



The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

POLICY SYNTHESIS

FOOD SECURITY RESEARCH PROJECT – ZAMBIA

Ministry of Agriculture and Cooperatives, Agricultural Consultative Forum, Michigan State University

No. 9

(Downloadable at: <http://www.aec.msu.edu/agecon/fs2/zambia/index.htm>)

March 2004

AN ASSESSMENT OF CURRENT POLICY INITIATIVES IN ZAMBIA'S COTTON SECTOR

Ballard Zulu and David Tschirley

BACKGROUND AND OBJECTIVES: Zambia's cotton sector has recently been hailed as a "remarkable success" in many ways (Boughton, et al. 2003; Tschirley and Zulu 2003a; Tschirley and Zulu 2003b). While the sector continues to face major challenges to raise quality and productivity and thus improve its competitiveness in world markets, cotton production has grown by about 15% per year since 1999, and exports of cotton and textiles are first among agricultural exports in value (Export Board of Zambia, 2001). The two closest competitors to cotton during this time – fresh flowers and sugar – are primarily produced, respectively, by larger commercial farmers and plantations. Cotton is almost entirely a smallholder crop, and is arguably the most important source of cash income for the entire smallholder sector.

The sector has undergone substantial structural change since 1994: the largest firm, Lonrho Cotton, was sold to Dunavant Zambia Ltd in 1999, three- to four new companies have entered the sector, and at least one has exited. In addition, government over the past two years has made its first forays into proactive policy to promote the sector. In this paper we assess three of these policy initiatives: input credit provision for smallholder producers of selected cash crops including cotton, the proposed creation of a Cotton Board, and the emergence in 2003 of District Council levies as a point of conflict between local governments and cotton companies. The purpose of the paper is to provide guidance to public and private decision makers regarding key modifications which may need to be made to these policies to ensure continued healthy development of the sector.

THE COTTON OUTGROWER FUND: In January 2002, Zambia elected a new President who appeared to favor a more activist policy with regard to agriculture. Around the same time the Cotton

Ginners' Association was spearheading a proposal to promote "food security through cotton". The main provision of the proposal was that government would provide loans of around US\$2,000,000 to ginning companies which would be on-lent to outgrowers, with the package being a blend of cotton and maize inputs. During the President's inaugural speech at parliament he revealed that the government intended to establish a scheme to provide funds for on-lending to farmers for various crops, not just cotton.

Objectives and Operation of the Scheme: The main objective of the new initiative was to increase the number of farmers growing cash crops by increasing the amount of money available to finance inputs. According to CDT, an additional objective of the cotton scheme was to reduce "pirate buying". Also called "side-selling" or "strategic default" by farmers, this involves farmers receiving input credit from one company but selling the cotton to another company and neglecting to repay the loan. Such behavior typically involves collaboration of both the farmer and the "pirate" buyer. The logic behind the input credit scheme was that if firms received low cost funds from government to lend out to farmers, and if they understood that these funds could be terminated if they did not play by the rules, they would be less tempted to pirate buy and would instead focus on building effective relationships with farmers and recovering their loans. Such logic might be most applicable to small firms with credit constraints for whom this program makes a non-marginal difference in their ability to engage with smallholders.

The total amount for the scheme was originally ZK15 billion (about US\$3.5 million) of which the cotton sector was to receive ZK3.5 billion (about US\$800,000). Government identified the Cotton Development Trust as the vehicle to deliver these

funds. Several discussions were held between CDT and the Zambia Cotton Ginners' Association. The initial idea was to on-lend these funds to all the Ginners at an interest rate of between 13% and 15%. In the end the available money was lent only to Dunavant and Continental Gineries in Livingstone. Some ginning companies refused to take part in the scheme namely Zambia-China Mulungushi Textiles and Mukuba Textiles. Clark Cotton, the second largest cotton company in Zambia, was excluded because its location, Eastern province, was not in the pilot scheme in 2002.

Government signed a contract with CDT stipulating that the funds would be lent to CDT at 8% annual interest. Twenty percent of the total amount was a grant to CDT for mobilization but the CDT board resolved that all the funds should be on-lent to the participating ginners. Government released ZK450m in a first tranche in August 2002. The next tranche of ZK650 million was released in December 2002. No further funds were released which meant that only ZK1.1b of the planned ZK3.5b had been released. Dunavant received close to ZK1 billion while Continental Gineries received the balance. CDT reports that payments are on schedule and that the last payment is expected in January, 2004.

The late disbursement of these funds reduced the effectiveness of the scheme. The amount released is also small, representing about 5% of Dunavant's lending during the 2002/03 season.

CDT planned for a scheme of ZK2.2b for the 2003/04 agricultural season that would include all ginning firms. MACO reports that the Cotton Growers Association applied to be the host of the funds but did not provide the needed documentation. CDT thus continues to be the host of the funds in the 2004 season. As of January 2004, close to ZK1 billion has been raised for the scheme and has been transferred. The balance is to come from the recoveries of the ZK1.1 billion from last year.

Key Issues: To date the scheme has avoided the error of centralizing input procurement and distribution to farmers within itself. By channeling

credit to private cotton companies already working with farmers and allowing them full freedom on how to use it, the scheme essentially becomes a means to increase lendable funds in the system and reduce borrowing costs for the companies.

A potential benefit of the credit scheme may be helping smaller firms remain in the market while giving them a vested interest in "playing by the rules" and not engaging in pirate buying. This would be a major policy success

A more important potential benefit of the scheme may be in helping smaller firms remain in the market while giving them a vested interest in playing by the rules. A major risk in allowing new, often small entrants into the cotton sector is that they may have little long-term investment in the sector and may, together, create major credit repayment problems that undermine the entire enterprise. At the same time, some level of workable competition is needed to stimulate private institutional innovations that improve quality and productivity while sharing profits equitably and sustainably with farmers (Tschirley et al., 2003). Thus, it would be a major policy success if the Cotton Outgrower Credit Scheme helps smaller firms remain in the market while providing input credit and not engaging in pirate buying. As a condition of participating in the loan program a Ginner could be required to maintain open records of loans to growers and their repayment.

The scheme would benefit from clarification of at least three key questions. First, what precisely is its purpose? Purposes which have been mentioned by players are increasing lendable funds in the sector, reducing borrowing costs for cotton companies, and reducing pirate buying. An additional original intention was to use 20% of the fund's assets to capitalize CDT, this objective was dropped during the first year. We have suggested that an important benefit relates to the effect of the scheme on the structure of the industry at the ginner/first buyer level. CDT, the cotton companies, and MACO would be well served by clarifying and prioritizing precisely what the objectives of the scheme are.

Second, will the scheme be financed with a revolving fund, or will it rely on new appropriations every year? A revolving fund would provide much greater stability for the Scheme, as long as the resources were managed properly and transparently. If such management cannot be reasonably assured,

then recurring appropriations are probably the best funding option. Yet such a design leaves the scheme vulnerable to political and budgetary changes, and for that reason would probably undermine strong commitment by key players in the sector. To date, the scheme has not been managed as a revolving fund: CDT was required to fully repay the ZK1.1b after the first year and receive a new appropriation of ZK2.2b. Its important that a strong and transparent management structure be put in place so that the scheme can begin operating as a revolving fund.

Finally, what criteria should be used in deciding each firm's eligibility and share of the financial resources? It is critically important that the program not be turned into a credit "give away". Thus, one key criterion for eligibility must be the ability of the firm to repay the loan. This will depend upon the ginner's ability to set up a lending organization of agents with knowledge of growers and their ability and inclination to repay loans, and an incentive for the agents to get the repayments. This implies that CDT must make some impartial assessment, based on criteria agreed to by the Ginners' Association, of the effectiveness of a company's input credit disbursement and collection system prior to granting eligibility. If needed, technical assistance could be provided to assist the firm improve its system and meet eligibility requirements. Once eligibility is granted, each company's share of the resources should also be based on transparent criteria agreed to by CDT and the Ginners' Association. During the program's first year, Dunavant received nearly 90% of all funds. It is likely that with the new funding of ZK2.2b and presumed entrance of Clark and other companies, Dunavant's share will fall substantially.

THE PROPOSED COTTON ACT: Beginning as early as 2000, CDT and other stakeholders started developing a regulatory framework to allow the orderly development of the sector over time. A key concern which drove this process was avoiding a repeat of the credit default crisis that nearly destroyed the sector from 1997 through 1999. The proposed Cotton Act emerged in this context.

Basic Provisions of the Act: The proposed Act establishes a Cotton Board with nine voting members, appointed by the Minister of MACO upon nomination by their own institution. Members are the PS of MACO, two persons each from CDT, the Cotton Ginners' Association, and the Cotton

Growers' Association, the Controller of Seeds (one person), and one person from the Environmental Council of Zambia. The Board would have no authority to set prices nor to directly engage in marketing behavior. Rather, its stated functions are regulatory and advisory. Specific stated functions of the Board are to:

- a. *Regulate* the production, processing, and marketing of cotton,
- b. *Advise* government on regulations and policies related to the sector,
- c. *Monitor and report* on implementation of policies and matters related to the sector, and
- d. "Carry out such activities as are necessary ... to the better performance of its functions"

Key sections of the proposed Act are on licensing (III.15) and registration (IV). The Board will have a Cotton Licensing Committee of not more than seven members. Functions of the Licensing Committee are to issue certificates and licenses, approve "distinguishing marks" (company trademarks), and maintain data bases on land planted with cotton, registered cotton growers, and distinguishing marks. The Act stipulates that "any person dealing in cotton" must be registered and pay a registration fee, and that any cotton leaving a registered ginner must have the distinguishing mark clearly shown (subsection 30.1). Licensing is specified for cotton ginners, cotton seed sellers, cotton seed producers, Inspectors, and "any other license which the Board may prescribe"

The Board may refuse to register a person "giving reasons in writing" if it is "satisfied that the applicant *or a person employed by the applicant* does not have sufficient knowledge or experience in the cotton trade" (emphasis added, VI.33.3). No criteria are provided as a basis for making such a judgement. All licence holders must maintain records on cotton transactions, which "shall be open to inspection at all reasonable times, by the Board ..." (VI.35). Once granted, registrations can be cancelled by the Board for, among other reasons, buying pre-financed cotton without authorization from the financier, engaging in "pirate buying"¹, or

The proposed Cotton Act focuses on two issues of great importance: credit repayment and product quality.

¹ "Pirate buying" is not defined in the Act, and the difference between it and "buying pre-financed cotton without authorization from the financier" is not clear.

engaging in “any other activity not registered with the Board”.

Cotton Board Inspectors powers include:

1. Enter and search any premise and seize and remove any cotton based on “reasonable cause”
2. Stop, search, and detain any vehicle based on “reason to believe ...”
3. Inspect all records related to cotton
4. Arrest and detain based on reasonable suspicion.
5. Seize machinery or material if he believes an offense has been committed *or is likely to be committed* (emphasis added; section 44.1.c)

The Act appears to prohibit appeal of Board decisions to Courts. The appeals procedure is first to the Board, then to the Minister. (IV.22.2 and VI.37.4).

The Act allows the Board to raise funds through Parliamentary appropriations, fees, grants, donations, and loans, and stipulates the establishment of a Cotton Development Trust Fund to finance technical activities (VII.39).

Assessment²: The proposed Cotton Act focuses on two issues of great importance to any export industry engaging in contract farming with smallholder farmers: credit repayment and product quality. Each of these aspects can be negatively affected when large numbers of cotton buyers operate in the sector, especially if some do not have long-term commitments to the sector. Buyers who do not provide input credit to farmers can offer more attractive prices and thus promote strategic default. These same buyers are not likely to pay attention to the careful post-harvest practices needed to ensure high quality cotton for export, nor are they likely to abide by the agreements nor support the long-term efforts needed to increase productivity in the sector.³

A successful industry will work to reduce the costs of – and need for – formal regulation by investing in relationships that increase trust.

We suggest that the public good would be better served by approaches that rely less on policing powers and focus on root causes of the sector’s difficulties.

Viewed in this context, efforts to impose some control over who can operate in a cotton sector are understandable. Yet it must also be recognized, first, that abuses can be committed by established players who have accumulated too much power and may over time come to favor short-term profits over long-term development. Second, as argued in the previous section, some level of competition is necessary to promote private innovation to ensure efficiency and equity so that smallholder farmers engaged in the activity can earn sustained profits and escape poverty. Finally, regulation has costs as well as benefits, and a successful industry will keep its eye on reducing the costs of – and need for – formal

regulation by investing in relationships that increase trust, especially between smallholder farmers and the much larger industrial buyers. The challenge, then, is to devise a regulatory approach that is workable, that has sufficient “teeth” to impose effective penalties but does so only when strictly needed, that is balanced enough to avoid capture by large established players, and that builds trust among players over time.

From this perspective, the heavy regulatory approach embodied in the Act provides reason for serious concern. The Act grants very broad policing powers to the Board, essentially creating a parallel police force, uses vague language in specifying the conditions under which these powers can be exercised, and attempts to insulate decisions of the Board from judicial review. It also transfers powers and responsibilities reasonably within the mandate of MACO to an agency another step away from political accountability. This combination of characteristics suggests that the Board’s powers could be abused, especially if the sector becomes more concentrated than it already is. The membership of the Board appears balanced, and its size – nine members – is large enough that attaining a majority for hard line positions may be difficult. Yet a quorum is only six, and it is impossible to predict how shifting alliances and power balances may play themselves out in any given vote.

The tone of the Act and the powers proposed for the Board and its Inspectors suggest that its design has been heavily influenced by a vision of the sector that emphasizes regulation and mandated orderly

² The proposed Cotton Act is a legal document and as such requires legal expertise for a full assessment. Here we raise key issues from a public policy standpoint.

³ These efforts can include varietal zoning agreements, collective action to avoid contamination of cotton with synthetic fibers, voluntary levies, and investments in farmer training.

processes at the potential expense of competition and innovation. Given that the sector has emerged from the crisis of the 1990s due in large measure to the institutional innovations and improved management that emerged from competition between the two major players, one might ask why such an approach is needed now. More specifically, one should ask three questions. First, will it be possible to implement such an approach in Zambia, or will the regulatory and policing burden be more than the Board can handle? Second, even if it is possible to implement, will this approach be in the best interests of the cotton sector and the broader society? Finally, are there other approaches that may be less intrusive and more effective?

Definitive answers to the first two questions are beyond the scope of this paper. We suggest, however, that the regulations may be very costly to apply in practice and hold the possibility of serious abuse if they are effectively applied. In short, we suggest that the public good would be better served by alternative approaches that rely less on policing powers and focus on root causes of the sector's difficulties.

Alternative Approaches: The proposed Act is missing any serious treatment of the problems of information and collective action to improve credit repayment, quality, and productivity⁴. The credit repayment problem is in large part a problem of the cost of information regarding the credit worthiness of farmers. Collective action – some voluntary but some likely requiring legal sanction – is needed to resolving this problem, and is also necessary to conceive, finance, and ensure adherence to procedures and programs to improve quality and productivity at the farm and ginning levels. While the Dunavant Distributor System (and perhaps Clark's less well known approach) has been remarkably successful in this regard, the system likely remains costly, and apparent credit repayment rates of 85-90% remain well below what a purely financial institution would consider acceptable.

All companies could achieve higher repayment rates at lower cost if the sector were able to operate an effective credit bureau – a clearing-house for information on the credit status of borrowers. Credit

bureaus can range from voluntary sharing of information among firms to legally mandated reporting and public availability of information on delinquencies and defaults. While the institutional and legal challenges of establishing a workable credit bureau are substantial, such an approach holds the prospect of providing a lower cost solution to the credit repayment problem than does a heavy regulatory approach as embodied in the proposed Act. The Cotton Ginners' Association, which has the greatest incentive to reduce credit default, should work together with CDT and other organizations (MACO, ZNFU) to propose a workable framework for improving credit information in the sector. The proposal should include strengthening of CDT and legal changes, if any, deemed necessary to achieve the goal of low-cost availability of information on the credit worthiness of potential borrowers.

The Act stipulates the creation of a Cotton Development Trust Fund for technical activities, which is a positive step. This section would be strengthened if specific mechanisms were proposed to generate funds from within the sector to finance quality- and productivity improvement programs, e.g., ginning or export levies.

Well functioning commodity sectors have the ability to generate regular and reliable information about key aspects of sector performance beyond credit histories of borrowers. Examples of such information include costs of production and profitability of the crop relative to alternatives in production, an assessment of key bottlenecks that increase costs and reduce profitability, international price levels and forecasts, trends in input use and yields relative to neighboring countries, number of producers, and total production. This type of information is currently very difficult to obtain. Providing it in a reliable fashion requires collaboration between public and private sectors. The Act should include a proposal for the institutional home and operational mechanisms to provide such information.

In summary, this review suggests the following. First, bringing together formally a broad set of stakeholders in the cotton sector to grapple with key development issues has great merit. Properly focused, such a group could play a central role mobilizing resources and political will to make the long-term investments in productivity and quality that are crucial for the sector's continued success. Second, the current heavy policing focus of the proposed Cotton Act is inappropriate. If approved in

⁴ The Act does mandate that the Board shall maintain data bases on land planted with cotton and registered cotton growers, among other items. Yet it does not tie this function into efforts to address credit repayment problems.

its current form, the Act would create a potentially powerful institution with vaguely defined limits on those powers, relatively little political oversight, and no judicial oversight. The probability of abuse in the Zambian context is prohibitively high. Third, if sector leaders remain committed to the creation of a Cotton Board, its policing powers should be reduced substantially, and the Act should specify much more clearly under what conditions any remaining policing powers can be used. Fourth, the sector needs seriously to deal with at least three issues that are either ignored or treated very briefly in the proposed Act. The sector needs to a) develop legal bases and operational approaches to improve information on borrowers' credit history, b) promote collective action for procedures and programs to improve quality and productivity, and c) propose a specific institutional home and operational mechanisms to improve the monitoring of sector performance beyond credit repayment. For the Cotton Act to make a positive contribution to the development of the sector, it needs to re-conceive the Cotton Board to focus on these issues and greatly reduce its policing emphasis.

DISTRICT COUNCIL LEVIES: The levying of fees on crops traded within a district or across its borders became a point of intense conflict between some local governments and cotton companies in early 2003 when it came to light that Chadiza District in Eastern Province had raised its levy on cotton from ZK5/kg to ZK100/kg. The ensuing negotiations between cotton companies and Chadiza, and reactions by some other Districts, have raised important issues about mechanisms of public finance at the local level and impacts on economic activity and smallholder farmer incomes.

Operation of the Levies: According to the Ministry of Local Government and Housing (MLGH), district councils in Zambia have for many years had the power to set levies on the sale or transport of agricultural produce. This power was made more explicit in the Local Government Act of 1991. Under the new government which passed this act, funding levels from central government to local councils declined, meaning that Councils felt greater need to raise funds. Given the lack of non-farm economic development in rural areas, agricultural produce levies have been their primary tool.

The interpretation of the agricultural levies by councils in Zambia is that they are charged on agricultural produce grown in , sold in, or transported out of the district. Prior to the 2003

marketing season, levies on cotton were uniform across districts at ZK5/kg, though it is not clear that all districts collected the levies on all marketed crops. In January 2002, Chadiza District gained approval from MLGH for Statutory Instrument No. 6 of 2002, in which it established new levies for maize, paprika, cassava and potatoes (grouped together), cotton, tobacco, tomato, cabbage, and watermelon. The value of the levy per kilogram varied widely. For cotton, it was set at ZK100/kg, higher than for any crop except tobacco, which was set at ZK300/kg.

Local businesses appear to have been unaware of the new levy schedule at the time it was passed, and the Chadiza District Council provided businesses with demand notices only in November 2002 (after the close of the marketing season) regarding the total value of 2002 levies due. In February 2003, an *ad hoc* group composed of representatives of Clark Cotton, Dunavant, Stancom (tobacco), Dimon Zambia (tobacco), and a local petrol filling station formally requested that the District Council reconsider the levies. The cotton and tobacco companies emphasized that they would reduce the price they pay to farmers by the amount of the levy. In April, the Council reduced levies on cotton to ZK40/kg, and to ZK70/kg for tobacco. Levies on other crops remained unchanged except for maize, whose levy was raised from ZK300 per 50 kg bag to ZK3,000. It remains unclear whether businesses were obliged to pay the full value of the originally assessed 2002 levies.

Interviews with Dunavant and MLGH officials indicate that other districts are charging levies of ZK10/kg, 1% of the anticipated price of cotton at the time they were set. However, interviews with MLGH reveal that Katete District Council gained approval in June, 2003 to raise the cotton levy to ZK200/kg for cotton seed and ZK100 for raw cotton. These new rates will not take effect until the by-laws are printed and circulated by the Government Printing Office. As of September 2003 there were no other pending by-laws on cotton or other crops.

Assuming that the Katete levy of ZK100/kg remains in place, potential revenue from Dunavant and Clark in Eastern Province is about US\$600,000, primarily from Katete and Chadiza. These are substantial sums of money for District Councils.

Key Issues: These events raise several issues. The first regards the way in which the levies were passed. District Councils are required by law to post

proposed bills on a notice board for three months, and to take comments during that time. Companies indicated that this procedure had not been followed; the fact that they raised no protests until 13 months after the final *printing* of the Chadiza statute seems to support their contention. MLGH reports that in their view all procedures required to pass a law as spelled out in the Local Government Act have been followed.

While full clarity on what procedures were followed may never be attained, it seems clear that local governments have incentives to be less than transparent when proposing such actions, due to the economic power wielded by large agro-industrial companies in poor rural areas. It is telling that Chadiza levies were reduced by 60% for cotton and 77% for tobacco, while they were raised by a factor of 10 on maize; the latter is traded primarily by small traders with little ability to make their voice heard in government. From the Council's perspective, however, maize is a less attractive crop to levy, because only a portion of it is marketed, and collection of the levy requires them to deal with large numbers of traders rather than one or two. What options are open to District Councils to raise funds for key public sector activities?

This paper will not answer that question; simply raising it should make the point that it is in the interests of agro-industrial

companies to work with local governments on this issue, demonstrate their appreciation for the Councils' quandary, and agree to pay reasonable levies. At least some players indicate that they are doing this. At the same time, District councils need to understand the longer term consequences of their taxing policies. Almost all governments in the rest of the world avoid taxing exports and often subsidize them. Their objective is to be more competitive in world markets and promote economic activity. Since the price of cotton in world markets is not influenced by the small quantities marketed by Zambia, the ginner cannot pass the tax on to buyers in the world market. Most of the tax will fall on the growers. At some level of taxation growers will reduce the production of cotton. Migration of cotton production is likely from districts with high taxes to those with low taxes, and from districts with

It is in the interests of agro-industrial companies to work with local governments on this issue ... At the same time, District councils need to understand the longer term consequences of their taxing policies.

Government and donors should consider technical assistance to local councils to grapple with this issue.

comparative advantage in cotton into those with less comparative advantage.

The use of the taxes will also influence the outcome. If tax funds are used to reduce costs of delivering cotton, the negative effect of the tax will be mitigated. Examples include improved roads, greater security, or improvement in the enforcement of contracts. The point is that taxation policy is complex, suggesting that government and donors should consider technical assistance to local councils to grapple with this issue.

REFERENCES

Boughton, Duncan, David Tschirley, Afonso Osorio, Higino De Marrule, and Ballard Zulu. 2003. Cotton Sector Policies and Performance in Sub-Saharan Africa: Lessons Behind the Numbers in Mozambique and Zambia. Paper prepared for the IAAE Triennial Conference, 2003. Durban.

Tschirley, David and Ballard Zulu. 2003a. *Zambian Cotton in a Regional Context: Performance under Liberalization and Future Challenges*. Policy Synthesis No. 7. Food Security Research Project. Lusaka.

Tschirley, David, Ballard Zulu, and James Shaffer. 2003b. *Cotton in Zambia: An Assessment of Its Organization, Performance, Current Policy Initiatives, And Challenges For The Future*. Working Paper No. 8. Food Security Research Project. Lusaka.

The Food Security Research Project is a collaboration between the Agricultural Consultative Forum, the Ministry of Agriculture and Cooperatives, and Michigan State University's Department of Agricultural Economics, and is funded by the United States Agency for International Development in Lusaka. The Zambia FSRP field team is comprised of J. Govereh, B. Mwiinga, J.J. Nijhoff, G. Tembo, and B. Zulu. MSU-based researchers in the FSRP are C. Donovan, T.S. Jayne, D. Tschirley, M. Weber, and A. Chapoto.

Please direct all inquiries to the In-Country Coordinator, Food Security Research Project, 86 Provident Street, Fairview, Lusaka; tel: 234 539; fax: 234 559; e-mail: fsrp1@msu.edu.