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# Cotton in West and Central Africa: Adapting a Successful Model to New Realities

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This Policy Brief introduces a series of synthesis papers on the relationship between cotton sector structure and performance, drawing on recent studies of cotton sectors across Africa. The series is targeted at the wide range of stakeholders involved in cotton sector reforms in West and Central Africa (WCA). This introductory brief focuses on the cotton sector structural model most prevalent in WCA—the '*filière integrée*'. The brief reviews the early successes of the '*filière integrée*' approach and the more recent history of crisis and reforms. This sets the stage for comparisons between the '*filière integrée*' system of WCA and other systems that are described in subsequent briefs.

**THE *FILIÈRE INTEGRÉE*—AN AFRICAN SUCCESS STORY:** Cotton production is an important smallholder export crop for Africa in general and for Francophone WCA in particular. From independence to the mid-1990s, the *filière integrée* approach to cotton sector organization in Francophone WCA was cited in the development literature as a success story. The defining characteristic of the *filière integrée* is the single-channel relationship between producers and a monopoly cotton company that vertically integrates the diverse functions associated with cotton production, processing, and exporting. The vertical integration facilitates the task of providing input credit and encourages investments in research and extension services needed to foster intensive cropping practices and high yields. At independence, the vertically integrated structures introduced by the French were maintained relatively intact, with the only change occurring in the 1970s through a switch from a monopoly managed by the *Compagnie française pour le développement des fibres textiles* (CFDT) to national monopolies managed by a public-private partnership between the CFDT (currently operating as Geocoton) and each national government, with the latter holding the majority shares. This approach successfully:

- provided access to extension services, inputs, and credit (with high repayment rates) for a broad range of farmers; the result was generalized increases in yields and incomes that contributed to poverty reduction;
- helped create farmer organizations and build their capacity;
- guaranteed an output market and stable cotton prices, hence reliable incomes for farmers;
- developed effective technical packages through regional sharing of research;
- created jobs both upstream (input supply and extension) and downstream (ginning);
- supplied tax revenues to support national budgets; and, in some cases
- invested in economic and social infrastructure in the cotton producing zones.

The performance was impressive, with yields quadrupling or quintupling from the 1950s through the

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mid-1980s in most WCA countries. While the famous "Berg" report published by the World Bank in 1981[1] was generally critical of Africa's poorly managed agricultural marketing boards and parastatals (using the cotton sectors in Tanzania and Nigeria as illustrations of problem systems), the same report praised the cotton sectors in Mali and Burkina Faso, pointing out that the *filière integrée* approach contributed to the success of two major World Bank projects during the 1970s.

**RECURRENT CRISES LEAD TO EARLY CALLS FOR REFORM:** WCA cotton sectors have experienced repeated periods of crisis since the mid-1980s (1985, 1992, 1998, and 2004, for example) characterized by sector-wide deficits that frequently required government and/or donor bailouts.[2] While each crisis was triggered by declining world prices, often exacerbated by overvalued exchange rates[3] and changes in cotton support programs of the more industrialized countries, some analysts argue that the WCA cotton sector organizational model became a victim of its own success.[4] The phenomenal growth up through the early 1990s made it increasingly difficult to manage the sector, control costs, and develop the administrative flexibility needed to respond to increasingly complex and volatile world markets. As the national economies in WCA became more dependent on the cotton sector, cotton sector decision making became increasingly politicized. Decisions by governments and by cotton companies frequently became indistinguishable and were often driven by short-term political considerations rather than by the need to ensure long-term sector sustainability. In some cases, politicians were tempted to extract resources from cotton companies during boom years, either to finance public expenditures or for private gain. At the same time, cotton farmers and cotton companies gained economic and political weight increasing their ability to influence government decisions concerning producer prices and cotton sector bail outs. Functioning in this politically driven atmosphere, the companies failed to adopt the more sophisticated management tools required for running their increasingly large and complex enterprises.[5] The result was rising costs due to inefficiencies and lax management control that gradually eroded the WCA competitive advantage in cotton.

Some concrete illustrations of the consequences of weak management and political influence in the face of rapid growth include (1) low prices received by producers, even after accounting for marketing costs; (2) inflexibility of the panterritorial pricing mechanism, which transferred resources from efficient producers to inefficient ones–in effect playing the role of a poorly designed poverty reduction strategy; (3) mismanagement and/or misappropriation of funds by the cotton companies, which in the name of price stabilization objectives taxed producers in periods of high prices only to be unable to compensate them in periods of low prices; (4) inflexibility of the input supply mechanisms, which discouraged diversification to other crops; (5) low farm profitability due to stagnating yields and low processing profitability due to inefficiencies in post-harvest operations (Baghdadli et al. 2007).

Most countries were aware of these managerial weaknesses and several began reform programs in the mid-1980s by introducing performance contracts negotiated between the state and the cotton company. The overall objective was to make cotton companies more accountable to government and stakeholders by specifying in advance company responsibilities and production targets. In practice, the contracts (used in Mali, Burkina Faso and Cameroon) proved difficult to monitor and failed to deliver any significant and long-lasting improvements. Cotton companies were reluctant to provide information to government, argued that changes in the overall economy justified their poor

[1] Aid to African Agriculture: Lessons from Two Decades of Donors' Experience edited by Uma Lele (1991, Johns Hopkins University Press) also found the WCA cotton systems' integrated approach more successful than others.

[2] In the late 1980s two-thirds of the producer organizations in Burkina Faso were in default on input credit payments which were eventually covered by government when reforms were initiated in 1992. In Mali, the sector incurred a 9 billion CFA franc deficit in 1985/86 credited largely to the combined effect of falling world prices and the growing cost of the CMDT's cotton production and rural development activities, which tended to be much broader than those undertaken in other WCA cotton systems. The sector broke even the next two seasons following reforms that included more rigorous financial management, subcontracting part of seed cotton and lint transport to the private sector, increased CMDT responsibility for export marketing, freezing producer prices and reducing input subsidies (Tefft 2004). Despite these short spurts of improvements, there has not been sustained growth in farmer productivity or a sustained reduction in post-harvest costs; Government and donors had to intervene again to bail out the Malian cotton sector in 1992/93 and several times since 2001.

[3] Exchange rate movements cushioned the system after the 1994 CFA franc devaluation and again in 2002 (because the US dollar was appreciating against the Euro); but the impact since 2002 has been generally unfavorable due to appreciation of the Euro.

[4] This view is expressed explicitly in Tschirley et al. (forthcoming) and reinforced by many of the managerial weaknesses described in Baghdadli et al. 2007.

[5] Burkina's SOFITEX and Mali's CMDT, for example, are the largest cotton companies in Africa, having experienced very rapid growth during the 1980s and early 1990s. This growth presented numerous management challenges.

performance, and still turned to the government to cover their losses.

**CALLS FOR FURTHER REFORM:** While recognizing the many benefits of the vertically integrated *filière* systems, many cotton sector analysts came to believe that the costs of relying on a monopoly structure (single firm) to maintain vertical integration throughout the sector were outweighing the benefits. Discussions about cotton sector reform heated up in the late 1990s, but the pressure became greater in 2004 when three countries (Benin, Mali, and Burkina) had sizeable deficits and were unable to pay farmers because of depleted stabilization funds. This forced governments to request World Bank support, which led, in turn, to pressure from the international financial institutions and bilateral donors for more substantive reforms of the *filière integrée* model.

Advocates of more reform tended to focus on structural issues (the need to increase competition) and the role of government (withdrawal from tasks that can, in principle, be accomplished by the private sector). To move the agenda forward, advocates noted that a wide range of cotton sector issues had to be addressed (Badiane et al. 2002). Activities proposed in support of structural reform included:

- allowing free entry and competition at all levels;
- allowing producer prices to reflect world prices while protecting stakeholders against price risks;

Supporting activities needed to reduce the role of government included:

- developing private-sector mechanisms to ensure credit recovery;
- building producer association capacity for managing input supply, technical services and contract farming;
- establishing trade associations to enhance private sector coordination and financing of sector-wide technical support services; and
- improving the provision of services, especially research, extension, and phytosanitary controls, where governments have a role in financing the public goods[6] component.

In most of the region there is a strong belief among local stakeholders that the single-channel relationship between producers and the cotton companies is necessary to ensure a sustainable input credit system and to guarantee intensive cropping practices. Support for the single-channel system considerably reduced the options for reform, resulting in a variety of incremental changes brought to the existing single-channel model. These changes pertained mainly to (1) further development of farmer associations and their increased involvement in the delivery of critical services/functions, (2) the entry of private actors in ginning or input supply activities (Benin, Côte d'Ivoire, Burkina Faso), (3) the tentative and often partial withdrawal of government from the management of the cotton sector and the parallel empowerment of cotton sector "inter-professional committees" (Burkina and Benin), and (4) the introduction of producer price-setting mechanisms to ensure a better linkage to world prices.

**THEORETICAL VS. EMPIRICAL FOUNDATIONS OF REFORMS:** To date, the types, magnitude, pace, and impacts of the reforms implemented in WCA have differed across countries, as has the enthusiasm for the process among government decision makers and subsector stakeholders. Mali, Cameroon, Central African Republic, and Chad, for example, continue to operate vertically integrated government-run monopoly sectors despite government commitments to privatize.[7] Benin and Burkina Faso have allowed new firms to enter the seed cotton purchasing and ginning sectors, but competition among these firms is suppressed by various rules and zoning decisions. For many cotton sector stakeholders, the underlying arguments for radically changing the structure of the sector appear to be founded on theoretical precepts rather than the realities of their national economies, the vagaries of the international market place, and the empirical record of cotton sector development in WCA and elsewhere in the world.[8]

A common argument against privatization and liberalization efforts is that in reality they have focused almost exclusively on measuring performance in terms of prices (for example, the share of the world cotton price paid to farmers) without paying adequate attention to the very long list of farmer concerns that had been addressed progressively from the 1950s

[6] Public goods are goods (or services) that can be used by one person without affecting the supply to other people. Once public goods are available, no one can be stopped from consuming them for free. (e.g., public roads, agricultural market information). It is impractical for the private sector to supply a public good.

[7] There have, however, been some modifications in the provision of transport services where the private sector is now active. Also, in August 2008 Mali passed an act authorizing the privatization of its cotton company (CMDT).

[8] This sentiment was strongly reinforced by changes in US cotton subsidies, considered the impetus for the U.S.'s share of world cotton exports growing from 17% in 1998 to 42% in 2003. This increase in exports has contributed to the decline in world cotton prices observed since the late 1990s and elicited the WTO complaints filed by Brazil and C-4 cotton producers.

through the 1990s by the *filière integrée* approach (Fok and Tazi 2003):

- Risk (addressed through early announcement of prices and guaranteed markets);
- Input access (addressed through sector-wide credit and delivery systems, relying on farmers associations to guarantee credit and ensure against abuses such as late delivery and poor quality);
- Input prices (use of subsidies at appropriate times to stimulate adoption of traction equipment, fertilizers, and insecticides);
- Output prices (progressive involvement of farmer associations in price negotiations that take production costs into consideration);
- Financial liquidity (generally rapid payment of farmers after cotton has been collected);
- Improving farmers' technical competence (development of mechanisms to fund extension services and research from sector revenues)
- Improving farmers' organizational and representational competence (through capacity building of farmer organizations at local, regional, national, and international levels); and
- Infrastructure development using cotton revenues to build roads, schools, and health care facilities.

The argument is that there is a risk in the more "competitive" sectors for the relationships and confidence that had been so carefully nurtured among the various actors in the *filière integrée* approach to weaken or disappear; this permits the growth of relationships based on brutal competition and provides few if any incentives for different actors to work together for the overall survival of the sector.

**UNDERSTANDING THE EMPIRICAL RECORD:** The purpose of the series of Policy Briefs introduced by this brief is to provide a better understanding of the relationship between cotton sector structure and performance by drawing on the empirical record of cotton sector reforms across the African continent. It is hoped that by having easy access to information on reforms elsewhere, stakeholders in the WCA cotton reform process will be in a better position to assess their own progress, compare it to that of others, and improve the outcomes.

The next PB in the series (No. 2) presents a broad overview of structure-performance links using nine performance criteria: producer prices, net farm returns, access to inputs and credit repayment rates, number of new cotton varieties adopted during the past ten years, cotton yield trends, lint quality, cost-efficiency of post-harvest operations, value added, and macroeconomic budgetary impacts. Empirical evidence for the analysis of these structure-performance links comes from seven country case studies: Mali, Benin, Cameroon, Uganda, Tanzania, Zimbabwe, and Zambia.

Subsequent PB will look at single problematic or controversial topics such as input supply and credit or pricing mechanisms. These subsequent PB will provide fuller descriptions of the different approaches taken to resolving the problems than that presented in the overview of PB No. 2.

**REFERENCES CITED AND RECOMMENDED READING:**


Badiane, O., D. Ghura, L. Goreux, and P. Masson. 2002. *Cotton Sector Strategies in West and Central Africa*. World Bank Policy Research Working Paper 2867. Washington D.C.: World Bank.

Baghdadli, I., H. Cheikhrouhou, and G. Raballand. 2007. Strategies for Cotton in West and Central Africa: Enhancing Competitiveness in the "Cotton 4". Washington, D.C.: World Bank. Also available in French from Editions Saint-Martin, Montreal.

Berg, Eliot. 1981. Accelerated Development in Sub-Saharan Africa: An Agenda for Action. Washington D.C.: World Bank.

Fok, M., and S. Tazi, with Colin Poulton, and Saa Dittoh. *2003. Evolution institutionnelle, approche statique et dynamique de la performance en relation avec les objectifs de développement. Synthesis project report:* Résocot/CottonNet. http://halshs.archives-ouvertes.fr/docs/00/05/92/36/PDF/Synth_reg_complet_fr.pdf /

Tazi, Sophia. 2006. *Privatisation/Libéralisation des filières cotonnières en Afrique. Quels gagnants? Quels perdants? Vol 10 no. 4. Biotechnologie, Agronomie, Société et Environnement.* http://popups.ulg.ac.be/Base/document.php?id=528

Tefft, J. 2004. Mali's White Revolution: Smallholder Cotton from 1960-2003. Paper presented at the NEPAD/IGAD regional conference of Agricultural Successes in the Greater Horn of Africa. 22-25, November, Nairobi. http://www.anancy.org/uploads/file_en/p10-cotton.pdf

Tschirley, D., C. Poulton, and P. Labaste (eds.). Forthcoming. Comparative Analysis of Organization and Performance of African Cotton Sectors: Learning from Reform Experience. Washington, D.C.: World Bank.

World Bank. March 2000, *The Administered Monopoly Model in the Era of Competition and Globalization*. World Bank Cotton Policy Brief Series. Washington, D.C.: World Bank. http://www.worldbank.org/afr/cotton/200003e.pdf.

World Bank. June 1999. *The Cotton Sector in West and Central Africa*. World Bank Cotton Policy Brief Series. Washington, D.C.: World Bank. http://www.worldbank.org/afr/cotton/199906e.pdf.