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Reform Experience with the Tanzanian Cotton Sector

by John Baffes

Cotton, Tanzania's second largest crop after coffee, was introduced at the turn of the century by German settlers as a plantation crop but later efforts focused on smallholder production. Output rose considerably with the releases of new varieties, along with better organization of the sector following establishment of the Tanganyika Lint and Seed Marketing Board in 1956. By 1966, production reached 80,000 tons, or 0.75 percent of world production of 10.7 million tons. A turning point came in the 1960s following the government's shift to central planning thinking, whereby several cooperatives were formed and began building ginneries, training staff, and taking over enterprises from foreign owners.

By 1968, the cooperatives and the Cotton Board had gained a monopoly of virtually all commercial activities of the sector. They soon became large bureaucracies and failed to pay adequate attention to the needs of the sector (see box), in turn rendering reforms the only feasible alternative. The first step toward reforms was taken in 1989/90, when the government launched the Agricultural Adjustment Program. More reforms came with the Cotton Act of 1994, when the government formally eliminated the monopoly held by the Board and the cooperatives and allowed competition in marketing and ginning. At the time there were 14 re-

gional cooperatives licensed to trade cotton. In 1994/95, some 22 private companies started trading cotton, and 8 new private ginneries were constructed.

By 1996/97, private businesses were purchasing almost half of all cotton. Private traders and ginneries were able to capture a considerable share of the market because they offered higher prices than cooperatives and paid promptly. Some private ginneries also engaged in contract farming, providing inputs to producers who agreed to supply cotton in return. The ginneries and producers usually established a minimum price at planting time, but the price could be adjusted if the market price was higher during the harvest.

Assessing the reforms

A principal argument for policy reform was the large gap between world prices and the prices received by cotton growers. During the six seasons prior to the reforms, the average grower's share was 41 percent of the cotton export price. In the six seasons after the reform, the share was 51 percent. Payments were made more promptly as well. Before the reforms, growers often had to wait as long as two years for payment. With



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inflation running at 20–30 percent a year, the value of their payments was halved by the delay. The reforms also meant that input prices increased considerably, primarily reflecting the removal of input subsidies. The average cost of pesticides, for instance, rose from 1,600 Tanzanian shillings (Tsh) a kilogram in 1993/94 to Tsh 5,000 in 1998/99.

Lack of reliable data makes it difficult to analyze the impact of reforms on supply, but a simple comparison before and after the reforms using International Cotton Advisory Committee data indicates that cotton output averaged 64,800 tons in the five seasons before the reforms and 66,400 tons in the five seasons after the reforms, a very moderate increase. But other data sources throw even this modest increase into doubt. Three government sources show no supply response after the 1994/95 policy changes, which is consistent with the large reduction in input use that took place after the reforms.

Once input supply and credit for purchasing inputs were no longer integrated into a single cotton marketing channel, use of inputs declined sharply. Loss of the single marketing channel pushed up the costs of marketing chemicals and led to a collapse in supply and distribution. And most farmers could not purchase chemicals at market prices either because they could not afford credit (due to high interest rates) or because credit was denied by the Banks (due to high probability of default). Two credit provision schemes were initiated to boost input use: the government's Agricultural Input Trust Fund in 1995 and the Board's Cotton Development in 1999. The first scheme ended in failure. The second, still in force, faces numerous problems; interviews with industry, for example, allege that corruption is pervasive in the distribution chain and that substantial quantities of chemicals are diverted to the free market.

Similar problems plagued seed distribution. Until 1997, seed distribution was handled by the cooperatives, which were required to retain one-tenth of the seed for free distribution (the rest was milled for oil). Once private traders took over, the quality of seeds deteriorated and growers received far less than the required 10 percent of seeds. After the reforms, at least eight new oil mills were built, increasing milling capacity by almost 50 percent. This intensified competition for seed, thus diverting it to oil mills.

Quality deterioration has been cited often as another negative outcome of the reforms. Among a host of reasons, the following four appear to have affected quality: decline in input use; abandonment of zoning; mixing of cotton varieties; and El Niño and La Niña for the 1997/98 and 1998/99 seasons. The effects of two other factors sometimes put for-

ward as causes of the decline in quality—the opening of new ginneries and the mixing of grades—are more ambiguous. There are also two factors pointing to an increase in quality. First, prior to the reforms, cotton had to wait in storage for as long as a year before it was sold. Since the reforms, cotton sales have been expedited, as evidenced by the shorter period of trading in Northern Europe which fell from 36 weeks between 1984/85 and 1993/94 to 14 weeks after the reforms. Second, prior to the reforms a large share of cotton went to the domestic textile industry. Although not documented, it is likely that lower quality cotton was consumed domestically, while higher quality cotton was exported. Since the reforms, most cotton is exported. So, although the quality of exported cotton may have declined on average, it does not necessarily follow that the quality of all cotton has declined. One measure of cotton quality is the premium that Tanzanian cotton commands over the A Index (or “world” price of cotton). In the seven seasons prior to the reforms, Tanzania's premia averaged 10.0 percent over the A Index. In the seven seasons after the reforms, the premia fell to 8.8 percent. Thus, while the quality of cotton may have declined marginally, it has by no means deteriorated, as most reports show.

The sector's ginning capacity has increased considerably while marketing has improved. Before the reforms there were 34 ginneries in Tanzania. During the first three years of the reforms 17 new private ginneries were built mainly in response to cooperatives' refusal to allow private traders to gin their cotton on a contract basis. The new private ginneries added 17,000 tons of monthly capacity to the existing 19,000 tons. On the marketing side, during the second year of reform the private sector took over more than a quarter of cotton marketing. As of 1997/98, the Board withdrew completely from cotton marketing. Currently, most cotton is marketed by the private sector.

Finally, considerable achievements have been made in research. The cotton research station has developed a new cotton variety which, according to research data and interviews with researchers, is superior to the existing varieties. However, achieving the higher yields promised by the new variety requires multiplication and the release of enough quantities to replace the older varieties and to forestall mixing with existing ones. That, in turn, will require a concerted effort by the various institutions including the

Board and the Ministry of Agriculture.

Constraints

Despite the achievements, several issues need to be addressed, including taxation, power of the Board and the Ministries, and reliability of statistics. Cotton, like all other export crops, is subject to a host of taxes, levies, and fees administered at both district and central government levels. One study found that the tax burden on cotton was almost 15 percent of the producer's gross receipts. Another government report found that nominal protection rates in the sector increased from -17.9 for 1986-89 to -69.0 for 1990-93 and -67.7 for 1994-99 (the negative sign indicates taxation). Moreover, numerous reports have shown that there is considerable tax avoidance and evasion, a not surprising outcome in such a high taxation environment. The recommendation regarding taxation is simple: the tax code should be simplified and taxes should be reduced.

One of the Board's responsibilities is quality inspection at buying posts. However, a lack of adequate resources severely limits these inspections. In practice, ginneries send samples to the board from each bale of cotton ginned, and the Board simply informs ginneries if samples are deficient. In order to be more effective, the Board hired a private company which placed inspectors at every ginnery in order to monitor the quality of cotton. These inspectors were given the right to "reject" cotton. Not only is it not clear what "rejection" means, but the quality control scheme appears not to be functional at all. Corruption also appears to have been a major problem. Interviews with ginning staff indicated that quality inspectors would "accept" or "reject" cotton on the basis of whether a side-payment of \$US 30 per truck load had been made. Quality of cotton is something that should concern the private sector participants, not the Board.

By statute, the Board is supposed to ensure free competition, fair trade, and to set and monitor indicative prices as established by market forces. For example, in 2002/03 the Board announced an "indicative" price of 140 Tsh per kilogram. However, this is a dangerous practice that should be discontinued. If the market price is above the "indicative" price, the announcement motivates traders to collude and refuse to pay more than the indicative price. On the

contrary, if the market price is lower than the indicative price, farmers may view the indicative price as a guaranteed price and refuse to sell their cotton at the prevailing price.

The power of the Board also appears to be excessive and goes far beyond what a regulatory agency should do. According to the 2001 Cotton Industry Act, the Board is entitled to "... do anything or enter into any transaction which in the opinion of the Board is calculated to facilitate the proper and efficient carrying out of its activities and the proper exercise of its functions under the provision of this Act."

Another concern is the poor quality of statistics. A recent government report contained such discrepancies in its statistics of cotton production that attempting to gauge the degree of supply response by comparing pre- and post-1994 averages would yield outcomes ranging from a 15 percent reduction to an 8 percent increase in cotton output. Improving collection and dissemination of statistics not only will guide policy makers in making the proper policy decisions but will also help the private sector in making the proper investment choices.

Cooperative Unions and the Private Sector—Perceptions and Reality

Members of cooperatives along with government officials are skeptical of the private sector's involvement in marketing and trade activities in Tanzania. Their views reflect, in part, 30 years of experimentation with central planning. Consider the following interview with a high ranking official of a cooperative.

When asked for his views on private sector involvement in cotton marketing, he replied: "The problem with the private traders is that you cannot control them! The World Bank should support cotton to be produced. It should support the cooperative union and forget about the private sector." This thinking echoed the Arusha Declaration some 34 years earlier: "The way to build and maintain socialism is to ensure that the major means of production are under the control and ownership of the Peasants and Workers themselves through their Government and their Cooperatives."

When asked what kind of assistance would be needed to overcome the difficulties the cooperative union faced, he replied: "I need finance. If I am given enough finance, I could do better." Though unstated,

implicit in this response was the assumption that the loan would not be at market rates or, if a history of debt accumulation by the unions and eventual forgiveness is any guide, would not be repaid at all. Most cooperative unions have difficulty obtaining bank loans because they lack creditworthiness, not because banks are unwilling to lend. Since banking sector liberalization, obtaining finance has not been a problem for creditworthy borrowers. The manager of a union-owned cotton oil mill, currently leased to an entrepreneur, noted that there had been no difficulty obtaining a \$340,000 loan to purchase the factory and another \$300,000 loan to rehabilitate it—a 5-year loan at 12 percent interest from a private bank.

When asked about the cooperative's achievements prior to the reforms, the official responded: "We built all this infrastructure!" "All this infrastructure" is now insolvent and up for liquidation (a cotton oil mill), run-down or underutilized (several ginneries), or abandoned (two 2,000-hectare cotton farms).

The problems with the cooperatives were vividly described as follows in a review of the sector: "Internal corruption, inefficiency, maintenance of loss-making non-core activities, ... over-manning, under-qualified management and outdated and poorly maintained plant ... remain largely uncorrected." This description is similar to that of a government review which reported: "A study ... on the quality of ginnery manpower working in ginneries owned by the cooperative unions found that: most of the staff were over 45 years of age; 90 percent of them were unqualified for their posts; most ginnery managers had no formal management training; above 80 percent of the ginnery workers did not meet the required minimum qualifications and their promotions were based on experience without undergoing any further formal training." The Netherlands Development Cooperation reached remarkably similar conclusions: "Studies in 1989 and 1992 judged that financial management of the [unions] was very weak, and revealed that both the Nyanza Cooperative Union and Shirecu were insolvent. They listed serious shortcomings in accountancy practices, revealed high marketing costs, and unrecoverable bank overdrafts. In addition they mentioned that the virtual absence of members' equity had made the unions become wholly financed by government, chiefly through bank overdrafts."

Cotton Outlook (October 28, 2002) reported: "A noteworthy of the [2002/2003 production] figures is the

small quantity attributed to each of the two major cooperative unions. Purchases by SHIRECU and NCU are estimated at 2,648 and 1,348 tonnes, respectively. A local press report has referred to the huge debts with which NCU is burdened. The article mentions a figure of over seven billion shillings (roughly US \$7,000,000), of which 4.5 billion (US \$4,500,000) are owed to the National Bank of Commerce."

*This article was prepared by John Baffes, Senior Economist, Development Prospects Group. It is an extract of a full document, **Tanzania's Cotton Sector: Constraints and Challenges in A Global Environment**, Africa Working Paper no. 42, December 2002, www.worldbank.org/afr/wps/wp42/htm (also published in **Development Policy Review**, vol. 22, no. 1, January 2004, pp. 75-96). For more information, please email jbaffes@worldbank.org.*