

# Informal trade in cotton:

## Understanding drivers and working towards solutions in Zambia and Zimbabwe



### Workshop brief

This research collaboration between IAPRI (Indaba Agricultural Policy and Research Institute), AEPRIC (Agricultural Economics, Policy Research and Information Centre) and IIED (International Institute for Environment and Development) set out to understand informal trade in cotton in Zambia and Zimbabwe, and its impacts on the economic, social and environmental performance of the countries' cotton sectors.

#### Policy pointers

- The regulatory frameworks around contract farming in the cotton sectors in Zimbabwe and Zambia have struggled to deal with growing market competition, over-capacity and growing informality (in the form of side-trading).
- This has set both sectors onto a path of low investment in production, low yields and quality, low sustainability and distrust of sector institutions.
- There are two options to reverse this trend and minimise informality: an improved model of contract farming; or an open and competitive market. Either option requires institutional reforms.



## Contract farming and side-trading

The cotton sectors in Zambia and Zimbabwe have historically been two of the biggest exporters of lint in southern and eastern Africa and have contributed to the livelihoods of thousands of resource-poor rural households. Contract farming is the post-liberalisation model of cotton production in Zambia and Zimbabwe and at least six other sub-Saharan African countries. It formalises the links between smallholders and processors (ginners), de-risking investment on both sides through guaranteeing access to market and inputs on one side and supply of cotton lint on the other.

### Concentrated competition in cotton sectors

- Following market liberalisation policies in 1994, both Zambia and Zimbabwe embarked on what has been termed a 'concentrated competition' model of cotton production, in which a parastatal was privatised into an oligopsony of private cotton firms. This model allows farmers to choose the cotton company with which they wish to be contracted to access inputs, with the cost of inputs deducted at marketing. Other countries have followed different models, from national monopolies (Mali and Cameroon) and local monopolies (Mozambique and Burkina Faso) to fully competitive sectors (Uganda and Tanzania).
- The 'concentrated competition' model can run into problems when markets become less concentrated and more competitive. Our research supports Tschirley *et al.*'s (2010) observation that increased competition due to rising numbers of players 'may undermine extension, input credit and lint quality before it has any positive effect on prices paid to farmers'. In both Zambia and Zimbabwe the number of seed cotton buyers has risen sharply in recent years (to 15 in Zimbabwe by 2013 and 11 in Zambia by 2015). One of the main reasons why increased competition undermines investment is side-trading. It is a short-term reaction by ginning companies to industry overcapacity, and by farmers to poverty and low profitability.

For this research we have framed informal trade as side-trading of cotton outside of contracts between farmers and ginners. Tackling cotton side-trading is an urgent policy issue as it harms both companies and farmers and has contributed to the crisis of the cotton sectors in Zambia and Zimbabwe.

To better understand the drivers for informality within the structure and governance of Zambia and Zimbabwe's cotton sectors and to suggest policy responses, we conducted 96 key informant interviews, 19 focus group discussions, and surveys of 400 cotton farming households during 2016.

## Why does side-trading happen?

Side-trading has undermined the performance of the cotton sectors in both Zambia and Zimbabwe. It peaked in the 2011/12 season when the price of cotton was much lower than in the previous year and more buyers had entered the market offering cash to farmers. Around half of the cotton growers we surveyed in the two countries reported side-selling during the 2011/12 season.

Our research reveals that the incidence of side-trading is primarily affected by changes in producer price, competition between ginners, and regulatory intervention. Factors at the household level such as age, farm size or income level do not appear to influence farmers' decision to side-sell.

*Side-selling is primarily affected by changes in producer price, competition between ginners, and regulatory intervention, not farm size or income levels.*

The explanation most frequently given for side-selling in both countries (84% of farmers in Zambia and 57% in Zimbabwe admitted to side-selling at some point in the past few years) was that the buyer – typically the field agent for a non-contracted ginner – offered cash to buy seed cotton. Households rely on cash to cover basic needs of food, children's school fees and healthcare. Attempts at formalisation – by eradicating side-trading – will be unsuccessful where these drivers are not considered and addressed.

Side-trading is possible also because companies are eager to buy due to chronic overcapacity in the industry. Our research shows that all companies

– both established and recent entrants – have engaged in side-buying of seed cotton to some degree. Attention must be drawn to the incentive structures of field agents (usually lead farmers working as self-employed agents on commission for companies) in driving informality. Commission linked to targets for recouping the contracted crop and input loans is by far the largest source of income for agents. Agents' need to meet commission targets can mean a de facto reliance on side-buying cotton contracted by competitors. Senior staff at the companies may not be aware of such behaviours of the field agents, or, even if they were, the trail of responsibility may be too hazy to manage such behaviours.

## What has been done so far?

The institutional response to side-trading to date has largely been in the form of self-regulation –to safeguard the contract farming model, enforce contracts and prevent freeriding. The Cotton Ginners Associations (CGAs) in both countries have created Codes of Conduct to preserve the contract farming model and prevent freeriding. In Zambia, this is reinforced by the Cotton Board's remit of revoking ginning licences and its use of a database to track contracted farmers. In Zimbabwe, the parastatal Agricultural Marketing Authority (AMA) has stipulated common buying points to facilitate better oversight of trade and sanction non-compliance.

These forms of regulation have had some positive effects in terms of reducing informality and strengthening the contract farming model. However, the efforts have reinforced farmers' perceptions that the institutions are working against, rather than for their interests. Many farmers believe that the CGAs have formed price-fixing cartels; farmers express dissatisfaction with the low price of cotton as well as the inflated costs of inputs. They also voice frustration over what they feel is an insufficient response from the relevant government bodies, such as the AMA, to enforce the relevant legislation and penalties.

Whether they were side-selling or not, the farmers surveyed in this research expressed high levels of dissatisfaction with their contracts. Their mistrust in the cotton trading system is in part due to a perceived lack of transparency in pricing. In Zambia, for example, competition policy prohibits the setting of a pre-planting season indicative price or transparent price negotiations between ginners and farmers. Representation of farmers in these aspects remains weak in both countries. Mistrust is also due to a perceived poor quality and high cost of input and service provision.

## Need for further reform

Continuing on the present track – in which ginners still make claims over production through contract farming, but with contracts of reduced value to the farmers – is not a viable route to orderly markets and international competitiveness.

The cotton sectors in both Zambia and Zimbabwe are struggling. Chronic overcapacity – ginning capacity utilisation dropped to 33% in Zambia in 2015 and 4% in Zimbabwe in 2016 – makes it more difficult for companies to earn returns on their investments. This becomes harder still against a backdrop of suppressed global markets and smaller cotton harvests. Ginning companies, including established players, are changing their business models to secure sufficient volume of seed cotton. One option, taken by Cargill in both countries, has been to exit the sector altogether. But the more typical response has been to reduce costs and reduce exposure to risk of farmers' defaulting on input loans. Investment in inputs and services has been scaled back, cash sales have become the norm, and quality premiums have all but disappeared. Sustainability programmes built around farmer training (for example in conservation agriculture) by established companies have suffered from underinvestment and appear to be floundering.

*Continuing on the present track is not a viable route to orderly markets and international competitiveness*

As the 'concentrated competition' model heads towards a low-investment, low-yield, low-quality status, a situation of chronic informality can take hold in the grey area between contract farming and an open market. In the short-term, this may suit the needs of farmers, agents and ginners desperate for profitability and business survival; in the long-term, however, it is a recipe for sector demise. The reduced value of input and service packages threatens productivity and quality, and poses challenges to the implementation of sustainability programmes such as Cotton Made in Africa. The expected benefits from increased competition are not being realised. This situation has emerged in both Zambia and Zimbabwe,

though to varying degrees and with differing policy responses to address them. The current value chain and sector structure entrenches dependence between value chain actors and prevents the emergence of 'free' farmers.

## Options for reform

Regulation (usually co-regulation between public and private sector) must push the market towards greater formalisation, either through **(1) a reformed model of contract farming** that maintains a 'concentrated competition' structure; or **(2) an open market of free buyers and free sellers**. The two options are outlined below:

### Option 1: An improved contract farming model

Reform of the 'concentrated competition' model can be achieved through **more stringent conditions of market entry** (and stricter enforcement of existing standards), together with price setting and sector collaboration.

- **Higher barriers to entry into the sector.** Entry barriers limit participation to those ginning companies that can guarantee a level of quality input supply, extension provision and quality control.<sup>1</sup> Enforceable standards drive up the quality of input provision as well as effective extension provision to the farmers by ginners, improve fairness and transparency in input pricing, and avoid a 'race to the bottom' in contract farming. In policy terms, this may be implemented through requiring companies to obtain an operating licence from the Cotton Board granted only if minimum standards set by the sector are satisfied. Renewal of the operating licence would be contingent on ginning companies passing a thorough review of compliance with the standards. These standards will help improve productivity of cotton farmers which is far below its potential in both countries. So long as productivity is low – no matter how good sector reforms are – no tangible outcomes will be possible.
- **A price setting mechanism.** Price setting mechanisms can help ensure some price certainty for farmers when they plant their crop, a fair retention of value and reward for higher quality for producers, and eradicate ginner collusion. A number of examples exist where price setting is done in a way that ensures higher value retention for producers, yet remains acceptable to other sector stakeholders, including competition authorities. Prices can be set pre-season, for instance, using forward sales, historical prices and market projections. Alternatively, a combination of pre-season and post-season prices could be used, as in Burkina Faso.
- **Improved multi-stakeholder representation.** A Cotton Board, or a reformed and well-capacitated regulatory body, that enforces regulations and standards, with the authority to revoke licenses, will demonstrate that sector institutions are working for everybody. Cotton-specific commodity associations in the market and representation in policy (for example via the Cotton Association of Zambia) should be supported to foster a balance of power between ginners, producers and policymakers. This will help ensure that farmers' interests and rights are taken into consideration.<sup>2</sup>
- **Adjusted incentive structures for field staff and more accurate methodologies to forecast harvested volumes.** These improvements will reduce reliance on side-buying to achieve targets. It is also necessary to introduce punitive measures at field agent level to complement those at company level, to deter field agents from engaging in side-buying.
- **Alternatives to cash payments.** While immediate cash payments are important to farmers, cash payment can fuel side-selling and threaten quality by preventing grading. The sector should consider moderating cash payments either through a quick and transparent process of payment within a 3-4 day window (to allow the company to check the quality of seed cotton bought, with premiums being

<sup>1</sup> Tschirley, D L *et al.* (2010) Institutional Diversity and Performance in African Cotton Systems: Learning from Reform in West-Central Africa and East and Southern Africa. *Development Policy Review*, 28 (3), pp. 295-323. Available at: [www.cotton-acp.org/docs/montpellier/ISSCRI\\_2008\\_D/Documents\\_E/S4\\_P2\\_Tschirley.pdf](http://www.cotton-acp.org/docs/montpellier/ISSCRI_2008_D/Documents_E/S4_P2_Tschirley.pdf)

<sup>2</sup> Staritz, C and Tröster, B (2015) Cotton-based development in Sub-Saharan Africa? Global commodity chains, national market structure and development outcomes in Burkina Faso, Mozambique and Tanzania. Austrian Foundation for Development Research, Vienna. Available at: [www.oefse.at/fileadmin/content/Downloads/Publikationen/Workingpaper/WP54\\_Cotton\\_based\\_development.pdf](http://www.oefse.at/fileadmin/content/Downloads/Publikationen/Workingpaper/WP54_Cotton_based_development.pdf)

paid according to quality), or with a two-stage cash payment, with the second dependent on quality. An e-payment system currently piloted in Zambia is a possible solution.

## Option 2: An open and competitive market

An open market would mean departing from the current institutional model of contract farming to one where **'free' farmers can access inputs directly from the national marketing body or from the open market and sell their cotton harvest to their ginneries of choice**. Ginning companies then compete to be buyers of choice rather than through enforcement of contracts. In this scenario, informality becomes irrelevant. The main risk is a significant decrease in cotton production if inputs are no longer pre-financed and private extension services no longer delivered – with implications for productivity and natural resource management. An open market should not be confused with an unregulated market. Without regulations to oversee the provision of inputs and services, and facilitate the market, an open market will be outperformed by contract farming in key indicators of productivity and quality.<sup>2</sup>

- **Strong input and credit markets.** Governments must ensure that the building blocks for strong input and credit markets are in place, so that processing firms and farmers have less need for contract farming to access quality inputs, especially seeds. The development of alternative financing options for farmers remains a key challenge to help farmers become more independent. The usual challenges around collateral, accessibility, risk of lending, transaction costs etc. for smallholders persist, though group acquisition of inputs and marketing arrangements can overcome some of these challenges.
- **Generation of revenues at the sectoral level.** For a sustainable development of an open market that works for all, it is essential to generate revenues at the sector level, rather than rely on donors or lead firms for individual value chain projects. The generated revenue must be re-invested in the strengthening of input and credit markets, provision of extension services, as well as market management and promotion (with mechanisms that determine the basic rules on trade, prices, quality, traceability and sustainability). Management of these funds has to be efficient, free from corruption and at arm's lengths from government. Several models from other sectors illustrate how sector-based financing of service delivery can be achieved. A revenue generation mechanism is already in place in the Zambian cotton sector through a collection of levy on every kilogram of seed cotton ginned, though many find that the revenue is not adequate to benefit farmers and develop the sector. Review and revision of the levy is needed to raise sufficient funds for boosting the authority and capacity of the Cotton Board.
- **Need for evidence.** A successful transition from contract to 'free' commodity markets, as outlined above, is constrained by a lack of case evidence. In-depth research on other export commodities in developing country settings should be conducted to offer guidance on how this transition can best be managed, for example where an integrated national marketplace can manage problems of price discovery (including by-products), price risk management, financial inclusion, and access to quality inputs.

## Conclusion

It may be helpful to label the improved contract farming model the '**medium-term**' option and the competitive market model the '**long-term**' option. In the current policy environment, the first option seems the more feasible to materialise, but it actually makes the sector *less* competitive. The second option may be the bolder, ultimately more fruitful approach and deserves careful attention.

Neither option can be achieved without sector alignment, coordination and accountability. The sector must set a vision for its development, align the key stakeholders behind it and organize accountability around investments and commitments. It is crucial to listen to the voices of smallholders and their associations in policy making. Continued tracking of progress in the two countries – which appear to be taking very different routes to formalisation (one by further strengthening the contracting system, the other by challenging this institutional arrangement altogether) – is also important and could provide useful lessons for countries and sectors in a similar position.

Aside from specific recommendations for Zambia and Zimbabwe and their respective approaches to formalisation, our research sheds light on drivers of side-marketing which may be relevant to other sectors or value chains that utilise contract farming as their dominant institutional arrangement. **The most significant drivers include farmers' cash needs** – especially for food and school fees – and **perceptions of unfairness in regards to contracting terms** (costs and quality of inputs, collusion over pricing). Failure to acknowledge and address these drivers will lead to a failure in specific business models that rely on contract farming or a failure of entire sectors, in the face of growing competition.

## About the authors

Emma Blackmore is a Research Associate at IIED, London.

Stephen Kabwe is a Senior Research Associate at IAPRI, Zambia.

Kingstone Mujeyi is an Agricultural Economist at AEPRIC, Zimbabwe.

Jackqeline Muzenda is a Senior Lecturer at the University of Zimbabwe and a founding member of AEPRIC.

Bill Vorley is a Senior Associate at IIED, London.

Cover photo: Cotton growing in a villager's field, Meceburi Forest Reserve, Mozambique.

Credit: Mike Goldwater, May 2010.



This research was funded by the Economic Social Research Council and the International Department for Development of the U.K., however the views expressed do not necessarily reflect the views of the UK Government.

Research jointly supported by the ESRC and DFID