

Six-month progress report (Oct 07 – Mar 08) Africa Bureau Associate Award to MSU Food Security III LWA Agreement

1) Highlights

During the first six months of the Africa Bureau Associate Award through the Food Security III Cooperative agreement with MSU, progress was made in three areas:

- completion of the two year workplan in collaboration with Africa Bureau and COMESA senior staff;
- provision of active analytical and program support to COMESA in the preparation of selected country compacts and laying the foundations for regional compact and early action investments;
- presentations for USAID/IEHA field staff and GAO on issues critical to CAADP and COMESA;
- design and initiation of research activities to fill critical knowledge gaps for regional input and output markets.

Progress in each of these areas is summarized briefly in this highlights section and then discussed in more detail below.

1.1 *Africa Bureau Workplan.*

An initial draft workplan was submitted to Africa Bureau and COMESA in October 2007. Following discussions with Jeff Hill, Tom Hobgood, Eric Crawford, Thom Jayne and Steve Haggblade in Washington DC in November, and subsequent discussions with Cris Muyunda, the workplan was substantially revised and again discussed with key stakeholders in January 2008. The approved workplan seeks to achieve the objectives of the Associate Award with Africa Bureau through a two-pronged strategy as follows:

- A) Support to COMESA in the preparation of a regional CAADP compact (and selected country compacts when requested), and the identification and implementation of investments and policy reforms at regional and country level to achieve the compact targets;
- B) A joint program of applied research and policy analysis to address gaps in empirical knowledge important to the design of investment programs and/or obtaining buy-in from national governments to policy reform.

1.2 Support to COMESA in CAADP Compact Design and Implementation.

MSU team members actively supported COMESA in moving forwards with compact design at regional and country level, *often at very short notice*:

- revision of Africa Pillar 3 framework document (Haggblade, Tschirley)
- participation in COMESA regional meeting in Lusaka, Zambia, to develop regional food staple trade concept note (Boughton, Govereh, Haggblade)
- participation in Africa CAADP Pillar framework review meeting in Pretoria, South Africa (Tschirley)
- review of draft Zambia country CAADP compact (Jayne, Haggblade, Tschirley)
- evaluation of Malawi agricultural input subsidy program (Jayne, Kelly, Crawford, Boughton)
- presentation in Lilongwe, Malawi of agricultural input subsidy program final report to government, civil society and donors (Boughton)
- frequent discussions with COMESA staff on the preparation of Pillar documents, their role in the development of national and regional country compacts, implementation details of these processes, and how these activities are to be coordinated to achieve effectiveness (Boughton, Jayne, Haggblade, Tschirley, Crawford, Govereh)
- participation at COMESA technical committee meetings in Seychelles (Jayne)

COMESA has officially nominated MSU to be the lead institution for Pillar 2 and 3 for its regional compact. FANRPAN has been identified as the regional facilitator to coordinate compact preparation and is expected to set out a timetable shortly, once contractual formalities with COMESA are completed. A half-day workshop was prepared for the ACTESA design team in Lusaka, Zambia, April 18, 2008 (discussion keynote powerpoint downloadable at <http://www.aec.msu.edu/fs2/zambia/BackgroundBriefing.pdf>).

In addition to providing direct support to COMESA, the MSU team has assisted USG in complementary areas. In November 2007, Boughton and Donovan made a presentation to the GAO visiting team in Maputo, together with MSU Mozambique team members Mlay and Payongayong, on the importance of food staples for promoting food security and income growth. Jayne and Haggblade made presentations to the USAID IEHA field staff in Washington DC in November 2007 and again in January 2008 on fertilizer subsidies and the importance of regional trade in food staples. Haggblade was an invited team member for a GAO panel on regional food staples trade and food security in February. In March, the MSU team put together a set of maps on regional food staples trade for Africa Bureau staff preparing a presentation for USAID Acting Administrator Henrietta Fore.

1.3 Research in support of regional input and output market development.

The agreed workplan identifies a number of key gaps that constrain the design and implementation of investments and programmes in support for expanded national and regional input and output markets. During the first six months of the Award, research was initiated on the following topics: the effect of open trade regimes on maize price volatility, the relationship

between smallholder staple marketing and public/private assets, net food staple buyer mapping in Southern and Eastern Africa, cash transfer experience literature review, and a cross-country of the fertilizer subsidy programs. Preliminary results from several of these studies were used in workshops and presentations in support of regional or country-level investment programs in the COMESA region, or USAID/IEHA and other USG events. More details on the research studies can be found in section 2.2 below.

2 Detailed Progress Report

2.1 Support to COMESA in CAADP Compact Design and Implementation

MSU provided support to the CAADP design process in Zambia and Malawi. In Zambia, Thom Jayne and colleagues prepared a detailed review of the draft compact at the request of the USAID mission (see Appendix 1). In Malawi, the largest component of agricultural public expenditure is the Agricultural Input Subsidy Program (AISP), with a price tag equivalent to over 60% of the agriculture budget. This multi-year subsidy program has important implications for Malawi's draft CAADP compact, called the agricultural development program. MSU completed the final report on the evaluation of the 2006/7 program, together with Imperial College, Wadonda Consult and ODI, and results were presented in March. (downloadable at <http://www.aec.msu.edu/fs2/inputs/documents/AISPFinalReport31March.pdf> - final report; http://www.aec.msu.edu/fs2/inputs/power_points/MalawiInputSubsidyFinalMoAMarch2008PresentationRev.pdf - presentation).

Several recommendations from the AISP mid-term report were adopted for the design of the 2007/8 program, including the formulation of specific objectives, publication of a program handbook, inclusion of independent agro-dealers in the distribution of subsidized inputs, and expanded use of flexible vouchers. Recommendations in the final report stress the importance of complementary investments in research, extension, and expansion of the private sector input distribution networks in rural areas to ensure sustainable productivity growth. Building on MSU studies in Malawi, Zambia and Kenya, Jayne made a presentation on the implications of fertilizer subsidies for CAADP investment plans and growth agendas at the USAID IEHA field staff meetings in Washington DC January 24. (downloadable at http://www.aec.msu.edu/fs2/outreach/USAID_Fertilizer_Jan_24_2008.pdf).

Expanded production and regional trade in food staples is crucial to the CAADP and COMESA growth agendas. The role of regional trade is clearly reflected in the CAADP Pillar 3 framework and MSU team members Haggblade and Tschirley assisted in the final editing process. At a COMESA workshop in Lusaka in early November to develop the concept note for a regional program of support for food staples trade (ACTESA), the MSU team made presentations on the role of regional trade in reducing price volatility (Govere and Haggblade presentation downloadable at: <http://www.aec.msu.edu/fs2/zambia/rfs-trade-policy-govere.pdf>) and the potential contribution of cassava value chains to expanded regional trade in food staples (Haggblade and Boughton presentation downloadable at: http://www.aec.msu.edu/fs2/outreach/cassava_comesa_nov7.pdf). Haggblade also made panel presentations on the role of regional food staples trade to both the USAID IEHA field staff

meetings in January (downloadable at http://aec.msu.edu/fs2/outreach/ieha_regional_staples_jan_2008.pdf), and a GAO workshop in February. A set of regional trade maps in the context of ACTESA was prepared for use by Africa Bureau staff in preparing a presentation by USAID Acting Administrator Fore at the end of March (downloadable at http://www.aec.msu.edu/fs2/outreach/regional_staples_trade_mar_2008_ver2.pdf). A half-day workshop on regional trade was organized in Lusaka, Zambia, for the ACTESA design team on April 18. (downloadable at <http://www.aec.msu.edu/fs2/zambia/BackgroundBriefing.pdf>).

At the COMESA meetings in the Seychelles in March, attended by Jayne, COMESA Senior Agricultural Advisor Cris Muyunda confirmed that the tender for coordination of the preparation of its regional compact has been awarded to FANRPAN. FANRPAN has requested that MSU assist in the design of this regional CAADP compact. MSU team members will participate together with other Expert Reference Group members and government representatives appointed by FANRPAN according to the completion schedule worked out by COMESA and FANRPAN.

In addition, COMESA is in the process of designating teams to be responsible for developing regional Pillar documents to provide guidance to the national and regional teams in the preparation of their compacts. MSU has been informed that it will be asked to be the lead international partner to assist COMESA in the design of the regional documents for Pillars 2 and 3. MSU team members will participate together with other Expert Reference Group members appointed for Pillars 2 and 3. The following outputs are anticipated:

Output 1: Revised COMESA CAADP Pillar 2 and 3 documents prepared by COMESA, with input from MSU, and circulated for review. Team members: Haggblade, Jayne, Boughton, Tschirley.

Output 2: Final Pillar 2 and 3 documents integrated into overall COMESA regional CAADP compact (led by FANRPAN and to be completed according to timetable to be determined by COMESA). Team members: Jayne, Haggblade, Boughton, Tschirley.

Output 3: MSU team members contribute to design of early actions and investments to promote regional trade in food staples and agricultural inputs as identified by COMESA in the process of compact design (ongoing with date the timing of specific early actions determined by COMESA). A concrete example is the organization under the leadership of Tschirley of a half day workshop for the ACTESA design team in Lusaka, Zambia in April.

Output 4: Preparation of a harmonized draft COMESA Agricultural Policy statement. This document will harmonize existing policy documents into a common framework that will serve as the basis for country-level outreach and capacity building efforts led by COMESA with anticipated World Bank funding.

2.2 Applied Research and Policy Analysis

The following set of research and analysis activities seek to address crucial gaps in the empirical knowledge base that need to be filled to design more effective investment programs and achieve

buy-in at national level to policy reforms that support expanded regional trade in food staples and increase input demand.

2.2.1 Regional trade in food staples

A) Comparison of maize price volatility in closed and open trade regimes

Reduction in food staple price volatility is a key objective of policymakers. Ironically, the very trade restrictions put in place to reduce volatility end up having the opposite effect. To provide empirical support to advocacy for more open trade regimes, this research compares maize price volatility in closed (Malawi, Zambia) and open trade regimes (Mozambique, Mali, Kenya). A draft paper has been prepared and presented in various policy fora in Africa (e.g., Second Bi-Annual Regional Grains Summit, Nairobi) and internationally (eg., FAO conference on regional grain trading potential, December 2007). The RATES project has posted the analysis on its website. We are revising the paper in light of comments received and plan to finalize the report by June 2008.

B) Explaining food staple market participation by sellers

The small proportion of smallholder net food staple sellers, and the high concentration of sales volumes among sellers, limits the number of direct beneficiaries who benefit from expanded regional trade. Past work has tended to focus on linking smallholders to high value niche markets. This study looks at the combination of public goods and smallholder assets necessary to expand smallholder participation in food staple markets over time. A pilot study for Mozambique has been completed, together with an analysis of trends in the share of food staples in marketed agricultural production in Mozambique, Kenya and Zambia. Given the complexity of the datasets and volume of outreach work with COMESA we anticipate completion of a report by December 2008.

2.2.2 Integrating market analysis into the design of emergency response and social protection

A) Spatial analysis of net food buying households in Southern and Eastern Africa

Net buying households benefit greatly from reduced barriers to regional trade, but they could potentially be hurt if local procurement of food aid causes prices to rise. To better understand the potential implications of local food aid procurement in the COMESA region an analysis of patterns in net food buying status of households is being undertaken for Zambia, Kenya, Mozambique. Analysis of net buying patterns has been completed for Zambia and Kenya and is commencing for Mozambique. Results write-up in draft form is expected mid-2008.

B) Review of cash transfer experience in Sub-Saharan Africa

Cash transfers are a potential alternative to food aid, or a complement when private sector imports are the most cost-effective means of addressing physical food access constraints. A

literature review on cash transfer experience in Sub-Saharan Africa is planned for later in the year to learn from a number of ongoing experiences that have not yet been fully documented.

2.2.3 Fertilizer and Related Input Market Growth

A) Cross-country study of fertilizer promotion programs

Fertilizer is a key input for increased productivity of food staples, especially maize. Fertilizer promotion programs are the subject of renewed interest in many African countries following the Abuja Fertilizer summit and the formation of the Alliance for a Green Revolution in Africa (AGRA). At the same time, rapid increases in fertilizer prices are dramatically increasing the potential cost of fertilizer promotion programs, and hence competing more aggressively for agricultural public expenditure shares in CAADP countries. This study looks at the contrasting experiences of Kenya, Zambia and Malawi in promoting fertilizer use to inform strategies to increase productivity and fertilizer use in a sustainable manner. The Malawi country study was completed in March. A draft country for Zambia is nearly completed and scheduled for circulation in May 2008. An analogous case study of Kenya is also nearing completion and scheduled for draft circulation in April 2008. The cross-country synthesis report is scheduled for completion by August 2008.

Appendix 1 Comments on Zambia draft CAADP country compact

The following are consolidated FSRP/MSU campus comments on the IFPRI/CAADP report prepared at the request of USAID Zambia. Contributors included Mike Weber, Antony Chapoto, Jones Govereh, Thom Jayne, Steve Haggblade, Jim Shaffer, Robbie Richardson, Ana Fernandez and Nicky Mason.

Do we support the conclusions?

In broad terms, yes. We all agree that sustainable agricultural growth will reduce poverty, that increased public goods investment to agriculture will raise agricultural growth, and that a six percent growth rate for agricultural cannot be achieved simply by focusing on maize.

These points are all well-accepted already. The report makes a bold attempt to determine the magnitude of the relationship between public expenditure and agricultural growth, and between agricultural growth and poverty reduction. Unfortunately, this cannot be done with any precision, because all of these relationships depend fundamentally on the type/composition of public expenditure. \$1million devoted to crop science or feeder roads is likely to have much different impacts on agricultural growth, income distribution, and poverty reduction than \$1million devoted to FRA buffer stocks. This is the main problem with the report (mirroring earlier comments from PROFIT and MATEP). It doesn't distinguish between different types of public expenditure, and hence doesn't give us insight as to how different compositions of public expenditures will lead to different rates of agricultural growth and poverty reduction. Nor does it incorporate into its analysis the fact that the relationship between public expenditures (of also all types) and agricultural growth will depend on marketing and trade policy choices taken by the government. For these reasons, findings such as those reported in Figure 3 (page 18) as well as all the other projections in Section IV need to be taken with a heavy dose of salt. Most importantly, the report make the potentially irresponsible conclusion that simply increasing the amount of government expenditure to agriculture will raise growth and reduce poverty. This could be seized upon by the GoZ to justify a Sachs-type program for massive free government fertilizer distribution.

Of course, determining how alternative types of public expenditures and policy choices affect agricultural growth and poverty reduction are *the* central agricultural policy issues in Zambia, and the ones that need the greatest interaction between analysts, government technical people, and senior policy makers. So, while we agree entirely with the broad conclusions of the report – that agricultural growth requires much greater public support, and that agricultural growth will contribute to poverty reduction – the central analytical task is to help clarify how different types of public investments and policy choices will lead to different outcomes of interest to the Government of Zambia. The report falls very short on this count.

Bottom line: A sophisticated CGE modeling framework is only as good as the assumptions and data plugged into it.

However, the report does contain much of value (having nothing to do with CGE estimation):

- Figure 2 on page 6 and Table 2 on page 7 are very informative. They provide a very useful disaggregation of farm types in rural Zambia;
- provides some useful estimates of how growth of particular crop sectors will affect overall agricultural growth;
- Section VI presents some important information on trends in different kinds of public investments. For example, Figure 13 on page 47 shows the alarming decline in government spending on agricultural R&D. Robust evidence in Zambia and elsewhere shows the importance of R&D to sustained agricultural productivity growth. But the IFPRI report assumes crop yield growth in its models without considering the implications of this figure which it presents later of declining public spending on R&D. Where is the crop yield growth expected to come from? How can maize yields be assumed to leap to the required 1.7t/ha by 2015?

Is the data reliable?

The Living Conditions Monitoring Survey data is probably as reliable as any other data set collected by CSO. However, we know very little about the extent to which the LCMS data were properly cleaned, and the quality of enumeration, data entry, etc. Assuming that IFPRI paid careful attention to outliers and other data quality issues, the data is most likely to be reasonable. It is the assumptions of the CGE model that are the problem.

What is missing?

The IFPRI report does not attempt to measure the impact of public spending on agricultural growth in Zambia. Rather, the report relies on estimates from elsewhere in Africa (see p.38 extract below) to determine the impact of public expenditures on agricultural growth. FSRP work indicates that important categories of Zambian public spending may be ineffective, or even counter-productive. Examples: FSP, FRA. As a result, the public spending elasticities produced here are not believable.

Drawn from page 38 of the report:

“How much public agricultural spending is required to achieve the CAADP and MDG1 growth targets? To answer this question, we needed estimates of the ‘agricultural growth-expenditure elasticity’, which can be estimated econometrically using historical data. Due to limited data for undertaking the econometric analysis separately for Zambia, we use results from cross-country regression analysis estimated for this purpose. This analysis estimated the returns to government spending in agriculture, education, health, and transport and communications on agricultural GDP, using a simultaneous equations framework and panel data from 1975 to 2004 on 13 countries in sub-Saharan Africa (Benin et al. forthcoming).”

Currently, unpredictable policies (e.g., export bans, FRA procurement, FSP) are undercutting private investment that would otherwise encourage production, storage and trade incentives for farmers and private traders. The IFPRI report is silent on these issues.

Lastly, the IFPRI CGE model is a “closed economy” model, i.e., agricultural growth is only a function of what happens inside Zambia. However, it is clear that regional factors (trade policy

environment, marketing policy decisions of neighboring countries, etc) will affect agricultural growth in Zambia. The IFPRI report, by limiting its focus to Zambia, downgrades *by assumption* the importance of regional trade policy for agricultural growth and poverty reduction in Zambia.

Do we have data (or other experience) that supports their findings? Contradicts their findings?

FSRP is worried by the statement on page 46 that “large returns associated with fertilizer use seem to support the government’s recent commitment to subsidizing fertilizer.” This statement appears to be made in ignorance of a considerable amount of research on fertilizer subsidies in Zambia. For the benefit of the GoZ, we would welcome the authors of the study to take a closer look at available evidence in Zambia, and at least considering how this evidence might be taken into account to potentially alter the assumptions of the CGE model, before publicly releasing their document. This would ensure better coordination among research groups in the region, and would contribute to greater consistency in the analytical work under IEHA, SAKSS, etc.

As a final comment, FSRP would like to encourage IFPRI use its SAKSS resources to contribute to the generation of accurate agricultural data in the region. There is a great need to build the capacity of national statistical agencies in the region to produce accurate and reliable data. This is ostensibly an important mandate of SAKSS and those who receive funds under SAKSS. All research organizations would prefer to define their mandate as analysis only, and leave to others the task of working in the trenches with national statistical organizations to generate and clean data, run training programs, identify problem cases, and help to provide a ready-to-use data set. If everyone took this approach, there would be no data worth analyzing, and hence no analysis worth considering. FSRP appreciates the support from USAID and SIDA which it uses to undertake these tasks and feels that greater attention to these issues by other groups in a wider range of countries in the region would contribute more meaningfully to the objectives of IEHA and SAKSS.