into Organic Agriculture



Together we make
a world of difference

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Breaking with Convention: Making an Impact One Fibre at a Time



The growth of the organic cotton sector has been considerable over the past five years. The positive environmental and social benefits at the farm level have become increasingly apparent to non-governmental organizations, government bodies and brands while becoming of greater importance to the general public. No longer is organic cotton a story of lower yields for higher incomes; it's a story of innovation and discovery. It's a story that is just beginning – one that clearly demonstrates the healthy alternatives to conventional agriculture that do not involve the use of harmful chemicals.

For many early innovators in the organic movement, there was nothing quite like experiencing firsthand the contrast between conventional farmers who live day to day under a mountain of debt and health problems, and organic farmers who empower themselves and their families within a few short years and develop amazing joy, humour, and confidence in their ownership of a healthy, collaborative solution.

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1. Tradition or Innovation?

In the not-so-distant past, farming without synthetic chemicals was considered to be the standard method of farming and was practised around the world for hundreds of years before the advent of modern agricultural chemicals. After synthetic chemicals were introduced to farmers, old farming methods were quickly subsumed by what is now termed “conventional” farming. Farmers saw and enjoyed a seemingly easy way to eradicate insects, weeds and other pests. What conventional farming failed to consider were the short, medium and long term effects of chemical exposure on people and the environment. As the effects of agricultural chemical exposure have not been well documented until fairly recently, the conventional cotton industry has easily been able to position modern organic farming as the same traditional, untried, unstable, and unaffordable production system, unable to provide adequate fibre volume to meet customer demand, despite its many success stories.

While that position has provided a convenient method of promoting conventional cotton fibre for many years, more and more brands have become well versed and highly experienced in social and environmental responsibility, including specific areas like textile chemistry and farming practices. Equipped with this knowledge, brands and their supply chains are now able to make informed sourcing choices. The choice to use organic versus conventional cotton is just that: a choice. But it's one that, like organic farming, works with instead

of against nature and one that aligns with the evolving environmental and social values of an increasing number of brands, organisations and consumers.

Organic farmers are true innovators in today's agricultural world, often working with extremely limited funds, without sophisticated scientists and laboratories and without ready access to or influence on corporate boardrooms. Even with these limitations, they produce high quality food and fibre without damaging their productive base. These farmers often achieve impressive results in water conservation (*see examples in the India section*) and the restoration of soil fertility, and develop an intimate understanding of how their crops interact with the wider farm environment.

Organic farmers usually achieve higher incomes than their conventional counterparts. On a trip to India in 2006, Organic Exchange staff asked seven groups of farmers to compare their experiences before and after transitioning to organic cotton with regard to income, personal health, environmental health, and social development. Six farm groups reported much higher incomes and similar or higher yields per acre. The seventh farm group reported the same level of income as with conventional, but lower health costs from reduced exposure to pesticides.

One of these groups has also developed a successful water harvesting and conservation system, generating hundreds of thousands of litres of water each year, which provides more than enough for its irrigation needs (*see India section*).

The organic crop yields reported in this book currently include farmers in conversion, which occurs over a period of three years, and thus may seem lower than conventional yields. A quick glance at accomplished organic farmers tells a different story. Experienced, innovative organic farmers achieve similar or higher yields, although many choose to emphasise diversity of crops, and thus more secure income, over a single cash crop.

An extensive review of yields over time might also show that organic fields stay productive longer and that after five to seven years, most organic cotton farmers obtain similar yields as conventional farmers.





2. Organic Cotton in 2006

2.1. A Look at Global Organic Cotton Production

The global organic cotton fibre supply has increased 292%¹ from a 2000-01 harvest of 6,480 metric tonnes to the 2004-05 harvest of 25,394 metric tonnes. Supplies are projected to grow to 31,017 metric tonnes (68,237,400 pounds or 142,161 bales) by the end of the 2005-06 harvest, reflecting an annual growth rate of 22%.

During the 2004-05 harvest, cotton was produced in twenty-two countries with Turkey growing 40%, India 25%, the United States 7.7% and China 7.3% respectively. In 2005-06, these four countries combined are projected to produce 79% of the global organic cotton fibre crop.²

All existing organic cotton producer groups are expected to maintain or slightly expand production for the 2006-07 harvest, and a small number of new projects growing cotton for the general market are expected to begin organic production in 2006-07. Additional projects that currently grow cotton exclusively for specific customers are expected to expand their customer base beginning with the 2007-08 harvest.

Organic cotton fibre supply and demand has gone through several phases of development in the past fifteen years. These phases 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.³ The current phase of development shows increased organic cotton production and trade,

improved supply chains and fibre quality and rapid growth in demand.

The first phase of organic fibre production began in the United States and Turkey in the late 1980s.⁴ These countries were soon followed by Sub-Saharan Africa, predominantly Egypt and Uganda, India, and

Peru. Some production was initiated by companies seeking to create new models of doing business; some were started by farmers seeking new markets and better ways of living; and several were started as development projects by an assortment of non-governmental organizations.

1992-2001 Organic Cotton Production Worldwide by Country (in metric tonnes)

	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01
Argentina	-	-	75	75	-	-	-	-	-
Australia	500	500	750	400	300	300	-	-	-
Brazil	-	1	5	1	1	1	5	10	20
Benin	-	-	-	-	1	5	20	20	30
Egypt	50	150	600	650	625	500	350	200	200
Greece	-	-	300	150	125	100	75	50	50
India	200	250	400	925	850	1,000	825	1,150	1,000
Israel	-	-	-	50	50	20	140	180	530
Kenya	-	-	-	-	-	5	5	5	-
Mozambique	-	-	-	100	75	50	-	-	-
Nicaragua	-	-	20	20	20	20	-	-	-
Paraguay	-	100	75	50	50	50	-	-	-
Peru	200	675	900	900	600	650	650	500	550
Senegal	-	-	-	1	10	10	50	125	200
Tanzania	-	-	-	10	100	100	100	200	250
Turkey	125	200	600	725	850	1,000	1,200	2,000	1,750
Uganda	-	-	25	75	300	450	250	200	275
USA	1,000	1,950	2,400	3,350	1,550	1,300	1,900	2,900	1,625
Zimbabwe	-	-	-	-	-	1	5	5	-
Total in Metric Tonnes	2,075	3,826	6,150	7,482	5,507	5,562	5,575	7,545	6,480
Total in Bales	9,510	17,535	28,188	34,292	25,240	25,493	25,552	34,581	29,700

Source: Ton (2002) updated in Ferrigno et al., 2006

Conversion Note: 2,200 pounds are in a Metric Tonne, and 480 pounds in a bale.

1. See Organic Exchange 2006 Spring Fibre Report for more information
2. Ibid
3. Ton, 2002, Myers and Stolton 1999
4. Ton, 2002

2004-05 Organic Cotton Stocks and Fibre Production by Country (in metric tonnes)

	BEGINNING STOCK AUGUST 1	HARVEST	SALES / COMMITMENTS	ENDING STOCK	% OF PRODUCTION	FIBRE TYPE
Benin	199	67	230	36	0.26%	Medium*
Burkina Faso	0	45	30	15	0.18%	Medium
Kenya	0	2	0	2	0.01%	Medium
Malawi	0	0	0	0	0.00%	—
Mali	0	296	296	0	1.17%	Medium
Senegal	5	27	14	17	0.11%	Medium
Tanzania	0	1,213	1,213	0	4.78%	Medium
Togo	0	0	0	0	0.00%	Medium
Uganda	400	900	500	800	3.54%	Medium
Zambia	0	2	0	2	0.01%	Medium
Zimbabwe	0	0	0	0	0.00%	Medium
India	930	6,320	5,213	2,037	24.89%	Medium
Pakistan	0	600	600	0	2.36%	Medium
Israel	0	436	436	0	1.72%	Medium
Egypt	0	240	240	0	0.95%	ELS**
Nepal	0	0	0	0	0.00%	Short***
Kyrgyzstan	0	65	65	0	0.26%	Medium
China	20	1,870	1,470	420	7.36%	Medium
Paraguay	34	70	70	34	0.28%	Medium
Peru	100	813	775	138	3.20%	Medium & ELS
Turkey	0	10,460	10,460	0	41.19%	Medium
USA	0	1,968	1,968	0	7.75%	Medium & ELS
Total	1,683	25,394	23,580	3,502	100.00%	

* Medium Staples are 24-30mm in length.

** ELS stands for Extra Long Staples such as Tangus, Pima and Egyptian with staple lengths over 30mm.

*** Short Staples are less than 24mm.

2005-06 Organic Cotton Stocks and Fibre Production by Region (in metric tonnes, predicted)

	BEGINNING STOCK AUGUST 1	HARVEST	SALES / COMMITMENTS	ENDING STOCK	% OF PRODUCTION
Southeast Asia (Pakistan/India)	2,037.00	10,834.86	11,835.00	1,036.86	34.93%
Middle East (Turkey, Israel)	0.00	10,760.00	10,700.00	60.00	34.69%
China	420.00	2,531.60	2,630.00	321.60	8.16%
Other Africa	804.38	2,469.60	2,859.00	414.98	7.96%
North America (USA)	0.00	1,867.64	1,868.00	0.00	6.02%
Latin America	172.00	1,188.00	1,035.00	325.00	3.83%
Africa CFA zone	68.50	1,014.95	1,049.00	34.45	3.27%
North Africa	0.00	240.00	240.00	0.00	0.77%
CIS (Commonwealth of Independent States)	0.00	110.00	110.00	0.00	0.35%
EU, Central Europe	0.00	0.00	0.00	0.00	0.00%
Central America	0.00	0.00	0.00	0.00	0.00%
East Asia / Australia	0.00	0.00	0.00	0.00	0.00%
Total in Metric Tonnes	3,501.88	31,016.65	32,326.00	2,192.89	100.00%
Total in Bales	16,050.28	142,159.65	148,160.83	10,050.75	



2.2. Regional Changes

On a regional level, major organic production increases have occurred from highest to lowest respectively in Southeast Asia (India and Pakistan) at 692%; the Middle East (Turkey and Israel) at 478%; and Africa at 403%.

Other regions have also seen growth with the lowest recorded data in North Africa at 120% followed by North America at 121%. Growth in Africa has been mostly in East Africa in the non-CFA* region where conventional cotton production is simultaneously decreasing.

Based on current projections, the Southeast Asia region will overtake the Middle East as the leading production region in 2005-06, with China overtaking Africa's non-CFA region as the world's third largest producer of certified organic cotton.

Some countries, Greece in particular, have appeared to cease organic cotton production. New production countries include Pakistan and Kyrgyzstan along with African countries Mali, Burkina Faso, Togo, Kenya and Zambia. Both Tanzania and Uganda have seen major growth. In Latin America, production is now underway again in Paraguay. China is now also a major organic cotton grower, and organic cotton trials in Spain are commencing in 2006.

* CFA refers to the CFA Franc Zone including Benin, Burkina Faso, Mali, Ivory Coast, Togo, Niger, and other Francophone West and Central African Countries.

