POLICY SYNTHESIS

FOOD SECURITY RESEARCH PROJECT – ZAMBIA

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KEY CHALLENGES AND OPTIONS CONFRONTING SMALLHOLDER, AGRIBUSINESS AND GOVERNMENT LEADERS IN ZAMBIA'S COTTON SECTOR

BACKGROUND: Since the initiation of major agricultural reforms in the early 1990s, Zambian cotton production and processing has grown rapidly and now ranks as one of the most important sources of crop income among small farmers and agribusiness firms in key agricultural production regions of the country.

A Cotton Industry Consultative Meeting, convened by the Ministry of Agriculture, Food and Fisheries (MAFF) and the Agricultural Consultative Forum, was held in Lusaka in October 1999 and again in February 2000 to discuss current problems and challenges facing the cotton industry. The meetings brought together representatives of farmers' groups, assemblers, ginners, the research and extension system, and MAFF officials. Based on these meetings and independent analysis, the Food Security Research Project prepared a study that identified underlying causes of the current crisis facing the industry and proposed a set of actions for the industry to consider and resolve to promote the interests of smallholder and agribusiness development in Zambia.

OBJECTIVES: This policy brief highlights some of the key messages contained in the full report.[1] However the problems and opportunities facing the industry are very complex, and cannot be easily summarized in this brief. Hence one goal of this policy brief is to encourage interested parties to obtain, review and debate the full study. A second objective of this brief is to highlight the strategic industry development questions and proposals identified in the study that require debate and follow up actions.

CHALLENGES FACING INDUSTRY AND GOVERNMENT LEADERS: Cotton production in Zambia has doubled since the dismantling of the cotton parastatal Lintco and the introduction of outgrower programs supported by private agribusiness firms in the mid 1990s. In spite of these achievements, the cotton sector has in the past two years been plunged into crisis. Four key challenges underlying the current problems facing the cotton industry are:

1. How Zambia's cotton sector can sustain and build upon its success story and remain competitive in the face of a projected long-term decline in world cotton prices as well as shorter price cycles;

2. How cotton pricing can be made more transparent and less uncertain for farmers;

3. How can agribusiness firms supply inputs and extension support to smallholder farmers to achieve productivity growth while addressing ginners' and other firms' problems with farmer loan repayment.

4. How the cotton industry can finance investments in agricultural research and extension systems needed to achieve long-run productivity growth in an environment where the public sector is not likely to provide these investments.

[1] Improving Smallholder And Agri-business Opportunities in Zambia's Cotton Sector: Key Challenges and Options. Working Paper No. 1. Food Security Research Project, Lusaka, Zambia. Downloadable at:
http://www.aec.msu.edu/agecon/fs2/zambia/index.htm

PROBLEM DIAGNOSIS AND IMPLICATIONS FOR THE INDUSTRY: Discussions at the Consultative Meeting and findings in the study highlight several key points that should frame debate about the cotton industry's future in Zambia:

First, in light of the government's limited ability to finance investments that are necessary to promote the productivity of Zambian cotton farmers and agribusiness firms, ***it is clear that the cotton industry — ginners, farmers, and everyone in-between — needs to organize itself and develop a framework for addressing its problems in which all parties are invested, seeking only strategic facilitating and regulatory assistance from government.***

Second, using Post Harvest Survey data now available, it is clear that there are key differences between as well as among smallholders growing cotton and those not growing cotton. Compared to farmers not growing cotton, cotton farmers in Zambia cultivate about twice as much land, are substantially more likely to use animal traction, and also grow more maize. While 70% of the cotton growers received inputs on credit, only 2% of the non-cotton growers did. It is not clear whether cotton provided a vehicle for these households to accumulate more draft power and land, or whether it was the better-equipped farmers that have gotten into cotton in the first place, or some mutually reinforcing process. Whatever the case, cotton cultivation does not appear to have a negative effect on staple food production. The Post Harvest Survey needs to be utilized more extensively to provide a clearer picture of farmer behavior to guide industry development plans.

Third, excess ginning capacity is a key contributor to the current loan recovery debacle. There are major scale economies in cotton ginning. As long as functioning ginning capacity remains 40% or more above production, there will be incentives for ginners and their agents to purchase cotton from farmers supported by other firms, unless a mediated framework -- with teeth -- is developed. If the underlying problems leading to the current poaching/loan default problem could be redressed, agribusiness firms would have the incentives again to continue expanding the cotton production base through outgrower arrangements.

Fourth, a rise in total cotton production will reduce industry processing costs and is likely to result in higher prices for farmers. Achieving production levels more in line with current ginning capacity would reduce ginning costs, which could partially be passed on to farmers in the form of higher prices, which would in turn stimulate even greater production. Ginners and farmers are in a symbiotic relationship in which both groups require adequate incentives and profitability to maintain the industry's viability. The mutual recognition of this symbiotic relationship will form the incentive for an industry-wide framework as proposed in Point 1.

Fifth, dealing with fewer actors in the production process may help reduce the costs that outgrower firms incur in providing inputs and recovering in-kind loans. The loan recovery problem is fundamentally a cost problem: it is prohibitively expensive for cotton companies to monitor the behavior of each and every smallholder producer to whom they are providing production inputs. The costs of monitoring and recovering loans are nearly proportional to the number of actors being monitored. These costs could be reduced by dealing with larger entities such as farmer groups. This process has just begun in Zambia. Strong farmer groups could not only facilitate the acquisition of inputs on loan but also provide market support, market information, and extension support to its members. However, it will take great efforts to help mobilize farmers into efficient and commercially-oriented groups, and this may be a useful role for donors and NGOs to support.

Yet these organizations take time to form and mature, so they cannot be the only approach to reducing the cost of loan recovery. A second, complementary approach, is for companies to identify a core group of farmers in whom to invest more aggressively to increase their productivity and their area planted. Additional research is needed to identify this core group of target farmers. Available evidence suggests that these farmers may already be larger and more commercialized than the typical smallholder, but have room for substantial improvements in yield and/or area planted. Companies would reach the smaller farmers through effective farmer organizations.

Sixth, the long-term trend of decreasing real prices for cotton shows clearly the need for all producing countries to obtain regular and substantial increases in productivity throughout the cotton chain, from input marketing through to ginning and output marketing. Public investments in agronomic and seed breeding research and extension services have been important sources of farm productivity growth all over the world. But this creates daunting challenges for Zambia, because its public sector is not likely to devote much of its constrained resources to cotton research and extension systems. This will impede the ability of the cotton industry to remain internationally competitive over the long run unless the industry develops mechanisms to self-provision these investments.

Self-financing mechanisms typically involve charging a legally mandated levy on transactions at some key point in the system. Evaluation of which point to administer the levy should consider at least four criteria: 1) addressing firms' temptations to minimize their contribution to the levy and "free ride" on the contributions of other firms, 2) ease of administration, 3) equity between farmers and ginners, and 4) effects on trust among all participants in the industry. Administration of a levy on exports and domestic sales of lint would be easier to monitor and enforce than other alternatives because there are fewer actors involved at this stage compared to at other stages in the marketing system. Administrative tractability would, in turn, make it easier to enforce contributions to the research and development (R&D) fund, thereby reducing the free rider problem. Charging the levy at the point of sale of the lint will also increase the probability that ginners will bear at least some portion of the final cost, since it is unlikely that they will be able to pass all of the cost down to farmers.

Finally, a levy on lint sales will avoid further complicating what is already a very confusing pricing environment for farmers, thus avoiding the creation of yet one more reason for farmers to distrust ginners.

Seventh, additional complementary actions must be taken to resolve the loan recovery and productivity problems. These include:

– reducing confusion and uncertainty among farmers regarding the prices they are paid,
– agreeing on information sharing and industry cooperation to reduce poaching,
– developing and proposing legislation to give teeth to this industry strategy,
– agreeing on a self-financing approach to fund cotton R&D,
– gaining government agreement to use existing budgetary resources, complemented by donor funds, in key ways to increase the supply of capable scientists who can contribute to improved cotton technology,
– gaining government agreement and support to educate farmers about the long-run benefit of loan repayment,
– gaining government agreement to consistently facilitate private sector approaches to input supply,
– gaining government agreement and support to improve quality control and classification, particularly with regard to reducing impurities from polypropylene bags at the factory gate or before.

KEY QUESTIONS TO BE CONSIDERED AND RESOLVED IN DESIGNING THE WAY FORWARD: The Zambian cotton industry must grapple with a number of key questions as it designs collaborative approaches to resolve its pressing problems. This set of questions is meant to be a starting point for serious debate leading to effective solutions.

1. Should stakeholders in the cotton industry and government form a "cotton industry strategic planning task force" for addressing the industry's problems and attempting to resolve them? If so, how would this subcommittee operate to ensure legitimacy within the industry and adherence to agreements made among its members?

2. What should be the key elements in an industry self-policing approach to solving the input use and in-kind credit default problem? The paper has proposed:

a) That firms within the industry agree to share information on individual households and farmer groups to whom they have extended in-kind loans, and the status of those loans, then agree not to purchase cotton from any farmer or organization receiving credit from another firm, or extend production credit to any farmer or organization with debts to another firm, and

b) That the industry prepare and propose to government legislation that (i) defines the conditions to be met for firms to be a legal buyer of cotton; (ii) imposes penalties on illegal or unlicensed buyers, (iii) imposes penalties on firms that buy cotton from or provide cotton financing to farmers with outstanding debts to other cotton firms, and (iv) imposes penalties on farmer organizations (but not individual farmers) who default on loans.

The paper emphasizes that this approach needs to be primarily self-policed, and above all seek in a positive way to attract and educate smallholders through the benefits from more intensive input and loan use, and repayment, with legal action being a last recourse.

3. How can ginning and other agribusiness companies reduce the confusion and uncertainty that producers currently feel about the prices they receive for cotton? The paper has proposed that companies consider two principles:

a) Establishing an industry-wide indicative reference price to be announced every year prior to planting. This reference price will serve to inform farmers of projected market conditions at harvest. It would be the reference price *without* charges for any in-kind input credit that firms may have provided,

b) Establishing an industry-wide procedure, developed in consultation with farmers and widely and frequently explained to them, for calculating deductions from the final revenue paid to farmers, based on the type and quantity of inputs the farmer has received on credit.

4. How can cotton companies expand the relatively small group of smallholder farmers with high cotton yields and relatively large areas (1-5 ha.) devoted to cotton? Should they place primary emphasis on increasing yields among low-yielding farmers with 1-5 hectares in cotton? Or can the cotton companies make key investments to help farmers with relatively higher yields, but relatively small areas (less than 1 ha), increase their area devoted to cotton? Do cotton companies or others have data at the individual farmer level that would help answer such strategic output expansion questions?

5. What is the best way to promote effective farmer organizations? Should cotton firms create and support farmer organizations themselves, or simply facilitate NGO efforts in the area by working with organizations that the NGOs help create.

6. Is a levy on sales of cotton lint the best way to finance private cotton R&D? If not, what alternative mechanisms can the industry propose?

7. Who should manage the R&D fund? Should it be under the auspices of Cotton Development Trust, or of a separate private sector organization created for the purpose?

The Food Security Research Project is a collaboration between the Agricultural Consultative Forum, the Ministry of Agriculture, Food and Fisheries, Michigan State University's Department of Agricultural Economics, and the United States Agency for International Development in Lusaka. The Zambia FSRP field team is comprised of Jones Govereh, Jan Nijhoff, and Ballard Zulu. MSU-based researchers in the FSRP are Cynthia Donovan, T.S. Jayne, David Tschirley, and Michael Weber.

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