Discussion of 'The Cotton Sector: History of a Capture'

Discussion by Véronique Thériault

Along with starchy staple crops, cotton dominates the farming landscape in West Africa. Cotton is primarily cultivated under rainfed conditions in rotation with maize, sorghum, and/or millet on small family farms that average fewer than ten hectares. Being the primary source of income for millions of smallholder farmers, cotton can help reduce poverty and improve food and nutrition security. As a main source of export revenue, cotton has wide-reaching implications for poor developing economies in West Africa.

The extent that cotton contributes to the socio-economic development of West African countries depends heavily on the economic performance of their cotton sectors. In turn, the incentive structure embodied in institutions influences the cotton sector's economic performance. Supportive institutions positively affect the ability of individuals and organisations to respond to new opportunities and challenges. Well-designed institutions provide incentives for individuals and organisations to invest, can limit the economic and political power of the elites, and create more economic equal opportunities for a greater share of the population (Acemoglu, 2003).

Over the last several decades, major institutional changes have been experimented with in West African cotton sectors, with the goal of increasing economic performance. These have included changes in social, political, and economic institutions, coming especially from market liberalisation and privatisation. With institutional changes come shifts in incentives and distributional power. These shifts have affected the economic performance of multiple West African cotton sectors, including those of Benin, Burkina Faso, and Mali.

West African cotton sectors compete in a highly competitive and global environment. Although cotton production and exports are key to their economies, West African countries play a relatively small role in the international cotton market compared to larger cotton producers and exporters, such as China, India, and the USA. As smaller players on the global stage, they need the ability to adapt to external forces (e.g. price fluctuations, tariffs, subsidies).

In addition, West African cotton sectors face internal constraints that can impede economic development, such as missing or imperfect access to inputs, financing, and insurance. Well-designed and implemented cotton-based institutions can help mitigate both external and internal challenges and support the socio-economic development of their countries.

Many institutional changes have occurred in the West African cotton sectors since achieving independence and a common goal has been improving economic performance. These changes can be grouped into four general periods: (1) contract with the French parastatal; (2) nationalisation of cotton gins; (3) implementation of market-oriented reforms; and (4) post-market reforms. Several indicators have been used to assess the economic performance of West African cotton sectors. These include production and yield; price; access to inputs, credit, and extension services; cotton quality; farm technical efficiency; research and development; export revenues; and profitability (Thériault and Serra, 2014; Thériault and Tschirley, 2014; Tschirley et al., 2009).

John R. Commons' institutional economic framework is well adapted to understanding the evolution in institutions and their related effects on economic performance (Thériault and Sterns, 2012; Commons, 1934). According to Commons' framework, actions to address limiting factors are the drivers of institutional changes. These actions have both intended and unintended consequences that affect economic performance, which in turn can lead to the advent of a new set of limiting factors. New sets of limiting factors resume the cycle of institutional change. Each institutional change generates a new incentive structure and affects power dynamics within the sector. Stakeholders are more likely to resist changes that would decrease their power.

I CONTRACT WITH THE FRENCH PARASTATAL (1960 TO MID-1970S)

Before the country's independence, the French parastatal, CFDT, had significant control over the cotton sectors in which it operated, managing farm input delivery and the grading and weighing of seed cotton, as well as exports. In return for its monopoly status, the French parastatal agreed to purchase all cotton production at guaranteed fixed prices announced before the planting season. During this period, production went up and the CFDT was profitable. However, much of the profits were retained by the French parastatal and little was reinvested in West Africa, and this impeded economic development.

II NATIONALISATION OF COTTON GINS (MID-1970S TO MID-1990S)

One of the major institutional changes corresponds to the end of the monopoly contract with the CFDT. To encourage economic development after independence, several West African governments nationalised their cotton sectors, which gave them control over the allocation of cotton export revenue. During this nationalisation period, cotton became a primary vehicle for boosting agricultural productivity and helped to promote integrated rural development (Thériault and Tschirley, 2014). Both cotton and cereal yields benefited from greater public investments. State-owned enterprises played an important role in developing and maintaining rural roads infrastructure, providing access to drinkable water, and reducing illiteracy. Yet, in the absence of strong institutions, greater power created incentives for rent-seeking behaviours and political interference. Farmers were still lacking a voice in decisions related to cotton activities. The combination of low farm-gate prices, mismanagement, and inefficiencies in ginning operations led to significant debts and discontent among farmers.

III MARKET-ORIENTED REFORMS (MID-1990S TO LATE 2000S)

In response to poor financial performance, donors started to push for market privatisation and liberalisation. The market-oriented reform process gave farmers the opportunity to better organise themselves to increase their voice within the cotton sector. Village-wide, multipurpose farmer associations were transformed into formal groups focused on cotton farmers. More responsibilities, such as the management of farm input credit, were transferred to them. Even though farmers, through their organisations, became more involved in management activities, their limited negotiation power in the determination of the price they received from the gins remained a limiting factor (Thériault and Sterns, 2012).

Market reforms were unevenly and partially implemented (Thériault and Serra, 2014). Benin made stronger attempts to privatise and liberalise its cotton sector than Burkina Faso and Mali. However, the establishment of several new cotton ginneries in Benin did not lead to increased competition, since the vast majority of them fell under the same, private rather than public, ownership. Despite the creation of new gins in Burkina Faso, the former state-owned enterprise continues to be the dominant player. After years of privatisation discussions, the Malian cotton sector remains managed by the state-owned enterprise, although it did undergo a change in management. Several factors can explain the uneven and partial implementation of the reforms, including resistance to change due to a loss of governmental power, as well as scepticism about the need for change and expected outcomes.

IV POST-MARKET REFORMS (LATE 2000S TO DATE)

In the post-market reform era, most efforts have been channelled towards increasing production. When world prices are high, increased production translates into greater export revenues. With greater export revenues, poor financial performance is less apparent, and therefore there is less push for market reforms. Cotton has been and continues to be produced under contract farming conditions, with guaranteed purchase of seed cotton at fixed pre-planting pan-territorial prices, and provision of inputs on credit. Both farm-gate and input prices have been key limiting factors to increased production. Price incentives, in particular through governmental fertiliser subsidies, have been used to encourage farmers to increase cotton production and productivity. But this has not always been enough to keep farmers content, as evidenced by the repeated farmer boycotts in Burkina Faso recently. After years of decline, Benin cotton production has been rising again over the last few years. This increase coincides with the arrival of the new president, who has a vested interest in the Beninese cotton sector (Honfoga et al., 2019).

The current economic performance of West African cotton sectors remains highly affected by institutional structure. There is a trade-off between competition and effective coordination (Tschirley et al., 2009). Effective coordination tends to facilitate the provision of services and improve the quality of cotton. Market competition tends to provide incentives for higher farm-gate prices and greater cost efficiency at the gin level. In more regulated cotton sectors, such as in West Africa, farmers are provided with extension services and inputs on credit, but receive lower farm-gate prices due to limited competition. The fact that no institutional structure performs unambiguously better across all performance dimensions can, in part, explain the abandonment of market reforms.

The institutional structure also affects the ability of cotton to spur food crop productivity (Thériault and Tschirley, 2014). This indicator has been the strongest in the regulated cotton sectors of West Africa. Direct and indirect pathways, through which state-owned enterprises have contributed to food crop intensification, include input provision and extension advice for food crops and agronomic spill-overs. Moving from a regulated to a more competitive market structure could have affected the food–cotton crop interdependence in West Africa, which may have threatened food security in the region.

Other limiting factors to the economic performance of West African cotton sectors include climate change, invasive species, low technology adoption, and lack of market influence. The increasingly erratic rainfall as a result of climate change has a detrimental impact on cotton production and productivity. The proliferation of counterfactual pesticides makes it more challenging to control for pests, while posing human, environmental, and financial risks to cotton farmers. With limited investment in agricultural research and development, West African cotton sectors are facing low and stagnant yields. Low adoption of technologies by farmers and gins results in low yields, limited traceability, and quality issues from contamination. With low processing capacity and domestic consumption, they are vulnerable to global development.

Moving forward, it is essential that any proposals to reform the West African cotton sectors take into account the institutional setting, such as the strong intertwined relationship between food and cotton crops, in order to avoid major discrepancies between expected and realised economic performance. Increasing farm productivity, while strengthening farmer resilience as well as ginning efficiency, is key to improving the economic performance of the West African cotton sectors. The promotion of regional integration is a viable approach for West African cotton sectors to increase their influence in the international market. Building strong institutions take times, but once built, they help to ensure that economic development occurs in an effective, accountable, and inclusive way.

REFERENCES

Acemoglu, D. (2003), 'Root Causes: A Historical Approach to Assessing the Role of Institutions in Economic Development', *Finance and Development*, Vol. 40, No. 2, pp. 27–30.

Commons, John R. (1934), *Institutional Economics*, New York: Macmillan.

Honfoga, B., Houssa, R., and Dedehounaou, H. (2019), 'Regulation of a Dominant Sector: A Case Study of Cotton', in Bourguignon, F., Houssa, R., Platteau, J.-P., and Reding, P. (eds.), *Benin Institutional Diagnostic*, WP19/BID03, Oxford: Economic Development and Institutions, ch. 5. https://edi.opml.co.uk/wpcms/wp-content/uploads/2019/10/5ab.-Chap5-CottonSector_RH_Aug28_LastVersion-final-v3.pdf.

Thériault, V. and Serra, R. (2014), 'Institutional Environment and Technical Efficiency: A Stochastic Frontier Analysis of Cotton Producers in West Africa', *Journal of Agricultural Economics*, Vol. 65, No. 2, pp. 383–405.

Thériault, V. and Sterns, J. A. (2012), 'The Evolution of Institutions in the Malian Cotton Sector: An Application of John R. Commons's Ideas', *Journal of Economic Issues*, Vol. 46, No. 4, pp. 941–66.

Thériault, V. and Tschirley, D. L. (2014), 'How Institutions Mediate the Impact of Cash Cropping on Food Crop Intensification: An Application to Cotton in Sub-Saharan Africa', *World Development*, 64, pp. 298–310.

Tschirley, D., Poulton, C., and Labaste, P. (2009), 'Organization and Performance of Cotton Sectors in Africa: Learning from Reform Experience', Washington, DC: World Bank.