for a living planet®

August 2009

Commodity Fact Sheet – Cotton

A. What is cotton and why is it a problem?

Cotton boll

Cotton is the raw material for 40-50% of all textiles (apparel, home textiles, etc.) and accounts for 85% of all natural fibers followed by wool, linen and hemp. There are two major cotton species in current production - G. hirsutum, commonly known as upland cotton, and G. barbadense or pima cotton. Cotton cultivation methods put stress on the environment and on the people who produce it. Cotton is a thirsty and pest sensitive crop. 8-10% of pesticides produced globally are used on cotton, even so cotton is only grown on 2.4% of global arable land, threatening human and ecosystem health. Working conditions in cotton production are often unfavourable, including cases of child labour and bonded labour.

B. Size of the global market

The **global textile market** – of which 43.5% is apparel, 33% interior and home textiles, and 23.5% industrial and technical textiles - is worth more than $400 billion at present. It is expected that China will represent around 45% and India around 20% of global trade in textiles by 2010. The global average of per capita textile consumption is 6.8 kg/ year (17.7 kg in developed countries and 4.5 kg in developing countries (ref.: Textile Exchange).
The **world cotton market** is volatile with production, consumption and price patterns rapidly changing. Cotton competes with polyester and other fibers for market share at the retail level. Cotton's share of world fiber use fell from 60% in the 1960's to 50% in the 1980's and is 37% in 2009. Considering that cotton represents about 40% of the global textile market, the value of the global cotton market is estimated to be well beyond $100 billion. Based on a cotton price of about 60 cents/ lb, the yearly global cotton production has a raw material value of over $30 billion. Total global cotton production fluctuated around 25 million tons over the last few years with an estimated production of 23.4 million tons in the growing season 2008/ 09 (ref.: ICAC). Cotton is grown in around 60 countries involving 250 to 300 million people worldwide. Most cotton farmers live in developing or emerging countries, many of them farming on small plots of land of often less than 5ha. Average cotton yield has increased globally from 574 to 771 kg/ha over the last 20 years.

C. Key regional and domestic markets

The main producers are China, India, United States, Pakistan and Brazil. The main consuming countries for raw cotton are China, India and Pakistan (see Table 1).

Table 1: **World Cotton Production and Consumption 2008/09** (ref.: ICAC, Washington)

Producer	Million tons	%
China	8.03	34
India	4.93	21
United States	2.79	12
Pakistan	1.96	8
Brazil	1.19	5
Uzbekistan	1.00	4
Turkey	0.45	2
Others	3.028	13
World	23.38	100

Consumers	Million tons	%
China	9.00	39
India	3.77	16
Pakistan	2.45	11
Turkey	1.09	5
Brazil	0.94	4
United States	0.78	3
Bangladesh	0.63	3
Others	4.34	19
World	22.99	100

About 6.4 million tons of cotton was traded internationally in 2008/09 (accounting for 27% of 2008/09 production), with USA and Brazil being the main exporters and China being the main importer (see Table 2).

Table 2: **World Cotton Export and Import 2008/09** (ref.: ICAC, Washington)

Exporters	Million tons	%
United States	2.87	45
Brazil	0.60	9
Uzbekistan	0.56	9
West Africa	0.47	7
India	0.43	7
Australia	0.23	4
Greece	0.22	3
Others	1.05	16
World	6.53	100

Importers	Million tons	%
China	1.52	24
Bangladesh	0.62	10
Turkey	0.57	9
Pakistan	0.46	7
Indonesia	0.43	7
Thailand	0.36	6
Mexico	0.29	4
Vietnam	0.25	4
Korea, Rep.	0.21	3
Russia	0.20	3
Others	1.46	23
World	6.37	100

The United States is the largest retail market for cotton products in the world, and North America accounts for 24% of world end-use cotton consumption, followed by China with 18% and the European Community with 15%. India accounts for 8% and Japan for 6% of world retail level cotton sales (ICAC World Apparel Fiber consumption Survey, December 2006).

D. 'Tipping' the cotton market towards increased sustainability

The aim of WWF is to increase sustainability of cotton production by:

- optimising water use (both for irrigated and rain-fed cotton) and addressing salinity issues
- measurably reducing toxicity resulting from agrochemical use
- increasing soil fertility
- preserving HCVAs and having limited impacts on habitat conversion
- reducing greenhouse gases emissions
- having positive financial and social effects on farmers and workers.

'Tipping' the cotton market needs an approach, which is capable of achieving real change in the mainstream commodity market. The main existing certification schemes – Organic and FairTrade cotton – have so far not been able to achieve this. The market share of organic cotton has increased over the years but is still less than 1%. To move from a niche market to more mainstream impacts on world cotton production, WWF has initiated the Better Cotton Initiative BCI in 2004 and is now an active player in this multi-stakeholder initiative. WWF aims that by 2020, more than 25% of traded cotton is grown in line with BCI standards.

E. WWF strategy on cotton

WWF has identified 3 priority strategies to increase sustainability of cotton production:

1. Promote BCI roundtable and voluntary standards – to address the key impacts of cotton production by developing and implementing a global standard for "better" cotton.
2. Develop Better Management Practices – to produce more (good quality) fibre with less input
3. Change government policies – that affect both where and how cotton is grown, via land and water use policies, through the use of farm extension services, and through subsidies and trade policies.

Strategies	***A few milestones along the way***			
	2010	2012	2015	2020
Promote BCI	BCI system operational in growing season 09/10	>1% of cotton produced in BCI focal countries meets the BCI standard		More than 25% cotton produced globally meets BCI standards
Develop BMPs	WWF actively engaged in the field testing of the BCI system in India and Pakistan (and potentially in Cameroon)	BCI system optimized based on WWF's input	WWF actively engaged in the field implementation of the BCI system in China and Brazil	
Change Government Policies		Priority policy needs/ deficits regarding land, water, and pesticide use identified in WWF priority countries/ regions	The BCI principles are promoted by national/ regional extension services in 5 WWF priority countries	Improved policies regarding land, water, and pesticide use implemented in WWF priority countries

F. Key actions over the next 2 or 3 years

In line with its strategy on cotton, WWF will focus on the following activities in the next 2 to 3 years:

- To test the BCI system in the field in India and Pakistan (and potentially Cameroon) in collaboration with local implementing partners and business partners.
- To support the BCI in gaining interest from potential members (e.g. companies, NGOs), donors and governments.
- To gain knowledge regarding cotton BMPs and to actively contribute to an optimization of the BCI system.

Useful links:
http://www.panda.org/what_we_do/footprint/agriculture/cotton/
http://www.bettercotton.org/
http://www.teonline.com/
http://www.icac.org