COTTON SECTOR STRATEGIES

IN WEST AND CENTRAL AFRICA

By

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EXECUTIVE SUMMARY

Cotton production has improved rural welfare and contributed to economic growth in the CFA franc Zone countries of West and Central Africa (WCA). Production has increased fourfold in the last two decades, making the region the world's second largest cotton exporter, with a share of world exports of 15 percent. Cotton is the main cash crop and the largest source of export receipts and government revenues in several countries of the region. Cotton cultivation employs more than two million rural households and hence is a key factor for poverty reduction.

In spite of its success in promoting cotton cultivation, the current system of integrated national cotton monopsonies has exhibited weaknesses. In particular, the system relies on (a) the ability of the monopsonies to tax producers and accumulate profits in times of high export prices, and (b) the availability of budgetary support from national governments in times of low international prices. Thus, the recent decline in world market prices would have produced a sharp fall in growers' revenues without the assistance provided by the international donor community to national governments.

For several years, the World Bank and the International Monetary Fund (IMF) have advocated reforms along the following lines:

- allowing free entry and competition at all levels of the cotton sector, including cross-border trade in seed cotton;
- developing private-sector–based mechanisms to ensure effective input credit recovery linked to the marketing of cotton;
- adopting pricing mechanisms that allow producer prices to reflect changes in world prices;
- developing effective market-based mechanisms to reduce price risks;
- building the technical and commercial capacities of producer associations to facilitate their participation in voluntary contract farming arrangements, input supply, and technical services;
- establishing agribusiness trade associations to allow the private sector to participate effectively in the coordination and financing of sector-wide technical support services; and
- improving the provision of services, especially research, extension, and phytosanitary controls, where governments have an essential role in financing the public goods component.

Experience suggests that the implementation of this reform agenda will take several years to complete. As explained in the text, individual WCA countries are at different stages of progress toward establishing competitive sectors. For the next crop season, the pricing mechanisms adopted should not call into question the objectives of enhanced competition and privatization, nor roll back the reforms that have already been implemented. The

prospects for achieving sustained poverty reduction in West and Central Africa would be greatly improved if the above-mentioned reforms were implemented.

At the same time, subsidies to cotton farmers in major cotton producing countries increase artificially the supply in international markets and depress export prices for WCA countries. Downward pressures on export prices have been exacerbated by generous (and in the case of the United States, rapidly increasing) subsidies for cotton production in the United States, China, and the European Union. Removal of these subsidies would benefit WCA countries, and allow them to better exploit their comparative advantage in cotton production for growth and poverty reduction.

A. INTRODUCTION

The recent fall in the world price of cotton has produced a serious loss of export revenues and fiscal receipts for some of the poorest African countries, at a time when many of these countries are reforming their cotton sectors to make them more competitive and less state dependent. The cotton sectors in the CFA franc zone countries in West and Central Africa (WCA)[1] have until recently been characterized by a single parastatal company that provided inputs and other services to farmers, and purchased all of their cotton harvest. This system, while it produced substantial increases in cotton production, typically paid prices to farmers that were lower than those in cotton-producing countries with more competitive arrangements. For several WCA countries, cotton is the largest source of export receipts; cotton is often the only cash crop, and the cotton sector is key to rural poverty reduction. Consequently, the Bretton Woods institutions have advocated reforms that should lead to a less centralized system and allow for free entry into ginning and competition for the purchase of seed cotton. This would raise the level of efficiency and reduce both costs and margins in the ginning sector, thereby creating the room for higher farmer shares in export prices.[2]

This paper considers (a) the factors behind the decline in world prices and their implications for long term growth of the cotton sectors in WCA countries, and (b) the reforms that need to take place to increase the competitiveness of the cotton sectors in these countries and enable them to cope with similar trends in international markets in the future. In particular, further progress needs to be made toward greater competition and free entry in all major sub-sectors of the industry. The paper also discusses the consequences of the large and (in the case of the United States) rapidly increasing subsidies to cotton producers by developed as well as developing countries in Europe and Asia. While it stresses the need for African countries to put in place systems that provide growers with a larger share of the world price, and at the same time make the sector less vulnerable to fluctuations in export markets and therefore less reliant on government involvement, the paper also underlines the importance of significant reduction or removal by other countries—in particular the United States, China, and countries of the European Union—of their support to cotton farmers. Removal of the subsidies in these countries would eliminate incentives to overproduction, which displace African exports now and constrain further growth of the cotton sector and hence the ability to fight poverty in the WCA countries.

[1] The cotton-producing countries considered here are Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Côte d'Ivoire, Mali, Senegal, and Togo. We do not discuss non-CFA countries in West and Central Africa (Ghana, Guinea, Nigeria) --- because their cotton sectors are organized differently --- nor the smaller CFA franc zone producers (Guinea Bissau, Niger).

[2] Given its sectoral expertise, the World Bank has taken the lead in guiding the reform of the cotton sector in WCA. However, IMF programs have also incorporated elements of cotton-sector reforms for these countries, when central to their macroeconomic stability.

This paper is not meant to provide an in-depth analysis of the policy and institutional problems or the long-term growth challenge facing the cotton sector in West and Central Africa (which is being done in a separate study by the World Bank Rural Development Team). The objective of this paper is to (a) present the point of view of the IMF and the World Bank with respect to the main global and domestic policy issues surrounding the cotton sector, and (b) provide guidance on reform strategies to the staffs of the two institutions that are dealing with the sector.

B. THE GLOBAL CONTEXT

1. Global Production and Trade Patterns

The world cotton market is characterized by dispersed production (though mainly in the northern hemisphere) and extensive trade in lint cotton. Though cotton's share in textiles has declined over time in favor of synthetic fibers, cotton remains by far the world's most important fiber, with a share of about 40 percent. Major producers, in declining order of importance, are China, the United States, India, Pakistan, and Uzbekistan. WCA countries together are smaller, but still important, producers, accounting in the latest crop year for about 5 percent of world production (Table 1) and 15 percent of exports.

2. Global Policies Affecting Cotton Production and Trade

Most major producers outside of the WCA region have programs aimed at supporting cotton production. In 1998–99 and 1999– 2000, such programs were in place in the following eight countries, accounting for an estimated 53 percent of world output: Brazil, China, Egypt, Greece, Mexico, Spain, Turkey and the United States.[3] For the 1998–99 crop season, the level of assistance offered by governments to the cotton sector in those eight countries amounted to $5.4 billion. In the following year, Egypt reduced its price support, but the seven other countries maintained theirs. Over 40 percent of the support was provided by the United States (Table 2). The high levels of subsidy have been a main source of the downward pressure on world prices (Figure 1).

The European Union (EU) provides the most generous assistance to cotton growers --- more than 100 percent of world prices. Moreover, EU subsidies for cotton are exceptionally generous when compared to other crops: three to four times larger per hectare than for maize and oilseeds, and seven to eight times larger than for cereals. However, cotton production (limited to Greece and Spain) is much lower than that in China or the United States. The

[3] See Carlos Valderrama Becerra. 2000. The World Cotton Market: Prices and Distortions. Paper presented at the 10th Australian Cotton Conference, Brisbane, Australia. 17 August, 2000. International Cotton Advisory Committee, Washington, D.C.

Common Agricultural Policy's cotton subsidy system was reformed in 1999 to increase penalties for excess production. China provides substantial assistance to cotton farmers

Table 1. Major Producing Countries: Production and Net Exports of Cotton, 1980/81-2001/02
(In thousands of metric tons)

	1980/81	1985/86	1990/91	1995/96	1998/99	1999/00	2000/01	2001/02 Proj.
				Production				
China, Peoples Rep. of	2,703	4,142	4,513	4,774	4,513	3,837	4,425	5,123
United States	2,425	2,928	3,380	3,902	3,034	3,699	3,747	4,374
India	1,323	1,967	1,991	2,886	2,774	2,655	2,376	2,572
Pakistan	715	1,218	1,640	1,788	1,373	1,875	1,788	1,744
Uzbekistan	1,671	1,730	1,595	1,251	1,003	1,129	959	1,046
European Union	676	756	945	1,337	1,334	1,365	1,321	1,401
West and Central Africa 1/	**214**	**364**	**536**	**683**	**878**	**848**	**701**	**959**
Brazil	623	831	701	390	458	676	894	719
Others	3,491	3,565	3,680	3,269	3,061	2,942	3,083	2,989
World	13,841	17,501	18,981	20,280	18,428	19,026	19,294	20,928
				Net Exports				
China, Peoples Rep. of	-773	610	-278	-659	70	344	47	-65
United States	1,286	420	1,698	1,584	850	1,450	1,471	2,134
India	119	77	154	105	-68	-334	-327	-382
Pakistan	324	685	295	286	-199	-13	27	-87
Uzbekistan	1,448	1,487	1,173	985	830	893	740	718
European Union	-715	-1,071	-827	-725	-783	-1,021	-871	-923
West and Central Africa 1/	**185**	**336**	**440**	**600**	**778**	**816**	**689**	**818**
Brazil	6	24	67	-363	-296	-335	-82	-207

Source: International Cotton Advisory Committee.

1/ CFA franc zone only.

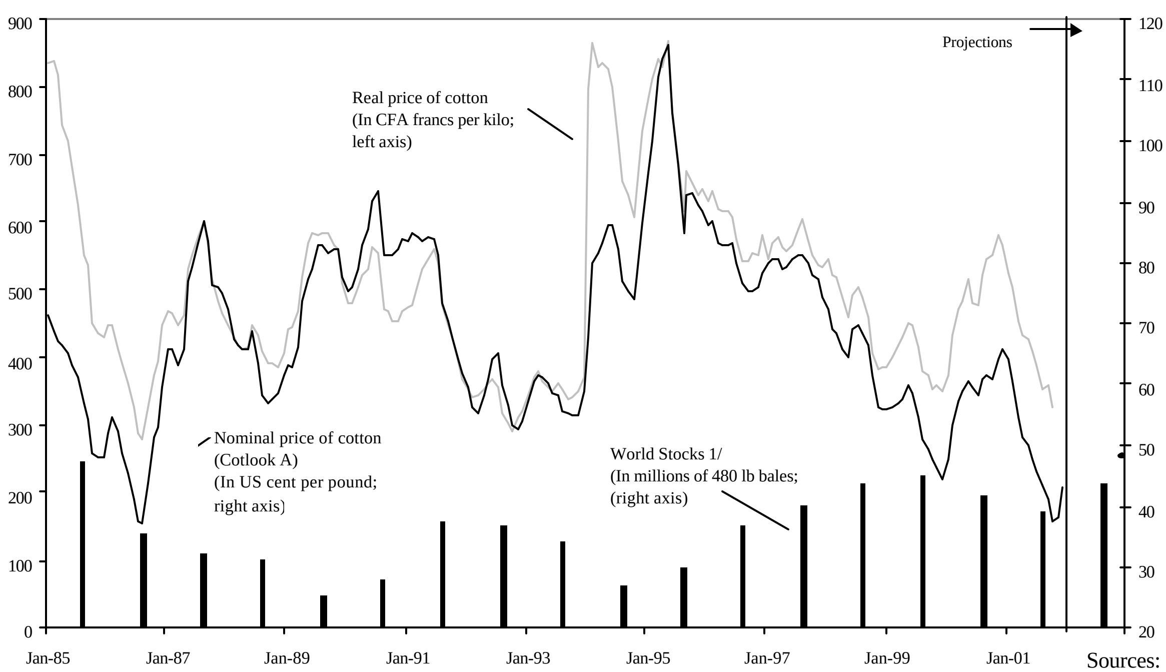
Table 2. Assistance Provided to Major Cotton Producers, 1999/00

Country	Production Thousand tons	Assistance U.S.$ Per kilogram	 Million U.S. dollars
Total	**9,942**	**0.57** 1/	**4,764**
United States	3,694	0.56	2,056
China, People's Republic of	3,829	0.34	1,534
European Union	558	1.42	795
Greece	428	1.39	596
Spain	130	1.53	199
Turkey	791	0.36	287
Brazil	700	0.06	44
Mexico	135	0.21	28
Egypt	235	0.09	20
Memorandum item:			
World cotton price		1.25	

Source: International Cotton Advisory Committee.

1/ Average.

Figure 1. Nominal Price, Real Price and World Stocks of Cotton, January 1985 - December 2002 1/



Sources: USDA; and IMF staff.

1/ Stocks reported in August, the last month of the cotton marketing year. Real cotton price relative to average WAEMU CPI, based in 1990.

through a reference price system for cotton. Currently, the procurement and marketing of cotton are monopolized by the government and the procurement and sales prices are determined largely to subsidize the farmers. This has resulted in domestic prices that are about 20 percent higher than world prices. After China's entry to the WTO, the state-trading monopoly will be phased out, and domestic prices should move closer to international prices. In the United States, the program of agricultural support is notable because it has been based on the assumption that agricultural prices would remain stable or increase slightly; the program was designed in 1996 to enhance the role played by market forces in production decisions. As production expanded and prices started to fall, the level of subsidies increased significantly. Instead of facilitating the adjustment of production to the excess supply and declining prices, the U.S. price supports have led to increasing production in the United States by making cotton more profitable than competing crops like soybeans, corn, or sorghum.[4] For instance, U.S. cotton farmers are expected to receive more support in the current crop year than in 1999, when cotton prices were also at very low levels.[5]

The U.S. agricultural support programs are up for renewal before the end of the current fiscal year, in September 2002.[6] The farm bill proposals to renew these programs, now being considered in Congress, would essentially (a) lock in place levels of spending that have been inflated in recent years by "emergency" funding measures, (b) introduce a new countercyclical element tied to product prices, and (c) expand the programs' coverage to other agricultural products. The proposed new farm legislation would contribute to continued overproduction and it would lower world prices of the agricultural products covered by the programs--- in particular cotton---which would perpetuate the problems faced by WCA exporters.

C. The Cotton Sector in West and Central Africa

This section describes the current situation in the cotton sectors of the region, and the next section outlines the reform agenda. While cotton production has expanded rapidly, the share of the international price paid to producers has been relatively low, reflecting inefficiencies

[4] U.S. farmers receive benefits under a number of government programs: production flexibility contract and commodity loan programs, subsidized crop and revenue insurance, and market loss assistance. U.S. policies have resulted in a decoupling of the U.S. price for cotton that farmers receive from the world price. Despite historically low world cotton prices, prices received by U.S. farmers have actually increased since early 2001, if the value of the loan programs (as a per-unit subsidy) is included.

[5] See Leslie Meyer and Stephen MacDonald, "Cotton: Background and Issues for Farm Legislation," U.S. Department of Agriculture, Economic Research Service, July 2001.

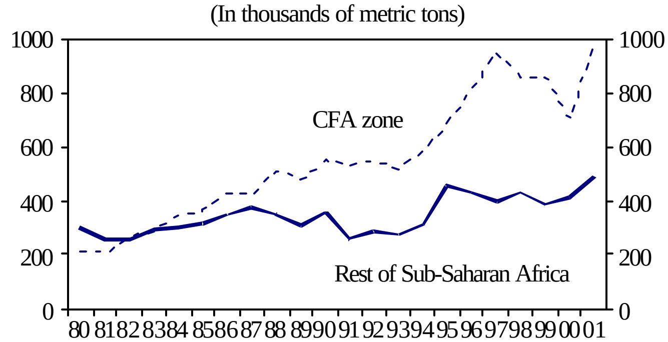
[6] See United States: Selected Issues - Country Report No. 01/145, August 24, 2001. Washington DC: International Monetary Fund)

in the ginning, marketing, and input distribution subsectors. A transition toward more competition and transparency and hence greater efficiency in processing and marketing of cotton should allow WCA countries to raise production further and expand their export market shares.

1. Production and Ginning Performance

Cotton production in West and Central African countries has increased fourfold since the early 1980s (Figure 2). Cotton has proved to be an economically viable crop that has had a significant and positive impact on exports, economic growth, and rural development. Cotton ginning, input supply, transport, and marketing constitute significant economic activities in most of these countries. Cotton-related activities account for a large share of rural employment and exports, and generate a significant share of government revenue.

Figure 2.
Cotton Production in CFA Franc Zone and Rest of Sub-Saharan Africa, 1980-2001
(In thousands of metric tons)



Source: International Cotton Advisory Committee.

With the exception of Benin, cotton production stagnated or declined in the WCA countries in the six years preceding the devaluation of the CFA franc in 1994, but accelerated after the devaluation (Table 3). Production increased by 16 percent a year on average from 1993–94 to 1997–98, then declined for three years, before reaching a new peak in 2001–02. Over the past four years, production increased substantially in Mali, Côte d'Ivoire, Burkina Faso, and Cameroon; it declined slightly in Benin and markedly in Chad and Togo.

The development of the sector has resulted in consistently good-quality cotton, high average crop yields (by international standards), and high ginning ratios. In 1995–96, farm yields were in the range 1000–1200 kg/ha, except in Burkina Faso and Chad, where they were below 1000 kg/ha. Ginning ratios, at about 40–43 percent, are also high in the WCA countries by international standards. By contrast, ginning ratios are closer to 34–36 percent for similar cotton in India, and in Zimbabwe they are around 39 percent. Several factors have contributed to successful cotton production in the region: application of appropriate soil nutrient replenishment, pest management, and seed varieties well suited to local conditions; the provision, by the government and/or the cotton companies, of support services and infrastructure; guaranteed producer prices and output markets; high input-credit recovery rates; and well organized village-level associations.

2. Institutional Environment

Despite the sector's historically strong performance, its institutional environment has led to numerous inefficiencies, which provide considerable scope for improvement. For instance, in all but two countries (Benin and Côte d'Ivoire), the cotton sector is under the control of a single company that controls the provision of inputs and other services to farmers, and operates as the sole buyer of the entire cotton crop. With the exception of Burkina Faso, national governments are majority shareholders of these companies. The lack of transparency under these managed monopoly systems creates a multitude of opportunities for rent seeking and the mismanagement of resources, generally at the cost of farmers, the national budget, and the economy as a whole.[7] In particular, it severely limits incentives to minimize costs, and it stifles entrepreneurial decision-making at all levels of the supply chain.

Essentially, the viability of national sectors under the current system is based on their ability to (a) tax producers and accumulate profits in times of high export prices, and (b) rely on budgetary support from national governments in times of low international prices. This strategy has not worked well in many countries owing to poor management of the stabilization fund by the cotton monopsonists. This strategy needs to be changed in an era of

[7] Various sector diagnostic studies and technical audits of cotton companies that have been carried out in many countries over the years have repeatedly documented a considerable level of rent seeking and relatively high operating costs in the ginning sector. The latest examples are the technical audit of CMDT in Mali in 2000 and the survey of ginning costs in Benin in 2001.

Table 3. West and Central African Countries: Production and Net Exports of Cotton, 1980/81-2001/02
(In thousands of metric tons)

	1980/81	1985/86	1990/91	1993/94	1997/98	1998/99	1999/00	2000/01	2001/02 Proj.
					Production				
Benin	4	32	59	116	152	142	150	131	136
Burkina Faso	23	46	77	51	138	120	110	114	164
Cameroon	32	46	44	51	76	78	75	94	95
Central African Republic	8	13	12	7	20	16	11	9	11
Chad	31	39	60	37	109	65	76	65	76
Côte d'Ivoire	56	82	116	114	147	157	164	125	164
Mali	43	68	115	101	216	218	196	105	240
Senegal	7	11	12	15	17	5	9	9	14
Togo	9	27	41	33	65	76	57	49	60
					Net Exports				
Benin	6	27	50	105	141	131	142	136	125
Burkina Faso	21	44	69	44	120	114	113	113	147
Cameroon	27	38	34	37	63	65	65	81	82
Central African Republic	5	11	9	3	17	15	10	8	9
Chad	33	44	57	33	101	63	72	65	65
Côte d'Ivoire	43	84	81	80	98	120	160	109	131
Mali	38	60	98	87	174	202	196	125	196
Senegal	4	7	7	11	11	2	3	4	8
Togo	7	22	36	35	57	65	55	47	55

Source: International Cotton Advisory Committee.

increasing globalization and regional integration. The fact that producer organizations are getting stronger reduces the room for taxation in the future. Similarly, increased pressure on budgetary resources will reduce the ability of governments to rescue national parastatals during future crises.

The current pricing system provides some stability to farmers, but at a high cost in terms of income foregone and lower long-term growth potential. Table 4 illustrates the impact of the current system on pricing in individual countries in West and Central Africa.[8] Before the devaluation of the CFA franc in 1994, producer prices in the WCA countries were about half of the international levels. In the period immediately following the devaluation of the CFA franc (1994–95 to 1996–97), producer prices in the CFA franc countries declined significantly as a ratio to international prices; this was due to deliberate domestic policies to consolidate fiscal positions and lower inflationary pressures. During the period 1997–98 to 2000–01, producers' shares increased to slightly above their pre-devaluation levels on average. Nonetheless, this ratio was higher in countries such as Benin and Côte d'Ivoire, which were relatively more advanced in the implementation of structural reforms in the sector.

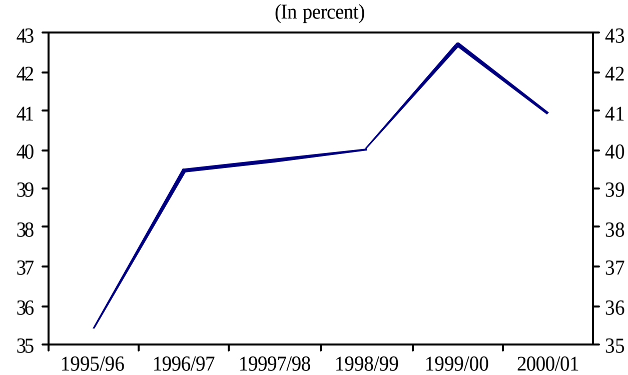
[8] Part of the difference in this ratio across countries is explained by the higher transport costs from ginneries to seaports in landlocked economies.

Table 4. Cotton Fiber: Ratio of Domestic Producer Price to International Price 1/

	Benin	Burkina Faso	Cameroon	Chad	Côte d'Ivoire	Mali	Togo	Average countries
1988/89-1993/94	52	54	48	48	51	46	49	50
1994/95-1996/97	41	39	38	35	41	36	40	39
1997/98-2000/01	59	51	50	49	55	48	57	53

Sources: Data on producer prices are from Pursell, "*Cotton Policies in Francophone Africa*", presented at a World Bank workshop, May 2001; interternational price series are from IMF, World Economic Outlook database; and recent producer prices are from IMF desk economists.

Figure 3. West and Central Africa: Ratio of Operating Cost to Total Cost 1/
(In percent)



1/ Average ratio is for Benin, Burkina Faso, Chad and Mali. Operating costs include all costs, except the purchase price of seed cotton. Costs are on an fob basis.

The relatively large gap between the domestic producer prices and lint equivalent export prices of seed cotton is explained primarily by (a) the rising operating costs of the cotton companies (Figure 3); (b) the implicit subsidies to other areas of the sector offered by the cotton parastatals (to private ginneries, for example, as well as to the domestic oil and meal processing companies); and (c) the provision of a variety of public services (for example, infrastructure maintenance, provision of schooling, and health services) by the cotton companies in the cotton growing regions.

3. The International Competitiveness and Growth Potential of WCA's Cotton Sector

The competitiveness of the region's cotton sector is evidenced by the low level of costs when compared to other countries, and by the strong growth in production over the last two decades. Comparisons of the costs of production by the various cotton producers of the world are difficult to make because of incomplete data. The most comprehensive source is from the International Cotton Advisory Committee (ICAC), which performed a survey of the cost of producing raw cotton in 2001–02 in 28 countries, including the largest producers (China, the United States, India, Pakistan, and Uzbekistan), four countries in WCA, and six others in Sub-Saharan Africa. It should be stressed that these data are also imperfect, however, the survey revealed that WCA countries were among the world's lowest cost producers. The current decline in world prices has illustrated the level of competitiveness of WCA's cotton sector. Although subsidies in the order of US $50 to $60 million were required for the zone as whole to cushion the effect of falling world prices, the national cotton sectors would have been profitable if the international price had exceeded 50 cents per pound. Few other countries can produce cotton profitably at this price level.

WCA countries can produce cotton cheaply, and cotton is generally far more profitable than alternative crops in many parts of the region. While farmers can shift relatively easily from cotton to soybeans in the United States, Australia, or Brazil depending on relative prices, growers in many WCA countries have much less scope for substitution. In Burkina Faso, the main choice is between the cotton/maize mix, or niebe alone. As shown in Table 2, cotton production in WCA's most important competitor countries takes place under heavy subsidization. Farmers in the two main producing countries --- countries that account for almost half of world production---enjoyed support as high as 20 percent of world prices in the case of China, and 50 percent in the case of the United States, while EU subsidies exceeded 100 percent. Producers in the WCA region are currently the main losers with respect to global policies, being penalized both domestically through implicit taxation, and in international markets due to subsidies in competing countries. There is no question, therefore, that producers in WCA countries would significantly benefit from a less distorted international environment for cotton production.

According to estimates made using the ICAC world textile demand model, the removal of U.S. subsidies would produce a fall in U.S. production that would lead to a rise in the international price in the short run by as much as 12 cents per pound.[9] Such an increase in the world price of cotton would increase revenues from cotton by about $250 million in WCA countries, which compares to the total flow of overseas development assistance (ODA) to the region of $1.8 billion in 1999, and $50 to $60 million of subsidies provided to WCA farmers in the current crop year to cushion them from the fall in prices. Elimination of government subsidies in the United States and China, by far the world's largest producers and the world's largest exporter in the case of the United States, would stimulate a reallocation of production toward lower cost producers, including those in West and Central Africa. Though the long-term price increase may be smaller than indicated by the above estimates, due to induced adjustments in production and consumption, the impact on long-term growth and poverty reduction in Africa would be significant. Reduction in the proportion of cotton production that is insulated from market forces as a result of government price support could also be expected to lower the volatility of the (free) world cotton price. Greater market stability would improve the environment for trade and encourage production in more competitive exporting countries such as those in the WCA region.

D. THE REFORM AGENDA: THE ROAD TOWARD COMPETITIVE COTTON SECTORS

The long-term strategic objective in the cotton sector is to increase and sustain its contribution to poverty reduction through employment creation and income generation in the rural areas, and to contribute to export earnings and government revenues. Growth linkage research in the West Africa region has shown considerable multiplier effects on employment and income in the rest of the rural economy due to the expansions in income from cash crops. The implications of sustained growth in the cotton sector or lack thereof for poverty

[9] Becerra, 2000, op. cit. Reduction of EU subsidies could be expected to have a similar, but much smaller, effect given the significantly lower level of production that is involved.

reduction, as well as the need for reforms to bring about such growth, should therefore be looked at from that much broader angle rather than from the immediate impact within the sector, or from the short-term effects on public finances.

Since individual countries in WCA are at different stages in their progress toward establishing competitive sectors, the reform agenda needs to take into account the situation in each country. The following sections present roadmaps for reforming individual cotton subsectors that depend on the institutional environment in each country. The sections summarize the main features characterizing the various subsectors in the current situation; describe the key features that would indicate successful reforms of these sectors; specify short-term target changes that need to be achieved in order to move toward competitive national cotton sectors; and identify specific actions that need to be undertaken by governments, private sector stakeholders, and development partners.

Since 1998, intensive consultations have taken place between the Bank and the IMF, the French Cooperation, national governments, producer organizations, and ginning companies to reach a consensus. The reform agenda that is outlined below reflects the progress that has been achieved toward that goal. This growing consensus was confirmed in July 1999 in Ouagadougou at the regional symposium on the future of the cotton sector in West and Central Africa. An important conclusion that came out of that symposium is the need to introduce competition at all levels of the sector in order to raise efficiency and sustain growth.

Experience suggests that successful reform of the cotton sector to achieve a competitive system is bound to take several years to complete. The reform plan has to be properly sequenced and managed so as to limit disruptions that could be detrimental to production. In most cases, however, the principal steps of the reform process would involve (a) spinning off to the private sector the non-core activities of the cotton parastatals (including extension services, transport activities, purchase and distribution of inputs and equipments, and marketing of seed cotton and cottonseeds); (b) reinforcing the technical and commercial capacities of farmer associations so they can directly contract for bank credit through a private-sector–based recovery system that links repayment of credit to the marketing of the seed cotton; and (c) introducing competition by opening up the sector to private ginneries, which in most cases would require privatizing ginneries that are owned by the parastatals. In addition, the marketing of fiber needs to be performed through transparent and competitive bidding processes. Over the short- to medium-term, there is considerable scope to lower the operating costs of the inefficient cotton monopsonies.

It bears emphasizing that the reform process would require that development partners provide the necessary technical assistance in support of programs to effect a successful transition to open and competitive systems. This approach is working well in Benin, where the IMF, World Bank, and bilateral donors have worked closely with the government and the private sector to facilitate the reform process. Similar support is also being provided to the cotton sector in Mali and will need to be extended to other countries in order to raise the chances of success in reforming the sector.

1. The Provision of Input Credit

Successful reform of this subsector would ensure effective credit recovery while allowing for the emergence of competitive primary marketing. Currently, credit recovery is achieved in two ways. In all but one country, the ginning companies, public or private, serve as intermediaries for the input credit, which they also recover on behalf of commercial banks or traders. In the remaining case (Benin), the recovery of credit is carried out through a private-sector–based Agribusiness Trade Association (ATA) type mechanism and does not involve ginning companies. While the latter system maintains the critical, direct link between seed-cotton payment and credit recovery, it eliminates the intermediation by ginning companies, which, in the case of state companies, has attracted rent seekers with little interest in undertaking long-term investments in input distribution activities. In fact, the system in Benin replaces the traditional intermediation / guarantee by the state company through a series of contracts between the private sector operators that are involved. Therefore, the next step in the transition under this system should be the development of an effective contract enforcement system to protect the integrity of the new mechanism. The transition in the remaining countries would involve two steps that could be carried out simultaneously or sequentially: (a) reduction of credit intermediation costs; and (b) the introduction of a private-sector–based recovery system, perhaps first of an ATA-type model like in Benin, which would operate well under a competitive contract farming system.

The strategic objective in this subsector is to sustain the broad access by farmers to input credit at reasonable cost by encouraging the development of recovery mechanisms that are more transparent and compatible with competitive primary marketing systems. In the context of limited farmer assets and underdeveloped financial markets, these mechanisms would have to maintain a direct link between the payment of seed cotton and the recovery of input credit. The mechanisms would operate best when owned and managed by the private sector, but they will require assistance both from national governments and development partners.

2. Marketing of Seed cotton

Primary marketing should be conditioned by the requirements for an effective input credit recovery mechanism. The indicator for successful reform should, therefore, be the emergence of a marketing system that allows free entry without jeopardizing the recovery of input credit. Judging from the experience in WCA, such a system would have to link seed-cotton payment directly to input credit recovery. The least complicated and least risky transformation that would satisfy this condition would lead to a system of competitive contract farming, at least during the initial years. Under contract farming, local farmer organizations would negotiate prices and sales contracts, on an annual or multi-annual basis, with one or several ginning companies. These contractual arrangements would provide member farmers with the necessary legal and institutional tools to tackle many of the production and marketing problems that they face, ranging from technology generation and dissemination, to credit access, input procurement, product quality, and price stabilization. For instance, sales contracts could be used to provide collateral for input credit, and ginning companies could collaborate with local producer organizations in purchasing insurance and other instruments to stabilize prices and incomes. To ensure the success of contract farming, the technical and commercial capacities of local farmer organizations would have to be strengthened significantly to allow them to adequately negotiate and enforce contracts with ginning companies and other private sector operators, including commercial banks and input distributors.

Currently, three types of primary marketing systems exist in the region. The first, which prevails in all but two countries, Benin and Côte d'Ivoire, corresponds to the traditional one-company-monopoly model. The second system is the one in Côte d'Ivoire, where the traditional national-level monopoly has been replaced by three geographic monopolies. A third system was adopted in Benin, where the monopoly of the national cotton company was lifted and prices and marketing decisions are now negotiated among private sector operators at the national level. In the three cases where several ginning companies exist (Benin, Côte d'Ivoire, and Togo), the price of seed cotton is de-linked from the allocation of quantities among these companies. In the case of Benin and Togo, the allocation of seed cotton is done on the basis of the share of installed ginning capacities. In Côte d'Ivoire, the quantity of seed cotton that a company receives is in principle determined by the level of production within its assigned geographic area. In all these cases, the prevailing system does not allow for competition for seed cotton among ginners. Moreover, it penalizes efficient ginning companies and rewards less efficient ones.

The move toward a system of competitive contract farming would allow for decentralized pricing, eliminate the administrative allocation of seed cotton, and encourage competition among ginning companies. This would, however, require organizational, technical, and commercial capacities on the part of producer organizations that are currently underdeveloped. Consequently, the next step in the transition, which should be carried out in parallel to the strengthening of the capacities of producer organizations, should be to set up private-sector–based mechanisms to negotiate pricing and marketing decisions. This move should be combined with the removal of geographic monopolies, in the case of Côte d'Ivoire, and the lifting of the monopoly of national companies over seed-cotton marketing in the remaining countries; in addition, sector-based input recovery mechanisms should be put in place. In Benin, the next move should be to decentralize the negotiation process. Once the capacities of local producer organizations have been sufficiently strengthened, sectors could graduate to systems where ginning companies negotiate pricing and marketing decisions directly with local producer organizations.

An important step that needs to be considered part of the reform of domestic marketing systems, is the removal of barriers to cross-border trade in seed-cotton. All cotton growing countries considered in this paper are members of regional integration bodies that have enacted policies to create common regional markets in West and Central Africa. Moreover, cotton is a major tradable commodity, and allowing cross-border trade would raise competition for seed cotton, improve producer incomes, and create incentives for investment in the sector.

3. Cotton Ginning

Currently the ginning industry is characterized by two modes of organization: one that is based on a single-company-monopoly system and another that is based on managed coexistence between public and private companies. In countries where a single-company monopoly exists, the following three steps should be taken immediately: (a) open up the sector and bring in new entrants, (b) ensure that national companies reduce unit costs by rationalizing ginning operations and spinning off non-core businesses such as transport and oil mills, and (c) maximize revenues by selling cotton seeds at competitive prices and adopting efficient fiber export arrangements. In countries where private ginning companies are already operating, the next step in the transition is to move toward more competition between state and private companies commensurately with the reforms in the input and primary marketing sectors. At this stage, countries should move to open up regional markets for seed cotton and allow ginners to compete for seed cotton at the regional level, thereby encouraging greater efficiency among ginning companies.

The ginning subsector has been one of the main sources of inefficiencies in the supply chain, hence the strategy to promote competition and thereby greater efficiency in this subsector. Beyond the regulatory frameworks for contract enforcement that have been referred to in the preceding sections, national governments would have to facilitate the entry of new operators and competition by privatizing the national companies. The latter should preferably be carried out in separate entities in order to avoid the emergence of private monopolies. The support to be provided by donors would include assistance for the planning and implementation of the privatization processes and the strengthening of national capacities for contract enforcement.

4. Import and Distribution of Fertilizers and Pesticides

Successful reforms in the fertilizer and pesticide subsectors should lead to competitive private-sector–based importation and distribution systems. Three different institutional constellations are discernable currently, corresponding to the following cases: (a) where the national company is alone in charge of the procurement and distribution system; (b) where the national company imports through private importers but remains in charge of the distribution process; and (c) where an ATA organizes the procurement process on behalf of farmers, but importation and distribution are handled by private operators. In the transition process, one could envisage countries moving progressively from the first to the third constellation. In that process, countries in which the national company is directly in charge of importation and distribution, the next step would be to move to a system where the company imports through private traders. The subsequent step would be to set up an ATA-type mechanism to take over the organization of the procurement process from the national company. These two steps could be taken simultaneously, in cases where farmer organizations have sufficient capacities to set up and manage such a mechanism. In countries where such a system already exists or where the national company procures through private traders, the immediate next step should be to establish transparent competitive bidding procedures. The systems at this stage should attract only professional importers and distributors who are able to mobilize the necessary financial resources and are willing to make long-term investments in import and distribution activities. The final move from the ATA-type system to a fully decentralized procurement system would depend on the availability of an effective input credit recovery mechanism and the degree of decentralization of primary cotton marketing. The move becomes less urgent, however, if the ATA-based system is coupled with transparent and competitive bidding procedures.

The strategic objective should be to sustain the broad access to quality products that has been achieved under the administered monopoly but in the context of competitive import and distribution systems. In addition to removing barriers to entry, national governments would have to enact and enforce adequate regulatory systems to protect contract rights, maintain quality standards, and safeguard human health and environmental safety. The private sector would complement these efforts by establishing ATA-type institutions to coordinate the provision of sectorwide technical support services, which would raise the demand-responsiveness and facilitate the contribution of beneficiaries to the financing of those services. The role of the Bank and other donors would be to assist in building national capacities for the development and implementation of regulatory systems and providing support to ATA institutions.

5. Seed Production and Multiplication

Two organizational structures are currently observable for the seed subsector among WCA countries. The first involves a system where the cotton company finances the research program, controls the seed distribution system, and works with contract farmers for the multiplication of improved seed. The second, about to be instituted in Benin, consists in an ATA-based system of co-financing research and extension services; subcontracting seed multiplication for distribution through local farmer organizations. The objective in both cases should be the establishment of well functioning private-sector–based multiplication and distribution systems. In the first case, the immediate next step in the transition should be to move toward an ATA-based system; in the second case, the next move should be toward expanding the role of the private sector both in seed multiplication and distribution. The pace of transition in both cases would be limited by the level of development of the private sector.

Continued access to high quality seeds through cost efficient multiplication and distribution systems should be the strategic objective in the seed sector. The accompanying measures that are called for here are basically the same as in the case of the fertilizer and pesticide sectors. However, in addition to enacting and enforcing adequate regulatory systems, governments would have to support and improve the performance of the national research systems. The private sector would also have to put in place institutional mechanisms that would enable it to participate more effectively in setting research priorities and augmenting the limited public resources to finance strategic research for the sector. Assistance by donors would help develop national regulatory systems and support research.

6. Pricing Policies

For the current crop year (2001-02), farm-gate prices have already been set, and additional financing is being sought to cushion farmers for some of the drop in world prices. For the next crop year, the following general principles should guide the countries of WCA: pricing mechanisms adopted for 2002-03 should not call into question the objectives of enhanced competition and privatization, nor should they roll back the reforms that have occurred. Thus, in Benin, where there is a publicly owned ginning company and six private companies, and where the prices are agreed upon among ginners, producers, and other market participants, a return to government-set cotton prices should be avoided.

Moreover, in countries where a government-owned monopoly remains, prices paid to growers should reflect fluctuations in the world price just as they would in a competitive environment with private ginning companies, which is the medium-term goal. Countries should not attempt to resist the influence of world prices, in particular by taking on a commitment to keep domestic prices artificially high in the face of low world prices. Doing so could imply unreasonably large budgetary costs. Thus, governments should strictly limit the extent of the subsidies they provide to cotton growers and ginning companies. Until reforms have produced a framework for competition among ginning companies, price setting (and hence the division of the proceeds from selling lint cotton) should in any case emerge from a transparent and equitable mechanism, agreed upon among the market participants (producer groups, the state, ginning companies, and financing institutions providing input and crop credits). In the past, it has been the case that ginning companies have justified low prices paid to producers on the basis of inflated costs. Ginning companies should be audited and compared to best-practice firms elsewhere.

Pricing mechanisms differ with respect to who bears the risk of price fluctuations over the course of the harvest. Two opposite cases can be envisioned. In the first case, the price to be paid for cotton is set at planting time; as a result, the risk of price fluctuations between planting and harvest is borne by the ginning company or the government. In the other case, no price is quoted to producers until the cotton is delivered to the ginning company and sold by the latter. In this case, all the risk is borne by the producers, those least able to do so. In most countries, some variant of the first case has been adopted. However, a problem with this system is that it often requires the government to step in with subsidies, which essentially shoulders the downside risk.

Since effective competition among ginning companies does not yet exist, an intermediate pricing mechanism that shares some of the risk between producers, ginning companies, and the government may be desirable for the 2002-03 crop season. For instance, in most countries with a single monopoly company and no private ginneries, such a mechanism could guarantee a minimum price to producers at the start of the season, with a top-up later if world prices remained at the initial level or increased. Ginning companies could hedge some of this risk by selling forward, but full hedging is impossible, since the size of the crop is not known and the cost of hedging could be prohibitive in some circumstances. In this system, both producers and growers share some of the risk (and all players could increase their receipts when world prices improve, in proportions that are equitable and defined in advance). Such a practice would be similar to the *ristourne* (rebate) which is familiar to growers in the region, but would differ from it on one major point: The second payment would not be based on the ginning company's surplus, but instead on the excess of the world price over the value that had been assumed in setting the guaranteed price. The excess could be shared between growers and ginners according to the percentage agreed upon when the guaranteed price was set; the state would also benefit through higher taxes on ginning company profits. The ginning companies would have an incentive to reduce their costs since doing so would boost profits. Such a scheme would not eliminate the risk of subsidy, but it would considerably reduce it if the guaranteed price were sufficiently conservative.

Past attempts at reducing the impact of price fluctuations on growers' incomes through stabilization funds have not been very successful. One of the reasons for this failure has been the lack of a clear understanding between growers, ginneries, and the state as to the ownership and control of the funds' resources. In Mali, for instance, growers feel that the stabilization fund resources have been largely used at the discretion of the cotton parastatal (CMDT) to cover deficits of its own making. In Burkina, on the other hand, where the fund is clearly owned and controlled by growers, the resources are better managed and protected from the cotton company. As a consequence, the resources are available for use to stabilize prices, and government subsidies are not expected to be required in 2001–02.

Reforms of the cotton sector and the price setting mechanisms should lead export proceeds to be distributed more fairly through transparent negotiations between the parties, and each party should have the responsibility to manage its own price risk. Ginneries could cover their price risks just like any other private enterprise would. Growers are not well equipped to cover price risks on their own, since their savings are generally invested in the form of animal husbandry, which cannot be easily disposed of when cotton prices fall. But village associations at the local or national level could enter into contractual obligations with private insurance companies that could provide them with income protection for an acceptable premium. Such arrangements would limit the need for government intervention.

E. CONCLUSIONS

The cotton sector in WCA is currently undergoing difficult times due to the historically low world price, partly reflecting generous subsidies to cotton growers in the United States, China, and the European Union, and the slow transition to competition among private ginning and marketing companies. Cotton is a key component of any program of rural poverty reduction in the WCA region, given its importance for the exports of these countries. Prospects for poverty reduction would be considerably improved by removal of subsidies by industrial and other developing countries, which are increasing the supply artificially and putting downward pressure on world prices. The WCA countries would benefit greatly from removal of price supports and subsidies to cotton growers in the other parts of the world.

Prospects for poverty reduction in the WCA countries would be improved with the reform of the cotton sectors in order to enhance competition and allow a larger share of the world price to be passed through to farmers. An objective of the reforms should continue to be the development of a sector in which the government has limited involvement in setting prices or providing subsidies. Privately owned ginning companies should compete with each other in determining prices, which would be agreed upon in an open and transparent manner. Such a system would require institutions to ensure credit recovery, so that purchases of inputs could be financed. Thus, it will be important to develop growers' associations and legal mechanisms for collecting debts. Though such institutions and competition among private ginning companies will not develop in time for the next crop year, it is important to continue to make progress toward this objective. In the meantime, the pricing mechanisms that are adopted should not call into question the objectives of enhanced competition and privatization, and they should not roll back the reforms that have already occurred.