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Trade Note 10

Cotton and Developing Countries: A Case Study in Policy Incoherence

Cotton is an example where rich countries trade policy negates the otherwise positive effects of their development policies. Even though its share in world trade is small, cotton is important to developing countries. Cotton accounts for approximately 40 percent of export earnings in Benin and Burkina Faso, and 30 percent in Chad, Mali, and Uzbekistan. Its contribution to GDP in these and other developing countries ranges from 5 and 10 percent (table 1).

However, the cotton market is highly distorted and subsidies in relatively wealthy countries depress global prices and cuts into the livelihood of millions in developing countries, where it is a typical, and often dominant, smallholder cash crop. The developed countries continue to shield their inefficient domestic producers through support that totaled an annual average of \$4 billion in the last few seasons. This note analyzes the effects of such market intervention and the policy issues options available to developed and developing cotton producing countries.

The Market Setting

Global cotton production doubled from 10 million tons in 1960 to 20 million tons in 2001. More than three-quarters of cotton output is accounted for by developing countries. China and the United States each account for approximately 20 percent of world output, followed by India (12 percent), Pakistan (8 percent), and Uzbekistan (5 percent). Other significant producers are seven Francophone

African countries, Turkey, Brazil, Australia, and Greece accounting for a combined 20 percent.

Table 1
Cotton's importance to developing and transition economies: 1998-99 averages

	Cotton exports			Merchandise Exports (million US dollars)	Per Capita GDP ^a
	Million US dollars	percent of merchandize exports	Percent of GDP		
Burkina Faso	127	43.9	5.1	289	249
Benin	164	39.1	7.1	419	398
Uzbekistan	1,038	32.2	6.5	3,227	467
Chad	76	32.2	4.7	236	224
Mali	180	29.5	6.7	611	285
Togo	67	21.3	4.7	315	341
Tajikistan	97	15.1	8.2	643	352
Turkmenistan	110	12.3	3.6	891	1,126
Tanzania	44	7.6	0.5	576	185
Sudan	41	6.0	0.4	688	290

^a Constant 1995 US dollars.
Source: FAO (FAOSTAT) and World Bank (World Development Indicators).

A recent survey on costs of cotton production found that China, Brazil, and Pakistan are the lowest cost producers followed by Turkey, Australia, and West Africa. High cost producing countries are the United States, Israel, and Syria. Even though the US is an inefficient high cost producer by global standards, cotton production has doubled over the last 20 years. In line with most primary commodities, real cotton prices have declined considerably during the last 40 years; they are currently half their 1960s levels. The current low level of cotton prices have been undoubtedly influenced by the support provided by major players, which we now examine.

The Policy Setting

In contrast to other commodities, rich countries do not rely on quotas or high tariffs. However, several cotton producing countries use domestic subsidies to support their cotton industry. The United States spends the most on cotton subsidies. Its



spending during the last four seasons has exceeded \$3 billion (table 2). Support in the United States takes several forms, including loan deficiency payments, marketing loan gains, production flexibility contracts (i.e. decoupled support introduced with the 1996 Farm Bill which replaced deficiency payments), marketing loss assistance (i.e. emergency payments introduced in 1998 in response to low prices), insurance, and step-2 export subsidies. During the 2001/02 season producer prices in the United States were 91 percent higher than world prices. Support in the European Union (i.e. Greece, and Spain) is given in the form of guarantee prices (i.e. the difference between a pre-announced target price and the market price). During the 2001/02 season producer prices in Greece and Spain were 144, and 184 higher than world price.

Table 2
A b breakdown of government assistance to us cotton producers, 1996/97-2001/02

	1996/97	1997/98	1998/99	1999/2000	2000/01	2001/02
Assistance (million US \$)						
Loan Deficiency Payments	0.0	6.0	320.7	687.3	151.4	732.1
Marketing Loan Gains	0.0	26.2	239.8	859.8	390.3	1,512.8
Forfeitures	1.6	0.3	3.3	1.1	17.2	0.1
Production Flexibility Contract	699.3	597.5	637.0	614.0	575.2	473.9
Market Loss Assistance	0.0	0.0	316.2	613.5	612.8	523.6
Insurance	157.2	147.7	154.9	223.3	215.8	266.4
Step-2	19.8	466.7	214.4	486.1	252.7	125.1
Total	857.6	929.3	1,790.3	3,178.9	2,047.6	3,705.9
Production (thousand tons)	4,124	4,303	3,251	3,832	3,742	4,420
A Index (US\$ per kilogram)*	1.73	1.60	1.30	1.16	1.26	0.92
Assistance (US\$ per kilogram)	0.21	0.29	0.58	0.91	0.59	0.82
Assistance (% of the A Index)	12%	18%	45%	78%	49%	87%

a. August to July average.
Sources: United States Department of Agriculture (assistance), International Cotton Advisory Committee (production), and author's calculations the rest.

U.S cotton policy is one of the more egregious examples of anti-development policies. The New York Times wrote on August 5: "King Cotton, the evocative old shorthand for the supremacy of cotton in Southern culture, still ranks high among the hierarchy of Washington's power lobby. No other crop is subsidized such an outrageous degree, enriching so few at a cost so high to millions elsewhere". The \$3.7 billion in subsidies to 25,000 domestic cotton producers cost US taxpayers is three times the entire U.S aid budget for Africa exceeds the entire GDP of Burkina Faso, where 2 million people depend on cotton as a principal source of revenue. The country tanks third from the last in the global rankings of living standards. It costs Burkina Faso about a dime more than the current global price to get a kilo of cotton to the world markets.

Subsidies in the US go disproportionately to the largest and wealthiest producers. The largest 10% of American cotton agro-businesses received three-quarters of the total subsidies.

Resulting over-production produces a glut that depresses world prices and costs African economies \$250 million a year in lost sales (Badiane and others 2002). The economic losses to Africa inflicted by the subsidy program exceed the aid Americans provide: Mali received \$37 million in aid in 2001 but suffered \$43 million due to lower export earnings (Oxfam 2002). The dive in cotton prices have taken a toll on the rural sector of cotton-dependent countries. In Benin, for example, where cotton accounts for 40 percent of merchandise exports and contributes more than 7 percent to GDP, Minot and Daniels (2002) found that a 40 percent reduction in farmgate cotton prices—equivalent to the price decline that took place from December 2000 to May 2002—implied a 7 percent reduction in rural per capita income in the short run and 5-6 percent reduction in the long run. The incidence of poverty among cotton growers in the short run rose from 37 percent to 59 percent while the average incidence of rural poverty (i.e. including cotton growers and other farmers) rose from 40 percent to 48 percent.

In addition to low prices and loss of export share by non-subsidizing producers, support by major players has triggered a number of noteworthy reactions.

- Many cotton producing countries have introduced 'reactive' support. Turkey, Brazil, Mexico, Egypt, and India, totaled \$0.5 billion of support during 2001/02.
- Brazil has initiated a WTO consultation process claiming losses to its cotton exports due to subsidies by the United States (WTO 2002).
- Four West African cotton producing countries (Benin, Burkina Faso, Chad, and Mali) are pressing for removal of support to cotton sector through the WTO. In an unusual move, the President of Burkina Faso, Blaise Compaore, addressed the WTO on June 10, 2003, asking for financial compensation for cotton

**Box 1: Imperfect Numbers**

According to the International Cotton Advisory Committee, support during the 2001/2002 totaled \$4.4 billion (see table 3). These numbers, however, must be treated with caution for two reasons. First, China appears to have supported its cotton sector by an estimated \$1.5 billion annually during the last three seasons, but it is difficult to substantiate such support since Chinese cotton policies are too complex to be assessed quantitatively and the official figures are often highly unreliable. Second, the ICAC figures for the United States do not include all types of transfers. A more comprehensive look indicates that US support is at least two thirds higher than what ICAC reports (see table 2).

Table 3
Government assistance to cotton producers

	1997/98 - 1999/2000	2000/01	2001/02
Total production assistance (million US dollars)			
US	1,378	0	2,291
China	2,065	1,90	1,196
Greece	638	0	537
Spain	234	179	179
Turkey	210	106	59
Brazil	42	44	50
México	19	23	23
Egypt	155	14	18
Total	4,618	2	4,353
Assistance as a percent of the Cotlook A Index			
US	32%	22%	57%
China	36%	34%	25%
Greece	127%	101	144%
Spain	132%	151	184%
Turkey	25%	10%	7%
Brazil	6%	4%	7%
México	9%	15%	22%
Egypt	30%	9%	8%

Source: International Cotton Advisory Committee (2002).

producing low-income countries to offset the injury caused by support (WTO 2003). This compensation should be in place for as long as subsidies are in place.

- The cotton sector has found an unlikely ally. The Director General of the International Rayon and Synthetic Fibres Committee, Colin Purvis, in a letter to the *Financial Times* on June 12, 2003 complained that “recent increases in cotton subsidies have rigged the market even more dramatically in favor of cotton, depressing demand for every substitute product. The result is industrial plants being kept idle... that were built in legitimate expectation that the competitive advantages of manufactured fibers would create demand to fill the capacity...”

Removal of support is expected to reduce production and consequently boost prices, allowing third world farmers to compete and earn profit on their crops. Simulations show that if full liberalization in the cotton sector takes place including removal of both trade barriers and production support (along with liberalization in all other commodity sectors), cotton prices would increase in the next 10 years by an average of 12.7 percent over the price that would have prevailed in the absence of reforms (FAPRI 2002). World cotton trade would increase by 5.8 percent while Africa’s cotton exports would increase by 12.6 percent. Uzbekistan would increase its exports by 5.8 percent, Australia by 2.7 percent, while exports from the United States would decline by 3.5

percent. Cotton production in the United States and the European Union would decline by 6.7 and 70.5 percent, respectively—in effect, cotton production in the European Union would fall to levels even below those prior to the Common Agricultural Policy taking effect. Production in Uzbekistan and Africa would increase by 4 and 6 percent, respectively.

Obstacles to Reform

The European Union reformed its cotton policy regime in 1999 and has no plans to undertake further changes soon. This is because none of the candidates to join the Union in the current expansion are cotton producers and hence there will be no pressure to increase the budgetary allocation to the cotton sector, and the current cotton program is viewed as a poverty reduction mechanism since the support supposedly goes to low income regions of Southern Europe.

The *2002 Farm Bill* in the US, in effect, regularized the emergency payments that had been given to its cotton (and other commodity) growers following the 1997/98 price decline; it also established a minimum price of \$0.71 per pound (or \$1.56 per kilogram, much higher than the 2001 and 2002 world averages of \$1.06 and \$1.00 per kilogram). The *2002 Farm Bill* will be in place for the next 6 years, consequently guaranteeing US cotton growers generous support until the year 2007, if the current low prices persist.



The cotton market has also been affected indirectly by the Agreement on Textiles and Clothing (the successor of the Multifibre Arrangement), which through quotas and tariffs on textiles and apparel has distorted the location of the textile industry, consequently imposing an implicit tax on cotton goods. The Agreement is expected to be phased out by the end of 2004. However, it is back-loaded with most of the reforms expected to take place on December 31, 2004, thus increasing the risk of non-compliance.

Several cotton producing countries (especially in sub-Saharan Africa) which traditionally had been taxing their cotton sectors, undertook substantial policy reforms during the 1990s to increase the efficiency of the cotton sectors. In most cases reforms were the only feasible alternative since the parastatals handling the marketing and trade of cotton were crippled by huge debts only to stay alive with state infusions of capital while in some occasions they went bankrupt. This, in turn, was caused by falling world cotton prices, inefficiencies and poor management of the parastatals and often outright corruption. Several countries -- Tanzania, Uganda, Zambia, and Zimbabwe -- have undertaken significant reforms to improve productivity (Baffes 2001). With the exception of Tanzania (where the reform process was never completed), considerable supply response took place along with higher share of export prices and timely payments to growers. West African cotton producers are also contemplating reforms. Central Asian cotton producers, mainly Uzbekistan, still intervene heavily in their cotton sectors and reforms are unlikely to take place soon.

Policy Options

The world price for cotton would rise substantially if developed countries were to reduce or eliminate their subsidies. And the export shares of low cost producers, including many African countries, would increase. Cutting subsidies would have major positive effects for poverty reduction, particularly for Africa.

If cannot be eliminated immediately, de-coupling subsidies from production would diminish the damages these subsidies do to developing countries. Income transfers under decoupled

support are based on past production levels and prices and thus have minimal impact on current production decisions—at least in theory.

Improving policies in developing countries -- including reducing export taxes and providing better trade-related infrastructure -- can help. Reducing the costs of production is an imperative for the cotton-dependent developing countries for them to maintain or increase their share in the global cotton market

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