FOOD SECURITY RESEARCH PROJECT – ZAMBIA
Market Access, Trade, and Enabling Policies
(MATEP) Project

First Quarter Report, FY06
(October 2005 to December 2005)

A Collaborative Research, Capacity Building, and Policy Outreach Project

between

The Ministry of Agriculture and Cooperatives (MACO)
The Agricultural Consultative Forum (ACF)
The Central Statistical Office (CSO) / Ministry of Finance
Michigan State University’s Department of Agricultural Economics (MSU)
United States Agency for International Development/Zambia (USAID)
1. Brief Overview and Facts

Cooperating Institutions

Ministry of Agriculture and Cooperatives (MACO), Economics and Market Development Department: Policy and Planning Branch and Marketing Development Branch
Agricultural Consultative Forum (ACF)
Central Statistical Office (CSO), Agriculture and Environment Division
Golden Valley Agricultural Research Trust (GART)
University of Zambia (UNZA), Institute for Social and Economic Research (INESOR)
Food Reserve Agency (FRA)
Agency for International Development, Zambia Mission (USAID/Zambia)
Agency for International Development, Bureau for Economic Growth, Agriculture and Trade, Office of Agriculture and Food Security (EGAT/AFS)
Market Access, Trade and Enabling Policies Projet (MATEP)
Department of Agricultural Economics, Michigan State University (MSU)

- Project Brochure: Summarizes project approach and output (to be posted)
- Project Annual Output Report: 04/05
- Contact Information: in-country personnel, U.S. based backstop and collaborative institutions.
- Prior Project Fact Sheet: summarizes project approach and output, August 1999-September 2003

2. Objectives

FSRP’s mandate is to contribute to effective policy dialogue, capacity building, and ultimately an improved agricultural policy environment in Zambia, through collaboration with government and the private sector in generating and disseminating applied analysis. FSRP aims to achieve these objectives through in-service capacity building, applied analysis, and policy outreach. A hallmark of the MSU/FSRP approach is the “joint products” approach, whereby training, applied research, and outreach are undertaken collaboratively with in-country stakeholders and government counterparts. The “joint products” approach is designed to achieve these broad results:

Capacity building for local Zambian counterparts, including training in the design, implementation, and analysis of household-level and market-level data collection for policy analysis and priority-setting purposes. This is accomplished mainly through in-service training of public and private sector collaborators, but also through training courses and seminars targeted to specific government organizations where improved analytical capacity is most needed;

Applied research to provide baseline information on smallholder production patterns and crop mix, input use, marketing behavior, measures of farm productivity, farm and non-farm incomes, food purchases and consumption, and other basic household-level information necessary to monitor the impacts of changes in the agricultural policy environment on selected socio-economic and regional groups in Zambia; and

Outreach activities to liaise with ACF, MACO, and other public and private policy making groups in Zambia on strategies for promoting smallholder agricultural productivity and income growth, and household food security in support of improved agricultural policy making in Zambia.
To carry out its research mandate, the FSRP in Zambia aims to: (a) strengthen the capacity of MACO, ACF, and other institutions or government agencies responsible for food security in Zambia to carry out applied research and policy analysis on food security; (b) strengthen the capacity of MACO to help coordinate research on national food security issues; (c) strengthen the Central Statistical Office (CSO) to carry out surveys, manage and process data, and perform basic analyses useful to policy makers; and (d) strengthen MACO’s management and implementation of agricultural marketing information services.

3. **Implementation Approach of the Food Security Research Project**

FSRP’s main base is its field office in Lusaka. Field office research professionals collaborate intensively with MSU campus-based staff on analysis and outreach efforts. This is complemented by frequent short-term field visits of MSU campus faculty to Zambia to work with the Lusaka-based team and officials from local collaborating organizations.

FSRP’s substantive research and outreach activities are guided by FSRP’s semi-annual Advisory Board consultations. From these Board meetings, an agenda for research, technical support, and outreach activities is identified and approved. Members of the Advisory Board include MACO, ACF, INESOR/UNZA, CSO, USAID, and FSRP.


4.1 **Improved consumer access to low-cost maize meal in urban areas during the current food shortfall:**

- Since September 2005, FSRP has been sensitizing MACO to the need to make sure that maize imported by the GRZ are sold on local public markets in order to allow consumers to benefit from the opportunity to mill grain into meal by small-scale mills. On October 20, 2005, the Minister of MACO stated that the Food Reserve Agency was now selling grain on a one bag/one-bag basis to any buyer, and that they had set up selling depots in strategic densely populated areas to ensure consumers’ access to low-cost mugaiwa this season.

- Following the conceptualization of an Agricultural Market Development Plan, FSRP provided substantive input and facilitated the production of a detailed AMDP document. AMDP focuses on market and private sector development, and a reorientation of the role of government and government agencies such as the Food Reserve Agency. During the second and third quarters of 2005, AMDP implementation commenced. FSRP facilitated a review of agricultural legislation, starting a process of legislative harmonization as a basis for the reforms proposed in AMDP.

4.2 **Market information:** FSRP continued to provide technical assistance to the Agricultural Market Information Centre (AMIC) at MACO. In spite of continued staffing problems, AMIC is developing a consistent database of commodity prices for the provincial center markets, disseminated by radio with a weekly price sheet and a bimonthly bulletin available electronically through email and an enhanced website, as well as with hard copy. There are now two functioning local MIS. The MIS in Kabwe has been working well with the Zambian National Farmers Union and has begun local radio dissemination of the weekly price sheets. In Chipata, FSRP has enabled strong collaboration between the Eastern Province Chamber of Commerce and Industry (EPCCI) and the local MACO office to develop the local Eastern Province Agricultural Market Information System (EPAMIS), currently distributing weekly price sheets and monthly bulletins. Radio broadcasts began late in this quarter and future work will include broadening the product set, improved dissemination through a website, and other communication efforts with cell phones and...
local farmer groups. The private-public partnership has been valuable, and EPAMIS is based on developing longer term sustainability through the recuperation of operational costs through advertising and services.

4.3 Conservation Farming: FSRP researchers Stephen Kabwe and Cynthia Donovan with collaboration from David Samazaka of GART conducted preliminary analysis of the study on the Magoye ripper use on maize and cotton cropping in Eastern and Southern Provinces. That research demonstrated continued research needs, but emphasized extension needs of the farmers who own the rippers. Profitability analysis will be completed by mid-2006.

4.4 Capacity building: By collaborating with individuals from MACO and CSO on specific research and other activities, FSRP provided in-service training to some 8 professional staff at MACO and CSO.

5. Description of FSRP/MATEP’s Main Activities (October 2005 – December 2005)

5.1 Cotton Value Chain Research and Outreach

Overview: Consistent with the overall FSRP and Market Access, Trade and Enabling Policies (MATEP) Project objectives and approach, our cotton policy activities are designed to strengthen the link of smallholder farmers to a value chain with good potential for growth in volume and value. Our approach has been to engage stakeholders in a broad-based consultation process that will lead to a sector development plan with buy-in from key stakeholders. Following approximately one year of consultation, it is anticipated that a stakeholder workshop will be held to critically discuss proposed elements of a sector development plan and agree on a way forward.

Progress report: Intensive stakeholder consultation in September 2005 identified changes in the Cotton Act as a key focus for MATEP activities. During the October-December 2005 period, Ballard Zulu, Anthony Mwanaumo, and David Tschirley prepared and finalized a Policy Memorandum on the Act. The Memorandum has been submitted to Julius Shawa, Director of Policy and Planning in MACO, and will be used in outreach with Parliament and others.

On 19 October, Mr. Ballard Zulu made the keynote presentation at the newly formed Cotton Association of Zambia’s inaugural workshop, and began to represent FSRP/MATEP on the Presidential commission formulating a development plan for the cotton sector.

Plans for the coming quarter:

- Actively pursue the need for revisions to the Cotton Act, starting with key policy makers in MACO and working closely with the Cotton Association of Zambia and other stakeholders as appropriate.
- Actively pursue dialogue with the CDT (Cotton Development Trust) and other stakeholders regarding the management of the Cotton Outgrower Fund, especially eligibility criteria and their relation to pirate buying activities.

Changes to the Workplan: None
5.2. Horticulture Value Chain Activities

**Overview:** Given the relative lack of information on Zambia’s horticultural system, our strategy emphasizes applied analysis during this first year of activities, development of a proposal for a Horticultural Supply Chain Development Program during the first half of year two in coordination with MATEP, and a National Stakeholders’ Workshop no later than the middle of year two, to review, revise, and approve this plan and form a Horticultural Supply Chain Task Force. The remaining 3.5 years of the program will focus on implementation, monitoring, and adjustment of the action plan in collaboration with the Task Force.

**Progress report:** Following the hiring of a Research Professional in September, Rapid Appraisal (RA) data collection was finalized in Lusaka and Ndola. RA data have been entered, and these and 2004 household data have been analyzed and report writing has begun.

**Plans for the coming quarter:** We propose moving the urban survey back to June 2006, rather than February/March 2006. On this basis, the next quarter (January-March 2006) will be dominated by a) finalization of the research report on the horticultural sector, and b) preparation for the Urban Consumer Survey. We will also pursue some of the new findings that emerged during the Rapid Appraisal regarding market management and investment (see previous quarterly report) and the planned policy synthesis paper will be ready as planned within this quarter.

**Proposed changes to the Workplan:** Urban consumer survey to be moved back to June 2006.

5.3. Fertilizer policy analysis and outreach

**Fertilizer:** This subcomponent deals with analysis of the GRZ Fertilizer Support Programme (FSP) and means to make it more supportive of a sustainable private sector distribution system within the context of the Agricultural Input Marketing Plan (AIMDP).

**Progress report**

Working on a short fertilizer report, toward improving the policy framework for promoting productive use of fertilizer in Zambia. The analysis will be used to help identify more effective means of targeting needy farmers who would not otherwise purchase fertilizer from the market, so as to reduce the scope for FSP to crowd out sales by the private sector. This is part of a more comprehensive effort by FSRP, MATEP and partners in the Ministry of Agriculture to inform the Agricultural Inputs Market (AIM) within MACO, and in response to donor requests.

FSRP/MATEP also has continued to monitor fertilizer supply trends (production and imports) and distribution trends (commercial versus non-commercial). Trends have been updated up to 2006 and this information was circulated to main importers and local producers.

FSRP/MATEP has identified constraints, opportunities and strategies to develop the industry. The process of developing a draft fertilizer marketing development plan was completed during this quarter. This is part of the full Agricultural Input Marketing Plan. This documentation was submitted to MACO and we await its adoption by senior managers.

FSRP has continued its analysis of fertilizer use efficiency on maize grown by smallholder farmers. Work is continuing to measure the responsiveness of maize to fertilizer on different soil conditions in Zambia. Models were developed to measure the additional kgs of maize yield per kg of nitrogen, under a range of different soil types, pH levels, agro-ecological zones, and farmer management practices in Zambia. The responsiveness will be combined with data on maize-fertilizer price ratios
for various districts to evaluate spatial differences in fertilizer use profitability. Results are expected in the coming quarter.

FSRP/MATEP has also analyzed fertilizer distribution in the 2002/03 production season to assess the extent of commercial and non-commercial fertilizer distribution. We managed to evaluate the impacts of government’s Fertilizer Support Program on the welfare of the individual farmer and nation at large. The results were shared with MACO senior managers.

**Plans for the coming quarter:**

Continue to engage government and other stakeholders to accelerate AIMDP implementation. Material to be used in the comprehensive outreach programme.

**Changes to the Workplan.** None

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5.4. Maize

**Overview:** To address technology development and dissemination, public/private investment in input markets and high marketing costs that reduce farm level profitability and effective demand, our strategy emphasizes better informing on resource allocation decisions, redefining the role of government and international trade.

**Progress report**

Continued analysis on the maize value chain study, toward the preparation of two working papers: (1) a descriptive analysis of the role and importance of maize in smallholder crop production and sales patterns; and (2) a comprehensive maize value chain study providing options to consider for improving the performance of the maize sector. The latter study involves the analysis of large-scale grain traders and millers in Zambia to understand industry perceptions of the major problems and constraints within the maize sector.

Presented work on the maize value chain study at USAID Washington, DC, Ronald Reagan Building to about 40 USAID people, November 17, 2005, on strategies for responding to the emerging food crisis in Zambia and options for promoting food security and productivity in the maize sector.

Undertook further analysis of alternative policy decisions that could improve the long-term performance of the grain marketing system and crystallized and synthesized these in form of a maize Policy Synthesis. These include enhancing access to FRA maize by small traders and hammer-millers, streamlining border clearance procedures for maize importation, developing procedures to reduce the import time lag associated with new and existing SPS requirements, extending the waiver period on the importation of maize, and increased transparency and consultation between Government and the private sector.

This work under MATEP is integrated with longstanding FSRP collaboration with MACO to develop a transparent and predictable set of rules that the private sector can reliably anticipate, regarding (a) quantities to be purchased by FRA, (b) the conditions that warrant and trigger FRA purchases, (c) the timing of purchases, and at what price; (d) quantities to be sold by FRA, (e) the conditions triggering FRA sales; and (f) how FRA maize sales are to be allocated if there is excess demand for FRA maize supplies.
Discussed maize price options with senior MACO officials on several occasions in the 4th quarter of 2005, to show the effect of controls, price support and sustainable alternatives to price controls for improving household food security.

**Plans for the coming quarter:**

Continued analysis on the maize value chain study and make preparations for conducting the urban consumer survey, which is to be implemented in the second quarter of 2006. We will share research results with stakeholders through our comprehensive outreach programme that entails show and tell with USAID and workshops with parliamentarians, PSD Group and core agricultural stakeholders through the ACF, to facilitate a conducive policy environment.

**Proposed changes to the Workplan:** None

### 5.5. Cassava

**Overview:** While maize production has trended downward over the past decade and a half, cassava production has grown rapidly, largely filling the resulting calorie gap from faltering maize output. Currently Zambia’s number two food staple, cassava holds significant further growth potential, not only for human consumption but also as a livestock feed and as a source of low-cost industrial starch. Most commercial applications will require significant scaling up of the existing cassava marketing system. FSRP has initiated a two-pronged strategy for helping to explore the potential Zambia’s new cassava varieties for improving both food security and income growth in a range of cassava-based agribusiness activities. The first involves a market chain study of cassava production, marketing and processing, combining PHS data sets with market monitoring in Lusaka and rapid market appraisals elsewhere. The second involves stakeholder support through participation in the ACF-sponsored task force on Acceleration of Cassava Utilization.

**Progress report:** We have begun weekly monitoring of prices and volumes of cassava traded in the Soweto Market in Lusaka. If funding permits, we will initiate a similar tracking system in Kitwe as well. In addition, FSRP has participated actively in the Cassava Task Force, as Vice-Chair and member of the subcommittees on livestock feed and trade standards.

**Plans for the coming quarter:** On the research side, we will complement continued market monitoring with analysis of the PHS production and marketing data on cassava. On the operational side, task force activities will include two main activities. First is the intended launching of a major stakeholder consultation on prospects for incorporating cassava into livestock feed rations. These efforts may include feeding trials by Livestock Development Trust using cassava-based feeds. The second major task force activity planned for the coming six months is assistance to the Zambian Bureau of Standards and other stakeholders in establishing practical standards for ensuring product safety and quality requirements.

**Proposed changes to the Workplan:** None.

### 5.6 Livestock

**Overview**

The livestock sub-sector contributes about 7.45% to Gross National Product (GNP) and accounts for about 35% share of the total agricultural production. The sub-sector is also an important part of the small farm economy in Zambia. In the traditional farming system, livestock not only supply draft power, but is also a source of protein food and farm income, while also providing manure as a
valuable fertilizer. Livestock can act as a capital reserve to help farmers over lean period and give stability. Livestock further brings about the efficient use of agro processing by-products and provides industrial forward and backward linkages in the economy. There is also a steady increase of women involvement in livestock production and thus is a tool for women economic empowerment.

A range of livestock are common in Zambia and these are cattle, pigs, goats, sheep, rabbits and poultry. Of the animals reared, cattle are the largest livestock and the emphasis of this paper will be on cattle. Cattle is reared by small scale farmers, medium scale farmers and commercial farmers. Small scale farmers account for about 75.97%, medium scale farmers 23.91% while commercial farmers account for 0.12% of the total agricultural population of Zambia (ACP 2001). FSRP has initiated work on the dynamics of the livestock subsector

Progress report

A number of interviews have been conducted with key stakeholders in the cattle industry. These stakeholders form the cattle industry value chain. Interviews are complemented with data from the supplemental survey of the Post Harvest Survey by CSO,MACO and FSRP to provide scope for understanding the dynamics of the cattle industry of Zambia. We present these as issues, constraints and prospects for the sector. We use the Industrial Organization (IO) Model for this purpose.

Plans for the Quarter

Continued work on the IO Model to allow us to present the basic conditions that are inherent or external to the beef industry while presenting how the industry functions within the limits of these conditions and how well it performs. This entails the dynamics of the structure, conduct and performance of the cattle industry.

Data limitations notwithstanding, by categorizing industry attributes, we will understand the industry’s decision-making process, achievements and outcomes in our quest to appreciate the dynamics of this high potential sub-sector of Zambian agriculture. In so doing, not only do we generate interest in understanding the dynamics of this sub-sector but also trigger support for dealing with the inherent data problems. This two-pronged approach is a necessary wake-up call for this ‘sleeping giant’ of Zambia’s agriculture.

5.7 Support to MACO policy plans for crop and input marketing

FSRP was requested by MACO to provide intensive support to several MACO initiatives, namely the Agricultural Market Development Plan (AMDP) and the Agricultural Inputs Marketing Plan (AIM). The AMDP was initially spearheaded by the now-ended ZAMTIE project, but while MACO endorsed many of the ideas contained in the initial document, most of them required substantial elaboration and analysis before they could be implemented effectively. FSRP has worked with MACO intensively in 2005 to support its efforts to finalize the AMDP and begin initial implementation.

Likewise, MACO has sought intensive support from FSRP to initiate its Agricultural Inputs Marketing Plan. This plan is the input marketing counterpart to the AMDP. Numerous FSRP activities in 2005 were dedicated to supporting MACO’s development of the AIM Plan.

5.8 Collaboration with Mt. Makulu and IFPRI on HIV/AIDS research under RENEWAL

FSRP in October and November 2005 collaborated with IFPRI on HIV/AIDS research under the RENEWAL Programme. FSRP’s contribution to the RENEWAL work in Zambia has also enabled FSRP to work more closely with a multi-disciplinary team at Mt. Makulu research station to understand how to make rural communities more resistant and resilient in the face of the AIDS pandemic. FSRP has also continued to disseminate AIDS awareness information through the various field surveys that bring FSRP into contact with rural households in Zambia.

5.10 Government of Zambia budget allocation to the agricultural sector

FSRP has worked with MACO colleagues to show policy makers how the Government’s budget to the agricultural sector is allocated. These efforts have shown that roughly 75% of the government budget to agriculture go to fertilizer subsidies, fertilizer grants, and operating costs of the Food Reserve Agency. Another 20% is allocated to salaries and wages, while only 5% go to investments such as agronomic and crop breeding research, extension, irrigation, and the like. These findings have sparked intensive discussion at senior levels of MACO. Considering that Zambia is committed to the NEPAD goal of having governments devote 10% of their national budget to agriculture, it is increasingly clear that the payoffs to this 10% will depend on how the agricultural budget is allocated.

5.11 Contributions to SAKSS and IEHA

FSRP has been gearing up to understand how to best contribute to the new SAKSS/IEHA initiative, both in Zambia and in the southern Africa region. FSRP staff have participated in several SAKSS/IEHA meetings designed to coordinate activities among the various producers and consumers of agricultural knowledge systems in southern Africa.

5.12 Development of updated work plan

FSRP has produced a new updated work plan for FY06 and FY07, finalized after receiving guidance and agreement from the FSRP Advisory Board in October 2005. The current work plan is presented in Annex A.5.

6.  FSRP Members

Researchers Involved


MSU Campus Backstop: Thomas Jayne (Co-Director), Michael Weber (Co-Director), Cynthia Donovan, David Tschirley, James Shaffer, Margaret Beaver, and Antony Chapoto
ANNEXES

A.1 FSRP Policy Extension and Outreach


- FSRP presentation on Factors Affecting Zambian Maize Prices in 2005, presented by Ballard Zulu to the Minister of Agriculture and Cooperatives, Hon. Mundia Sikatana, the Permanent Secretary Mr. Richard Chizyuka, Lusaka, members of the Millers Association of Zambia, members of the Grain Traders Association, and senior MACO officials, Mulungushi House, Lusaka, December 7, 2005.


- FSRP (Jan Nijhoff and Ballard Zulu) participated in a MACO maize marketing policy meeting, discussing AMDP (export ban, levies, FRA issues), October, 2005.


- Stephen Kabwe attended and presented a paper in titled “Sustained Use of Conservation Farming Practices by Small and Medium Scale Farmer in Zambia” at the III World Congress on Conservation Agriculture in Nairobi Kenya. The participants who attended the congress were just below 600 participants from 62 countries. In the additional to keynote plenary presentation, the III WCCA benefited from 48 presentations in 17 min workshops and related facilitated discussions.

A.2 FSRP Working Papers and Reports


A.3 Policy Syntheses


- The Cotton Bill Revisited, David Tschirley, Ballard Zulu, Julius Shawa, Anthony Mwanaumo. FSRP Policy Memorandum. December 2005

A.4 Professional Publications

## Annex A.5. FSRP Outreach Programme: Sharing evidence-based research results to improve agricultural policy making in Zambia

<table>
<thead>
<tr>
<th>Who</th>
<th>How</th>
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| MACO | Lunch meetings with key MACO staff | Nov 25, 2005/ Ongoing | • Maize price policy options  
• Maize imports, waiver, SPS and role of FRA  
• Policy dynamics ie price options, maize marketing (All) | Completed |
| MACO/Millers Association of Zambia (MAZ) | Meeting | December 7, 2005 | • Factors Affecting Zambian Maize Prices in 2005 (Ballard, Steve, Anthony) | Completed |
| MACO | Memo/Meeting | January 10, 2006 | • Cotton Bill/Act (Ballard, Dave, Anthony) | Completed |
| MACO | Meeting | January 11, 2006 | Fertilizer: Zambia’s Fertilizer Support Programme (FSP): Insights from the 2002-03 Season, Jones, Steve, Thom, Jim, Julius, Green | Completed |
| Policy Makers, donors etc | Policy Synthesis | Ongoing | • Zambia’s 2005 Maize imports Experience: Lessons and Implications, Anthony, Ballard, Julius, Green, Thom | Completed |
| USAID | Show and Tell Dry Run | January, 12, 2006 | • FSRP activities, relevance and contribution to Zambian agriculture, emphasis on production diversification trends, maize and fertilizer, All. | Completed |
| USAID/US Ambassador | Show and Tell, (1100-1230) | January 19, 2006 | FSRP activities, relevance and contribution to Zambian agriculture, emphasis on production diversification trends, maize and fertilizer, All. | Completed |
| Private Sector Development Working Group and organized by USAID | Workshop, half day | January, 30, 2006 | Using FSRP research results in PSDP Integrating AIM, AMDP, NAP into PSDP and strengthening backward and forward linkages, All. | Completed |
| Parliamentarians | Workshop, half day | February 1, 2006 | • FSRP key research results (final & preliminary), on Assets, AIDS, input and technology (fertilizer and CF), production (trends, cotton and marketing (maize, cassava and horticulture)  
• Data collection, cleaning and management (for MPS to appreciate and lobby for resources for timely surveys), All. | Completed |
| • All agricultural sector stakeholders and in collaboration with and hosted by the ACF | Half day Workshop | February 6, 2006 | • What is in the 2006 national Budget for Agriculture? (Julius et al) | Completed |
| All agricultural sector stakeholders and in collaboration with ACF and MACO | Full day Workshop | May, 2006 | • Resource allocation (Julius, Jones, Steve, Thom)  
• Trends (Jones, Thom, Steve)  
• Fertilizer (Jones, Steve, Jim)  
• Maize (Ballard, Thom, Anthony) | In planning stage |
| • MACO | • Retreat | June, 2006 | • What is new and interesting from FSRP  
• Key deliverables from workplan and impact on policy  
• Preparing MACO for 2007 budget under the 2006-2007 MTEF | No progress |