



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*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](mailto: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.*

## **POLICY SYNTHESIS**

### **FOOD SECURITY RESEARCH PROJECT – ZAMBIA**

USAID/Enabling Agricultural Trade (EAT) and Michigan State University, Lusaka, Zambia.

No. 44 (Downloadable at: <http://www.aec.ms.edu/fs2/zambia/policy.htm> July 2011)

## **REVITALIZING ZAMBIA'S AGRICULTURAL MARKETING INFORMATION CENTRE (AMIC)**

**By Daria Gage\***

### **Key Points**

1. Public sector agricultural market information systems (MIS) can provide useful information to farmers, uninformed traders, and policy makers. While private information networks offer a valuable service to select clients, only a well-functioning public MIS can redress information asymmetries among marketing actors that can inhibit competition.
2. The second core mission of a public MIS should be to organize and manage data in such a way that government decision-makers and civil society organizations can accurately diagnose and even anticipate emerging market problems and respond to them in a timely manner.
3. Zambia's AMIC suffers from a range of weaknesses all along the supply chain for price information. Data collection and transmission is irregular and unreliable, data management is unstructured and lacks strategic oversight, and dissemination is entirely supply-driven.
4. The primary reasons for AMIC's weak performance are competing priorities and a misguided incentive structure for staff at the national, provincial, and most importantly at the district level, where the viability of the collection process depends on reciprocity between price collectors and traders.
5. The draft Agricultural Marketing Act, which will be sent to Parliament in the 2012 budget cycle, provides an opportunity to re-establish AMIC's mission and importance.

**INTRODUCTION:** AMIC was established in 1992 as part of the process of economic liberalization with a core mandate to: (1) ensure that all private sector players, small and large, have reliable access to market information; and (2) track market information that can be used for public sector planning and decision-making.

In the latter function as a database of information for policymakers and researchers, AMIC has provided nominal value in the past, and can provide historical data upon request. AMIC's historical data has enabled certain insights, such as the fact that (i) the margin between maize meal and maize prices has declined over the 1994-2010 period, (ii) maize prices have become more stable in recent years, and (iii) formal sector wage rates have risen

faster than food prices over the 1994-2007 period and then reversed as a result of the various consequences which the 2007-2009 world food price crisis had on Zambia (e.g., Chapoto and Jayne 2009; Mason et al. 2011). However the quality of AMIC data has varied over time, there is limited district coverage, and the target data such as commodities, level, and districts covered are inconsistent over time. Currently, the system is barely functional. District reports are irregular and likely to be inaccurate. Provincial level databases are rarely maintained and largely ignored. AMIC does consistently submit a weekly price bulletin to be broadcast on national radio, but the accuracy of these prices is suspect. Clearly the system currently does not achieve its objectives of providing detailed and timely market

currently does not achieve its objectives of providing detailed and timely market information that small producers and small- and medium-sized agribusinesses require.

A range of successful agricultural market information systems exist as models, including several in comparable economies. However, while lessons can be gleaned from all models, there is no one-size-fits-all solution. In laying out a realistic vision for AMIC, it is important to take stock of the current state of the system, and set achievable goals. First, AMIC must achieve regular and accurate data collection for a small set of important regional markets, and seek to disseminate this information regularly and broadly. When this system is functioning well, AMIC might then consider expanding its district coverage, gathering qualitative information, and conducting analysis about market trends and marketing margins (Chomba et al. 2002).

**ORGANIZATIONAL AND REPORTING STRUCTURE:** AMIC is just one of several critical agricultural services that have seen their resources absorbed by the Ministry of Agriculture and Cooperatives' (MACO) more politically important programs, namely the Food Reserve Agency's (FRA) marketing activities and the Farmer Input Support Programme (FISP). These two programmes account for 60% of Zambia's agriculture budget. Both FRA and FISP are implemented directly and indirectly by MACO's Department of Agribusiness and Marketing, the very same department that houses AMIC.

AMIC sits in a separate Market Support unit at national headquarters in Lusaka, and FISP and FRA activities do not directly compete for staff time and resources. Starting at the provincial level and below, however, Market Development Officers must find a way to balance market information activities with support for FISP and FRA in their geographic areas.

The Senior Market Development Officer (SMDO) at the provincial headquarters does not collect price data and does not have any regular deliverables to submit to AMIC headquarters.

However, he or she has the option to aggregate weekly district information, produce and distribute monthly bulletins, broadcast provincial market information by radio, or maintain a provincial database. These *optional* activities are not tied to any professional incentives and are rarely done.

At the district level, District Market Development Officers (DMDO), occasionally supported by an assistant, are tasked with collecting and reporting weekly price data for AMIC. They are also expected to share price information with producers and traders in their district. However, since they are provided with little guidance, financial support, feedback, or nation-wide price information, there is no incentive for them to prioritize this work. Instead, they spend most of their time managing district-level FISP distribution and monitoring, as well as supporting FRA procurement and storage, even though these functions were not initially part of their formal job description.

**DATA COLLECTION AND TRANSMISSION:** AMIC headquarters collects weekly retail and wholesale prices for a range of commodities from the nine provincial HQ districts. The other 63 districts are encouraged to collect similar information. Collection and transmission, however, are highly irregular, and there is currently no national system for utilizing this data.

In principle, AMIC covers retail, wholesale, and farm gate prices, and updates weights and unit measurement information at each marketing level. A wide range of commodities have been requested and suggested by various stakeholders. AMIC has tried to meet these requests by piloting regionally-specific data collection requirements, such as prices for livestock, seasonal fruits, and fish. In addition, reviews of AMIC consistently recommend that it coordinate with other agencies to collect proxy marketing and transport costs, commodity stock levels, crop production forecasts, regional

supply and demand trends, and prevailing international prices.<sup>1</sup>

Currently, only a fraction of the above is collected. While both wholesale and retail markets should be visited only retail traders are consulted in most cases. In addition to their selling price, they are asked to share their purchase price and unit of transaction. Such an approach is certain to yield inaccuracies as retailers are reluctant to disclose profit margins.

Setting aside the question of accuracy, few districts collect and report any data at all. AMIC headquarters seeks weekly submissions from only the nine provincial headquarters districts. Several other districts report data to the provincial level, but this practice is unstructured, unstandardized, inconsistent, and ultimately depends on the personality and motivation of each district officer.

Severe resource constraints to data collection are unsurprising and common to public programs throughout the country. Even when activity budget requests are approved, funding is rarely forthcoming. As a result, district officers lack fuel and vehicles, electricity and phone lines, fax machines, laptops, and other supplies, all of which are necessary to collect and transmit data.

But structural and organizational weaknesses are more problematic than resource constraints. Requirements and priorities are not clearly articulated from the Lusaka Head Office out to the districts. Market Development Officers have received no training in the management and applicability of market information, and little guidance about data collection approach. They report feeling awkward about demanding weekly price updates from traders, especially when they come bearing very little nation-wide price information or market insight in exchange.

In addition to a lack of training and mentorship, AMIC collectors also lack one single, clear data

collection template. There are a number of different templates floating around at the district level, some with additional and unique commodities or services.

These are district-specific allowances (e.g. watermelon) and piloted additions for certain districts (e.g. livestock). Districts appreciate the flexibility AMIC offers them to consider seasonal and regional variations in coverage. However, the current templates do not organize or prioritize the resulting list of commodities. As one officer stated, “We don’t know what they want from us, so we leave it blank.” A simpler form, with less variation between districts, would more likely be completed in its entirety and submitted on time, and would support comparability from market to market, and year to year.

Interviews with AMIC staff at the national, provincial, and district level revealed that there is a lack of understanding about the reporting structure. When they do collect price data, non-HQ districts submit it to the province and believe that provincial averages will be sent to Lusaka. Some provincial officers assume that districts are sending a duplicate copy to AMIC headquarters, and that it is not their job to pass along the information. National AMIC staff want data only from the nine provincial headquarters districts, and assume that provinces are maintaining their own separate databases of district-level data. If they receive data from additional districts, it is discarded.

In this context, it is unsurprising that district officers receive very little feedback from above. Since their submissions are being ignored, and they are receiving no valuable information products from the national AMIC system for dissemination, they have little incentive to continue weekly collection activities.

**DATA MANAGEMENT AND COORDINATION:** Data management occurs primarily at the national level, conducted by a small team that currently includes only one civil servant tasked with data entry into an SPSS database. Data cleaning and verification are not

---

<sup>1</sup> Some robust user needs evaluations were conducted between the years of 1999-2007, thanks to donor support and technical assistance.

possible, given limited human and transport resources.

There is some coordination at the national and provincial levels with CSO, which proactively seeks information from AMIC. However, there is no consultation with the myriad public and private information networks and databases with which AMIC could validate and contextualize its agricultural market information. Past reviews of AMIC consistently recommend that it incorporate crop production forecasts from the National Early Warning Unit and commodity stock information from the FRA, but there is currently no real information exchange between AMIC and these other departments. Outside partners such as ZAMACE, FEWS NET, and ZNFU's SMS price information system are consulted even less, though their data could be used to validate AMIC's findings.

In principle, provinces are expected to maintain unique databases and analyze trends throughout their province. In the past (until 2004), they did maintain separate excel databases. However, these efforts are not encouraged, let alone mandated, and as a result, there is little data management at the provincial level. This is not altogether a bad thing; there would be no way to integrate provincial files into the national SPSS database, and no departmental intranet system is in place. ZARI coordinates information-sharing between its provincial offices through a relatively efficient system, which could serve as a model if provincial data management is ever consistent enough to warrant the investment.

**INFORMATION DISSEMINATION:** Small-holder farmers and small-scale traders are considered to be the primary clients of AMIC. Despite this stated mission, the limited dissemination strategies of AMIC in Lusaka focus on government institutions (Kizito 2011).

A short list of wholesale and retail prices for each of the nine provincial headquarters districts are broadcast weekly on ZNBC Radio 2. While submission of this information to the radio program is timely and consistent, reported prices

are widely considered to be unreliable. The written version of this bulletin is distributed by email to a short list of subscribers, mostly within government.

AMIC will provide civil society organizations, policymakers, and independent researchers with copies of its historical databases upon request. There is no automated system for this request, and there is no AMIC website.

Although AMIC headquarters used to produce a market price bulletin, limited resources and technical problems with their software have impeded the release of a report over the past 18 months.

Market extension should be at the heart of the sub-national dissemination approach, with DMDOs approaching local constituents with an information exchange of sorts. However, the DMDOs are not currently equipped with the information they need about prices across the country and internationally.

A few districts produce monthly or bi-monthly bulletins, but this is the exception to the rule. There is no district bulletin template provided by HQ, and completion and dissemination is not encouraged. It is unclear whether these bulletins are valuable, since they are not distributed widely.

Many districts would like to broadcast nationwide market information on community radio, and believe this would be a good way to reach farmers and other users of AMIC data. Only Southern Province currently broadcasts via community radio. Their activities rely on additional funding for improved data collection and dissemination through a World Bank pilot program (Agricultural Development Support Programme, or ADSP).

**POLICY RECOMMENDATIONS:** 1. The central challenge in reforming AMIC will be in achieving high-level ownership. Commitment at senior levels of MACO is vital to emphasize how an effective public MIS can foster broad-based agribusiness development in Zambia. Key

decision-makers at the Ministry of Agriculture, such as from the Policy and Planning department, could be the focal point of the conversation, but they must bring the Ministry of Finance and the Office of the President on board. A consistent advocacy campaign should be combined with sponsored study tours for top-level policymakers to observe effective price information systems in action.

2. The full burden of FISP and FRA must be lifted from the shoulders of the District Market Development Officers. There are several ways of accomplishing this, and further dialogue with policymakers will determine the best approach. This policy brief proposes adding one provincial officer under the SMDO to manage the lion's share of FISP program administration and monitoring, though district and camp-level officers must still liaise with cooperatives.

Another solution might be a dedicated market information officer in each province, whose responsibilities would include collecting and reporting prices from a select number of districts. A final option would be a more dramatic organizational restructuring, taking AMIC out of the Department of Agribusiness and Marketing altogether, and folding it into NAIS or CSO.

3. AMIC's mission of addressing the informational disadvantages of the small-scale producer and trader must be reinforced. To incentivize collection, district-level staff must truly believe that information is not being collected for statistical purposes, but rather as part of an efficient public service that benefits farmers and agribusinesses in their districts. A low-cost branding campaign targeting both internal and external audiences would be a first step. However, it is critical that AMIC provide DMDOs with valuable, concise, well-presented nation-wide information to share with their district's smallholders and small-scale traders. The viability of the collection process depends on this reciprocity between district officers and traders.

4. A bankable multi-year strategy for AMIC must be developed by the Department of Agribusiness and Marketing. It could be divided into two distinct phases.

The focus for Phase One (years 1-2) should be on streamlining and clarifying roles and responsibilities, and on achieving a single-minded mission: meeting the market information needs of smallholders and small-scale traders at least in a select number of districts. The objective should be thorough, consistent, and standardized data collection; and accurate, up-to-date, information from major regional markets in Zambia communicated back out to the districts in a timely manner.

In Phase Two (years 3-4), AMIC could start to expand coverage to new districts and commodities, re-consider regional variation, and launch more robust dissemination modes such as an interactive website and intranet. ZRA has a website to calculate taxes that is used by traders across the country, and ZARI has an effective intranet to share information between provincial offices. These could be used as models, but only once a foundational reporting structure has been built during Phase One.

MACO's Policy and Planning division should be engaged in every step of this strategic planning process, and should provide support to each district to prepare thorough and realistic budget requests, tied to each activity.

5. To support district collectors, AMIC must clearly define its expectations in the collection and sub-national dissemination of information by refining the standardized template, creating a weekly checklist of tasks, and estimating the weekly effort that each officer should allocate to these tasks. All pilot initiatives to allow for regional variation in core deliverables should be set aside for Phase One until a two-way reporting system is functional and consistent. Also, the DMDO's overall job description must be revised and limited to the core responsibilities of cooperative-based market extension and marketing information collection and

dissemination. FISP and FRA activities should not fall completely in the laps of the DMDO.

6. In reality, the provincial-level role in AMIC is minimal. In fact, the best thing that the provinces can do to support AMIC's success is to alleviate some of the burden of FISP and FRA activities on the district-level officers. Therefore, it is proposed that the Department of Agribusiness and Marketing engage nine new contract hires (non-civil service) for *strategic market development programs*, one per province. These individuals will report to the SMDO, and can assume the administrative and M&E burden for FISP and FRA that currently falls on the districts of that province.

At the same time, AMIC must clearly define the limited but key role that the SMDO plays as a middleman between HQ and districts for delegating and reporting whenever necessary. However, pressure for the provinces to manage their own market information data should be eliminated until the intranet technology is in place to truly allow for one multi-user, national database.

Recent turnover at headquarters has resulted in four empty positions at the AMIC and the Market Support Unit. At least two more staff members are urgently required, and could be filled by either civil service or non-permanent staff. First, an additional Data Management support person is necessary, particularly as the unit starts to receive and enter weekly data from the priority districts. This data entry and cleaning must be done at HQ, since the province-level databases do not currently exist, and would amount to parallel and redundant efforts anyway. Second, AMIC requires a new position, a dedicated Outreach Officer, with a mandate to increase coordination and info-sharing with ZNFU, CSO, NAIS, and international price monitoring and systems such as SAFEX or the USDA Economic Research Service (ERS). This person would also work with ZARI to learn about how they share information internally with provincial offices, and would play a role in developing the

implementation plan for Phase Two of the AMIC Strategic Plan. The Outreach Officer would be tasked with sharing up-to-date nationwide price information with all districts.

## REFERENCES

- Chapoto, A. and T. Jayne. 2009. *The Impacts of Trade Barriers and Market Interventions on Maize Price Predictability: Evidence from Eastern and Southern Africa*. International Development Working Paper No. 102. Michigan State University.
- Chomba, G. G. Mbozi, D. Mundia, M. Simpamba, B. Mwiinga, C. Donovan, and S. Mushingwani. 2002. *Improving the Transfer and Use of Agricultural Market Information in Zambia: A User Needs Assessment*. FSRP Working Paper No. 6. Lusaka, Zambia: FSRP.
- Kizito, Andrew. 2001. *The Structure, Conduct, and Performance of Agricultural Market Information Systems in Sub-Saharan Africa*. Ph.D. dissertation, Michigan State University.
- Mason, N., T.S. Jayne, A. Chapoto, and C. Donovan. 2011. Putting the 2007/2008 Global Food Crisis in Longer-term Perspective: Trends in Staple Food Affordability in Urban Zambia and Kenya. *Food Policy* 36.3: 350-67.

## ACKNOWLEDGMENTS

\*Daria Gage is senior technical advisor for USAID/Enabling Agricultural Trade (EAT) at Fintrac, Inc.

This policy synthesis was produced through a collaboration of USAID's Enabling Agricultural Trade (EAT) Project, implemented by Fintrac, Inc., and the Food Security Research Project, implemented in collaboration with the Agricultural Consultative Forum, the Ministry of Agriculture and Cooperatives, and Michigan State University, and funded by ACF, USAID/Zambia and the Swedish International Development Agency (SIDA). All errors and findings are the authors' sole responsibility. Please direct all inquiries to the Director, Food Security Research Project, 26a Middleway, Kabulonga, Lusaka; tel: 260 211 261194; email: [fsrp1@iconnect.zm](mailto:fsrp1@iconnect.zm)