

# Organic cotton: A route to eco-friendly textiles

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Over the past decade, a small number of farmers and manufacturers have pioneered the market for organically grown cotton producing fibres and clothing, due a concern for family health due to pesticides and harmful chemicals. Nowadays, Global sales of organic cotton apparel and home textile products reached an estimated \$3.2 billion in 2008, according to the Organic Cotton Market Report 2007-2008. This represents a 63% increase from the \$1.9 billion market in 2007. Womens' clothing accounted for 36% of total organic fiber consumer sales in 2008. Mens' and child/teen clothing grew 56% and 52%, while infant's clothing/cloth diapers grew 40% in sales. Organic fashion means clothes which have been made with a minimum use of chemicals and with minimum damage to the environment. This includes chemicals used during every step in the process, from growing cotton, to the dyeing and finishing of the fabric.

The fashion industry has an enormous impact on the environment. Many of the clothes we wear today are made from synthetic materials that are made from petrochemicals. The synthetic materials such as nylon and polyester are made from petrochemicals, which are very polluting to the environment, causing global warming. They are also non-biodegradable, which means they don't break down easily and so are difficult to dispose of. In order to manufacture nylon, nitrous oxide is released as part of the process. Nitrous oxide is a greenhouse gas that is 310 times stronger than carbon dioxide and causes global warming. In 1998, Nike, one of the largest sports clothing lines in the world, decided to incorporate organic practices. Most of their products contain 3%-5% organic fibres and they also offer a 100% organic line. Nike alone uses nearly three-million pounds of organic cotton per year and other large companies such as Patagonia, Timberland, and Orvis also incorporate organic fibres into their clothing lines; without public support these companies would not be successful. Apparel companies are developing programs that either use 100% organically grown cotton, or blend small percentages of organic cotton with conventional cotton in their products. There are a number of companies driving the expanded use of domestic and international organic cotton.

A wide variety of products made from organically grown cotton is now available: shirts and pants, socks, underwear, skirts and blouses, sheets and pillowcases, towels and bathrobes. The range of styles can be somewhat limited, but new styles are being developed to keep pace with the growing demand for organic cotton clothing. The top ten organic cotton-using brands and retailers globally were Wal-Mart (USA), C&A (Belgium), Nike (USA), H&M (Sweden), Zara (Spain), Anvil (USA), Coop Switzerland, Pottery Barn (USA), Greensource (USA), and Hess Natur (Germany).

As a result of consumer interest, organic cotton fiber is used in everything, from personal care items (sanitary products, make-up removal pads, cotton puffs and ear swabs), to home furnishings (towels, bathrobes, sheets, blankets, bedding), children's products (toys, diapers), clothes of all kinds and styles (whether for lounging, sports or the workplace), and even stationery and note cards. Global sale of organic cotton products increased from US \$1.07 billion in 2006 to US \$ 3.23 billion in 2008, thus showing an average increase of 54% per annum. Global sales of organic cotton fabrics are in this table.

Global Sales of Organic Cotton Products	
Year	Sales (US \$ Million)
2000	245
2005	583
2006	1,073
2007	1,911
2008	3,230

Source: Various issues of Organic Cotton Market Reports.

Most brands and retailers selling organic cotton products remain committed to their sustainability plans and upbeat about market growth with plans to expand their product lines by 24% and 33% in 2009 and 2010, respectively, which is estimated as \$4 billion market in 2009 and a \$5.3 billion market in 2010.

Organic cotton is grown using methods and materials that have a low impact on the environment. Organic production systems replenish and maintain soil fertility, reduce the use of toxic and persistent pesticides and fertilizers, and build biologically diverse agriculture. Third-party certification organizations verify that organic producers use only methods and materials allowed in organic production. Organic cotton is grown without the use of toxic and persistent pesticides and synthetic fertilizers. In addition, federal regulations prohibit the use of genetically engineered seed for organic farming. Organic cotton grown by farmers worldwide increased from 40,322 metric tons in 2006 to 145,872 metric tons equaling 668,581 bales in 2008, grown on 161,000 hectares in 22 countries.

India took over Turkey's long-standing position as the leader, seeing its production increase by 292% to reach 73,702 metric tons, or about half of world organic cotton production. Other leading organic cotton producers, according to rank are Syria, Turkey, China, Tanzania, United States, Uganda, Peru, Egypt and Burkina Faso. During 2008, certified organic cotton fibre supplies grew by 95%, significantly higher than annual growth rates of 45% in 2006 and 53% in 2007. According to the report, the production increase was driven in large part by the heightened demand for organic cotton from small- to large-sized retailers around the world.

Organic cotton farmers saw the range in average price they received per pound increase from between \$0.85 and \$1.25 for organic upland cotton in 2006 to between \$1 and \$1.50 in 2008. Organic pima cotton farmers saw a similar increase in price, ranging from \$1.65 to \$2.09 in 2006 to \$1.05 to \$3 in 2008. Global production and demand of organic cotton is given table as under:

Organic cotton production means not only the absence of inorganic synthetic fertilizers, pesticides and the elimination of growth regulators and defoliants, but it involves very careful planning of the whole farming system. Organic cotton is not only better for bodies but better for environment. It makes a world of difference in the health and comfort of people, especially those with allergies, asthma, or multiple chemical sensitivities. Especially infants can enjoy the purest softness, comfort and strength of cotton, while diminishing the harm to environment because what is toxic to an adult is 15 times more toxic to a baby. Not only do these synthetic pesticides pollute air, water and soil, but they jeopardize our future.

Global production & demand of organic cotton (Metric Tons)		
Year	Production	Demand
2000	6,480	5,720
2004	25,394	23,580
2005	31,017	32,326
2006	40,322	44,541
2007	57,932	61,025
2008	145,872	120,500

Source: Various issues of Organic Cotton Market reports.

## References

1. Organic Cotton Farm and Fiber Report -2008.
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